

**NSO Publications, 1985-1999**  
**Sorted Alphabetically by Author**

- Abdelatif, T.E. 1985, Umbral Oscillations as a Probe of Sunspot Structure. PhD Thesis (University of Rochester)
- Abdelatif, T.E., Lites, B.W., and Thomas, J.H. 1984, in Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings, Sunspot, New Mexico, 25-29 Jul. 1983. S.L. Keil, ed., 141-147: Oscillations in a Sunspot and the Surrounding Photosphere
- Abdelatif, T.E., Lites, B.W., and Thomas, J.H. 1986, *Astrophys. J.* 311, 1015-1024: The Interaction of Solar P-Modes with a Sunspot. I. Observations
- Abrams, D., and Kumar, P. 1996, *Astrophys. J.* 472, 882-890: Asymmetries of Solar p-Mode Line Profiles
- Abrams, M.C., Davis, S.P., Rao, M.L., and Engleman, R. 1990, *Astrophys. J.* 363, 326-330: Highly Excited Rotational States of the Meinel System of OH
- Abrams, M.C., Davis, S.P., Rao, M.L., Engleman, R., and Brault, J.W. 1994, *Astrophys. J. Suppl. Ser.* 93, 351-395: High-Resolution Fourier Transform Spectroscopy of the Meinel System of OH
- Acton, D.S. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 71-86: Results from the Lockheed Solar Adaptive Optics System
- Acton, D.S. 1990, Real-Time Solar Imaging with a 19-Segment Active Mirror System: a Study of the Standard Atmospheric Turbulence Model. PhD Thesis (Texas Tech University).
- Acton, D.S. 1994, in Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992. R.R. Radick, ed., 1-5: Status of the Lockheed 19-Segment Solar Adaptive Optics System
- Acton, D.S., and Dunn, R.B. 1993, in SPIE 1920, Active and Adaptive Optical Components and Systems II: Albuquerque NM, 31 January-- 4 February 1993. M.A. Ealey, ed., 348-352: Solar Imaging at National Solar Observatory Using a Segmented Adaptive Optics System
- Acton, D.S., Sharbaugh, R.J., Roehrig, J.R., and Tiszauer, D. 1992, *Appl. Opt.* 31, 4280-4284: Wave-Front Tilt Power Spectral Density from the Image Motion of Solar Pores
- Acton, D.S., and Smithson, R.C. 1991, in SPIE 1920, Active and Adaptive Optical Components and Systems II: Albuquerque NM, 31 January-- 4 February 1993. M.A. Ealey, ed., 159-164: Solar Astronomy with a 19-Segment Adaptive Mirror
- Acton, D.S., and Smithson, R.C. 1992, *Appl. Opt.* 31, 3161-3165: Solar Imaging with a Segmented Adaptive Mirror
- Acton, D.S., Smithson, R.C., Roehrig, J.R., and Sharbaugh, R.J. 1988, AFGL Technical Report 88-0304, 18 pp.: Study of Fine Scale Solar Dynamics

- Acton, L., Bohlin, D., Brueckner, G., Dulk, G., Harvey, J.W., Hildner, E., Holger, T., Hudson, H., Lin, R., Neidig, D.F., Ramaty, R., Rosner, R., Withbroe, G., and Woodgate, B. 1985, Max '91: The Active Sun. (NASA) 23p.
- Aime, C., Borgnino, J., Druesne, P., Harvey, J.W., Martin, F., and Ricort, G. 1985, in High Resolution in Solar Physics: Eighth IAU European Regional Astronomy Meeting, Toulouse, 17-21 September, 1984, 103-107: Speckle Interferometry Technique Applied to the Study of Granular Velocities
- Aime, C., Borgnino, J., Druesne, P., Martin, F., and Ricort, G. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 75: Solar Granulation Speckle Interferometry Using Cross-Spectrum Techniques
- Airapetian, V.S., and Koutchmy, S. 1994, in ESA SP-373, Third SOHO Workshop, Solar Dynamic Phenomena and Solar Wind Consequences: Proceedings, Estes Park Colorado, 26-29 September 1994. A. Poland, ed. (ESA), 195-197: Fast Coronal Transient (CME) with Twisted Legs
- Airapetian, V.S., and Smartt, R.N. 1994, in ESA SP-373, Third SOHO Workshop, Solar Dynamic Phenomena and Solar Wind Consequences: Proceedings, Estes Park Colorado, 26-29 September 1994. A. Poland, ed. (ESA), 29-33: Role of Loop-Loop Encounters in Coronal Heating
- Airapetian, V.S., and Smartt, R.N. 1995, *Astrophys. J.* 445, 489-496: Optical Diagnostics of Coronal Loop Interactions
- Airapetian, V.S., and Smartt, R.N. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 31-36: Emission-Line Signatures of Coronal Loop Interactions
- Ajello, J.M., Pryor, W.R., Barth, C.A., Hord, C.W., Stewart, A.L., Simmons, K.E., and Hall, D.T., 1994, *Astrophys. J.* 289, 283-303: Observations of Interplanetary Lyman-alpha with the Galileo Ultraviolet Spectrometer: Multiple Scattering Effects at Solar Maximum
- Akasofu, S.I. 1984, *Plan. Space. Sci.* 32, 1257-1261: Sunspot Pair Formation by the Photospheric Dynamo Process
- Akasofu, S.I. 1984, *Plan. Space Sci.* 32, 1469- : An Essay on Sunspots and Solar Flares
- Akioka, M., and Cauzzi, G. 1996, in International Astronomical Union Colloquium no. 153. Y. Uchida, T. Kosugi, and H.S. Hudson, eds. (Kluwer), 433-: Simultaneous Observations of Solar Surges in H-Alpha and X-Rays
- Aksnes, K., Franklin, F., Mills, R., Birch, P., Blanco, C., Catalano, S., and Piironen, J. 1984, *Astron. J.* 89, 280-288: Mutual Phenomena of the Galilean and Saturnian Satellites in 1973 and 1979/1980
- Albright, G.E. 1992, Circumstellar Material in the Algol-Type Binary TX Ursae Majoris. MS Thesis (University of Virginia).
- Albright, G.E., and Richards, M.T. 1993, *Astrophys. J.* 414, 830-845: Circumstellar Material in TX Ursae Majoris.

- Alexander, D., Harvey, K.L., Hudson, H.S., Hoeksema, J.T., and Zhao, X. 1996, in Solar Wind Eight: Workshop Proceedings, Dana Point CA, 25-30 June 1995. D. Winterhalter, J.T. Gosling, S.R. Habbal et al, eds. (AIP), 80-83: The Large Scale Eruptive Event of April 14 1994
- Alexander, D., Slater, G.L., Hudson, H.S., McAllister, A.H., and Harvey, K.L. 1994, in ESA SP-373, Third SOHO Workshop, Solar Dynamic Phenomena and Solar Wind Consequences: Proceedings, Estes Park Colorado, 26-29 September 1994. A. Poland, ed. (ESA), 187-190: The Large-Scale Coronal Eruptive Event of April 14 1994
- Alissandrakis, C.E., Dara, H.C., and Koutchmy, S. 1991, *Astron. Astrophys.* 249, 533-538: Study of Small Scale Magnetic Flux and the Corresponding Velocity Pattern
- Alissandrakis, C.E., and Kundu, M.R. 1984, *Astron. Astrophys.* 139, 271-284: Center-to-Limb Variation of a Sunspot-Associated Microwave Source
- Alissandrakis, C.E., Kundu, M.R., and Shevgaonkar, K.R. 1991, *Astron. Astrophys.* 251, 276-284: VLA Observations of Solar Active Regions at 6 and 20 cm
- Alissandrakis, C.E., and Lantos, P. 1996, *Solar Phys.* 165, 61-81: Synoptic Study of Coronal Structures Observed at Meter Wavelengths During the Declining Phase of the Solar Cycle
- Alissandrakis, C.E., Lantos, P., and Nicolaides, E. 1985, *Solar Phys.* 97, 267-282: Coronal Structures Observed at Metric Wavelengths with the Nancay Radioheliograph
- Alissandrakis, C.E., Lubyshev, B.I., Smolkov, G.Y., Krissinel, B.B., Treskov, T.A., Miller, V.G., and Kardapolova, N.N. 1992, *Solar Phys.* 142, 341-358: Two-Dimensional Solar Mapping at 5.2 cm with the Siberian Solar Radio Telescope
- Alissandrakis, C.E., Nindos, A., and Kundu, M.R. 1993, *Solar Phys.* 147, 343-358: Evidence for Ordinary Mode-Emission from Microwave Bursts
- Alissandrakis, C.E., Schadee, A., and Kundu, M.R. 1988, *Astron. Astrophys.* 195, 290-300: High Resolution Microwave and X-Ray Observations of Solar Flares
- Allen, M.J., Oluseyi, H.M., Walker, A.B., Hoover, R.B., and Barbee, T.W. 1997, *Solar Phys.* 174, 367-401: Chromospheric and Coronal Structure of Polar Plumes 1. Magnetic Structure and Radiative Energy Balance
- Almeida, J.S., and Lites, B.W. 1992, *Astrophys. J.* 398, 359-374: Observation and Interpretation of the Asymmetric Stokes Q, U, and V Line Profiles in Sunspots
- Almeida, J.S., and Lites, B.W. 1993, in IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 177-179: Asymmetric Stokes Q, U and V Line Profiles Observed in Sunspots
- Altrock, R.C. 1985, in Radio Stars. R.M. Hjellming and D.M. Gibson, ed. (Reidel), 243-246: Coronal-Hole Detectability on Solar-Type Stars
- Altrock, R.C. 1986, Solar-Terrestrial Predictions: Workshop Proceedings (2nd), Meudon, France, 18-22 June, 1984. P.A. Simon et al, eds., 131-142: Coronal Emission-Line Data and Solar-Terrestrial Predictions

- Altrock, R.C. 1988, ed., Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. 577 pp.
- Altrock, R.C. 1988, in Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 288-291: The Solar Emission-Line Corona: Current and Future Ground-Based Observational Research
- Altrock, R.C. 1988, in Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 414-420: Variation of Solar Coronal Fe XIV 5303 Å Emission During Solar Cycle 21
- Altrock, R.C. 1990, in Atmospheric Density and Aerodynamic Drag Models for Air Force Operations: Conference Proceedings, Hanscom AFB, MA, 20-22 October, 1987. F. Marcos, ed., Chapter 8: 11-12: Ground-Based Solar Coronal Observations as a Possible Input to Atmospheric Models (Research Note)
- Altrock, R.C. 1990, in Climate Impact of Solar Variability:, Conference Proceedings, Goddard Space Flight Center, Greenbelt Maryland, 24-27 April, 1990. NASA CP 3086. K.H. Schatten and A. Arking, eds., 287-292: The Variation of Solar Fe XIV and Fe X Flux Over 1.5 Solar Activity Cycles
- Altrock, R.C. 1990, in MAX '91. Workshop no. 2, Laurel, Maryland, 8-9 June, 1989, 281-290: Observations of AR 5395 in Coronal Emission Lines
- Altrock, R.C. 1992, in Encyclopedia of Science and Technology. 7th Edition, Vol. 16 (McGraw-Hill), 607: The Solar Corona (Invited Note)
- Altrock, R.C. 1993, in ESA SP-348, Coronal Streamers, Coronal Loops, and Coronal and Solar Wind Composition: Proceedings of the First SOHO Workshop, Annapolis Maryland, 25-28 August, 1992. Clare Mattock, ed. (ESA), 83-86: Ground-Based Coronagraphic Observations of Solar Streamers (Invited)
- Altrock, R.C. 1993, in Encyclopedia of Astronomy. 2nd Edition, S.P. Parker and J.M. Pasachoff, eds. (McGraw-Hill), 377-378: Solar Corona
- Altrock, R.C. 1994, in IAU Colloquium 143, The Sun as a Variable Star: Solar and Stellar Irradiance Variations. Proceedings, Boulder, CO, 20-25 June 1993. J. M. Pap, C. Frohlich, H.S. Hudson and S. Solanki, eds. (Cambridge University Press), 172-181: Variations of Coronal Radiations at Optical Wavelengths (Invited, Refereed)
- Altrock, R.C. 1997, Solar Phys. 170, 411-423: An "Extended Solar Cycle" as Observed in Fe XIV
- Altrock, R.C. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 339-345: Variation of Solar Coronal Intensity and Temperature in Cycle 22
- Altrock, R.C. 2002, Solar Phys. (submitted): A Study of the Rotation of the Solar Corona

- Altrock, R.C. 2002, in Multi-Wavelength Observations of Coronal Structure and Dynamics -- 10th Yohkoh Anniversary Meeting: Workshop Proceedings, Kailua-Kona, HI, 21-24 January, 2002. P.C.H. Martens and D. Cauffman, eds. (COSPAR Colloquia Series, Elsevier Science): Long-Term Variation of the Rotation of the Solar Corona
- Altrock, R.C., DeMastus, H.L., Evans, J.W., Keil, S.L., Neidig, D.F., Radick, R.R., and Simon, G.W. 1987, in Handbook of Geophysics and the Space Environment. Adolph S. Jursa, ed. (NTIS), 1-25: Chapter 1: the Sun
- Altrock, R.C., and Gilliam, L. B. 1984, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 463-474 (Mar. 1983--Feb. 1984). H.E. Coffey, ed. (NOAA): Coronal Line Emission (Sacramento Peak), 1983
- Altrock, R.C., and Gilliam, L. B. 1985, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 475-486 (Mar. 1984--Feb. 1985). H.E. Coffey, ed. (NOAA): Coronal Line Emission (Sacramento Peak), 1984
- Altrock, R.C., Gilliam, L.B., and Cornett, J.L. 1986, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 487-498 (Mar. 1985--Feb. 1986). H.E. Coffey, ed. (NOAA): Coronal Line Emission (Sacramento Peak), 1985
- Altrock, R.C., Gilliam, L.B., and Cornett, J.L. 1987, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 499-510 (Mar. 1986--Feb. 1987). H.E. Coffey, ed. (NOAA): Coronal Line Emission (Sacramento Peak), 1986
- Altrock, R.C., Gilliam, L.B., and Cornett, J.L. 1987, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 507-510 (Nov. 1986--Feb. 1987). H.E. Coffey, ed. (NOAA): Sacramento Peak Coronal Line Synoptic Maps, 1986
- Altrock, R.C., Gilliam, L.B., and Henry, T.W. 1992, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 559-570 (Mar. 1991--Feb. 1992). NOAA, Boulder, CO. H.E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 1991
- Altrock, R.C., Gilliam, L.B., and Henry, T.W. 1992, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 559-570 (Mar. 1991--Feb. 1992). NOAA, Boulder, CO. H.E. Coffey, ed: Coronal Line Emission (Sacramento Peak), 1991
- Altrock, R.C., Gilliam, L.B., and Henry, T.W. 1993, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 571-582 (Mar. 1992--Feb. 1993). NOAA, Boulder, CO. H.E. Coffey, ed.: Coronal Line Emission (Sacramento Peak), 1992
- Altrock, R.C., Gilliam, L.B., and Henry, T.W. 1993, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 571-582 (Mar. 1992--Feb. 1993). NOAA, Boulder, CO. H.E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 1992
- Altrock, R.C., Gilliam, L.B., and Henry, T.W. 1994, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 583-594 (Mar. 1993--Feb. 1994). NOAA, Boulder, CO. H.E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 1993

- Altrock, R.C., Gilliam, L.B., and Henry, T.W. 1994, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 583-594 (Mar. 1993--Feb. 1994). NOAA, Boulder, CO. H.E. Coffey, ed.: Coronal Line Emission (Sacramento Peak), 1993
- Altrock, R.C., Gilliam, L.B., Henry, T.W., and Cornett, J.L. 1988, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 511-522 (Mar. 1987--Feb. 1988). H.E. Coffey, ed. (NOAA): Coronal Line Emission (Sacramento Peak), 1987
- Altrock, R.C., Gilliam, L.B., Henry, T.W., and Cornett, J.L. 1988, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 511-522 (Mar. 1987--Feb. 1988). H.E. Coffey, ed. (NOAA): Sacramento Peak Coronal Line Synoptic Maps, 1987
- Altrock, R.C., Gilliam, L.B., Henry, T.W., and Cornett, J.L. 1989, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 523-534 (Mar. 1988--Feb. 1989). NOAA, Boulder, CO. H.E. Coffey, ed: Sacramento Peak Coronal Line Synoptic Maps, 1988
- Altrock, R.C., Gilliam, L.B., Henry, T.W., and Cornett, J.L. 1989, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 523-534 (Mar. 1988--Feb. 1989). NOAA, Boulder, CO. H.E. Coffey, ed: Coronal Line Emission (Sacramento Peak), 1988
- Altrock, R.C., Gilliam, L.B., Henry, T.W., and Cornett, J.L. 1990, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 535-546 (Mar. 1989--Feb. 1990). NOAA, Boulder, CO. H.E. Coffey, ed: Sacramento Peak Coronal Line Synoptic Maps, 1989
- Altrock, R.C., Gilliam, L.B., Henry, T.W., and Cornett, J.L. 1990, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 535-546 (Mar. 1989--Feb. 1990). NOAA, Boulder, CO. H.E. Coffey, ed: Coronal Line Emission (Sacramento Peak), 1989
- Altrock, R.C., Gilliam, L.B., Henry, T.W., and Cornett, J.L. 1991, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 547-558 (Mar. 1990--Feb. 1991). NOAA, Boulder, CO. H.E. Coffey, ed: Sacramento Peak Coronal Line Synoptic Maps, 1990
- Altrock, R.C., Gilliam, L.B., Henry, T.W., and Cornett, J.L. 1991, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 547-558 (Mar. 1990--Feb. 1991). NOAA, Boulder, CO. H.E. Coffey, ed: Coronal Line Emission (Sacramento Peak), 1990
- Altrock, R.C., Gilliam, L.B., Sime, D.G., and Fisher, R.R. 1987, NCAR Technical Note 276+STR. The Fe XIV Solar Corona at 5303 Angstroms: an Atlas of Synoptic Charts from the Sacramento Peak Coronal Photometer, May 1973 to December 1985. 162 pp.
- Altrock, R.C., and Henry, T.W. 1995, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 595-606 (Mar. 1994--Feb. 1995). NOAA, Boulder, CO. H.E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 1994
- Altrock, R.C., and Henry, T.W. 1995, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 595-606 (Mar. 1994--Feb. 1995). NOAA, Boulder, CO. H.E. Coffey, ed.: Coronal Line Emission (Sacramento Peak), 1994
- Altrock, R.C., and Henry, T.W. 1996, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 607-618 (Mar. 1995--Feb. 1996). NOAA, Boulder, CO. H.E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 1995

Altrock, R.C., and Henry, T.W. 1996, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 607-618 (Mar. 1995--Feb. 1996). NOAA, Boulder, CO. H.E. Coffey, ed.: Coronal Line Emission (Sacramento Peak), 1995

Altrock, R.C., and Henry, T.W. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific. Conf. Ser. Vol. 95.K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 324-332: Prediction of Coronal-Hole Solar Wind Velocities at Ulysses from NSO/SP Coronal Data

Altrock, R.C., and Henry, T.W. 1997, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 619-630 (Mar. 1996--Feb. 1997). NOAA, Boulder, CO. H.E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 1996

Altrock, R.C., and Henry, T.W. 1997, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 619-630 (Mar. 1996--Feb. 1997). NOAA, Boulder, CO. H.E. Coffey, ed.: Coronal Line Emission (Sacramento Peak), 1996

Altrock, R.C., and Henry, T.W. 1998, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 631-642 (Mar. 1997--Feb. 1998). NOAA, Boulder, CO. H.E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 1997

Altrock, R.C., and Henry, T.W. 1998, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 631-642 (Mar. 1997--Feb. 1998). NOAA, Boulder, CO. H.E. Coffey, ed.: Coronal Line Emission (Sacramento Peak), 1997

Altrock, R.C., and Henry, T.W. 1999, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 643-654 (Mar. 1998--Feb. 1999). NOAA, Boulder, CO. H.E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 1998

Altrock, R.C., and Henry, T.W. 1999, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 643-654 (Mar. 1998--Feb. 1999). NOAA, Boulder, CO. H.E. Coffey, ed.: Coronal Line Emission (Sacramento Peak), 1998

Altrock, R.C., Henry, T.W., and Cornett, J.L. 2000, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 655-666 (Mar. 1999--Feb. 2000). NOAA, Boulder, CO. H.E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 1999

Altrock, R.C., Henry, T.W., and Cornett, J.L. 2000, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 655-666 (Mar. 1999--Feb. 2000). NOAA, Boulder, CO. H.E. Coffey, ed.: Coronal Line Emission (Sacramento Peak), 1999

Altrock, R.C., Henry, T.W., and Cornett, J.L. 2001, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 667-678 (Mar. 2000--Feb. 2001), NOAA, Boulder, CO, H. E. Coffey, ed.: Coronal Line Emission (Sacramento Peak), 2000

Altrock, R.C., Henry, T.W., and Cornett, J.L. 2001, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 667-678 (Mar. 2000--Feb. 2001), NOAA, Boulder, CO, H. E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 2000

- Altrock, R.C., Henry, T.W., and Cornett, J.L. 2002, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 679-681 (Mar. 2001--May 2001) (paper) and no. 682-690 (Jun. 2001--Feb. 2002) (electronic), NOAA, Boulder, CO, H. E. Coffey, ed.: Coronal Line Emission (Sacramento Peak), 2001
- Altrock, R.C., Henry, T.W., and Cornett, J.L. 2002, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 679-681 (Mar. 2001--May 2001) (paper) and no. 682-690 (Jun. 2001--Feb. 2002) (electronic), NOAA, Boulder, CO, H. E. Coffey, ed.: Sacramento Peak Coronal Line Synoptic Maps, 2001
- Altrock, R.C., Hick, P., Jackson, B.V., Hoeksema, J.T., Zhao, X.P., Slater, G., and Henry, T.W. 1995, Adv. Space Res. 17, no. 4/5, 235-238: Solar Coronal Structure: a Comparison of NSO/SP Ground-Based Coronal Emission Line Intensities and Temperatures with Yohkoh SXT and WSO Magnetic Data
- Altrock, R.C., Keil, S.L., Neidig, D.F., Radick, R.R., and Simon, G.W. 1987, in The AFGL Report on Research for 1985 and 1986. AFGL-TR -87-0188 18-30: Solar Research
- Altrock, R.C., Keil, S.L., Neidig, D.F., Radick, R.R., and Simon, G.W. 1989, in Geophysics Laboratory Report on Research for 1987 and 1988. GL Technical Report TR-89-0119, 16-31: Solar Research
- Altrock, R.C., Musman, S., and Cook, M.C. 1984, in Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings, Sunspot, New Mexico, 25-29 Jul. 1983. S.L. Keil, ed., 130-140: The Evolution of an Average Solar Granule
- Altrock, R.C., Rybansky, M., Minarovjech, M., and Rusin, V. 1999, Contributions of the Astronomical Observatory Skalnate Pleso 29, 105-110: Coronal Index of Solar Activity for 1998
- Altrock, R.C., Rybansky, M., Rusin, V., and Minarovjech, M. 1997, Contributions of the Astronomical Observatory Skalnate Pleso 27, 25-30: Coronal Index of Solar Activity for 1996
- Altrock, R.C., Rybansky, M., Rusin, V., and Minarovjech, M. 1999, Solar Phys. 184, 317-322: Determination of the Solar Minimum Period Between Cycles 22 and 23 from the Coronal Index of Solar Activity
- Altrock, R.C., and Smartt, R.N. 1994, in ESA SP-373, Third SOHO Workshop, Solar Dynamic Phenomena and Solar Wind Consequences: Proceedings, Estes Park Colorado, 26-29 September 1994. A. Poland, ed. (ESA), 425-428: Photometric and Imaging Observations of the Emission Corona
- Ambastha, A., Bhatnagar, A., Jain, R., Srivastava, N., Gupta, S., Sharma, R., Agrawal, G., Kumawat, V., Hill, F., Fischer, G., Grier, J., Jones, H.P., Jones, P., Kupke, R., Leibacher, J.W., and Stebbins, R.T. 1991, Bull. Astron. Soc. India 19, 215-233: Site Evaluation Program at the Udaipur Solar Observatory
- Ambroz, P. 1999, in JOSO Annual Report 1998, 91-92: Large-Scale Transport of Magnetic Flux in Solar Convection Zone
- Ambruoso, P., Marmolino, C., Gomez, M.T., and Severino, G. 1993, Solar Phys. 141, 35-49: The Center-to-Limb Variations of Four Ca I Lines in the Photospheric Spectrum at lambda6500
- Andersen, T.E., Dunn, R.B., and Engvold, O. 1984, LEST Foundation Technical Report no. 7. 60 p: LEST Design Study

- Anderson, E. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 445-448: Gap Filling the GONG Data Set
- Anderson, E., Antia, H.M., Basu, S., Chaboyer, B., Chitre, S.M., Christensen-Dalsgaard, J., Eff-Darwich, A., Elliott, J.R., Giles, P.M., Gough, D.O., Guzik, J.A., Harvey, J.W., Hill, F., Leibacher, J.W. et al 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmieder, eds. (Kluwer) 151-158: The Seismic Structure of the Sun from GONG
- Anderson, E.R., Duvall, T.L., and Jefferies, S.M. 1990, *Astrophys. J.* 364, 699-705: Modeling of Solar Oscillation Power Spectra
- Anderson, E.R., Howe, R., and Komm, R. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 901-904: Solar Cycle Changes in SOI and GONG Data for 1996-7
- Andretta, V., and Giampapa, M.S. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pac.), 552-554: Using He Lines as a Probe for Estimating Surface Filling Factors on Sun-Like Stars
- Andretta, V., and Giampapa, M.S. 1995, *Astrophys. J.* 439, 405-416: A Method for Estimating the Fractional Area Coverage of Active Regions on Dwarf F and G Stars
- Andretta, V., Giampapa, M.S., and Jones, H.P. 1995, *Irish Astronomical Journal* 22, 177-180: Helium in the Spectrum of the Sun and of Solar-Type Stars
- Andretta, V., and Jones, H.P. 1997, *Astrophys. J.* 489, 375-394: On the Role of the Solar Corona and Transition Region in the Excitation of the Spectrum of Neutral Helium
- Andretta, V., Jordan, S.D., Jones, H.P., and Penn, M.J. 1998, in ESA SP-404, The Corona and Solar Wind Near Minimum Activity: Proceedings, Fifth SOHO Workshop, Oslo Norway, 17-20 June 1997, 163-167: Investigating the Formation of the Helium Spectrum with Coordinated SOHO/Kitt Peak/ Sacramento Peak Observations
- Andretta, V., Jordan, S.D., Muglach, K., Garcia, A., Jones, H.P., Penn, M.J., and Soltau, D. 1998, in Astron. Soc. Pacific Conf. Ser. 155, Second Advances in Solar Physics Euroconference: Preveza Greece, 7-11 October, 1997 (Astron. Soc. Pacific), 336-340: The Helium Spectrum in the Quiet Sun: the January 16/17 and May 7-13 1997 Coordinated SOHO/Ground-Based Observational Campaigns
- Andretta, V., Jordan, S.D., Muglach, K., Garcia, A., Jones, H.P., and Soltau, D. 1998, in Tenth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: Proceedings, Boston, MA, 15-19 July, 1997. B. Donahue and J. Bookbinder, eds. (Astron. Soc. Pacific), 559- : Investigating the Formation of the Helium Spectrum in the Solar Atmosphere
- Antia, H.M. 1998, *ll. Astron. Soc. India* 26, 149-155: Helioseismic Inferences from the GONG Data

- Antia, H.M. 1998, *Astron. Astrophys.* 330, 336-340: Estimate of Solar Radius from f-Mode Frequencies
- Antia, H.M., Basu, S., and Chitre, S.M. 1998, *Mon. Not. Roy. Astron. Soc.* 298, 543-556: Solar Internal Rotation Rate and the Latitudinal Variation of the Tachocline
- Antia, H.M., Basu, S., Christensen-Dalsgaard, J., Elliott, J.R., Gough, D.O., Guzik, J.A., Kosovichev, A.G. 1998, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmider, eds. (Kluwer) 151-158: The Seismic Structure of the Sun from GONG
- Antia, H.M., and Chitre, S.M. 1998, *Astron. Astrophys.* 339, 239-251: Determination of Temperature and Chemical Composition Profiles in the Solar Interior from Seismic Models
- Antia, H.M., and Chitre, S.M. 1999, *Astron. Astrophys.* 347, 1000-1004: Limits on the Proton-Proton Reaction Cross-Section from Helioseismology
- Antia, H.M., and Chitre, S.M. 1999, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 165-166: What do Solar F-Mode Frequencies Tell Us?
- Antia, H.M., and Chitre, S.M. 1999, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 41-42 : Helioseismology and the Solar Neutrino Problem
- Antonucci, E. 1990, *Astrophys. J.* 360, 296-304: Rotation of the Photospheric Magnetic Fields: a North-South Asymmetry
- Antonucci, E., Malvezzi, M., Ciminiera, L., Angrilli, F., Bruner, M.E., Perona, G., Dodero, M.A., Evans, B.L., Golub, L., Landini, M., Noci, G., McWhirter, P., Fossi, B.M., Poletto, G., Neidig, D.F., Schmidt, K.H., Thomas, R.J., and Tondello, G. 1992, in Electromechanical Coupling of the Solar Atmosphere: Conference Proceedings, Capri Italy, 1991. D.S. Spicer and P. MacNeice, eds. (American Institute of Physics), 126-135: The X-Ray Ultraviolet Imager for the Orbiting Solar Laboratory
- Appourchaux, T. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 37-46: The Structure of the Solar Core: an Observer's Point of View
- Appourchaux, T. and the VIRGO Team 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 99-104: Results from the Luminosity Oscillations Imager on Board SOHO: Low-Degree p-Mode Parameters for a 2-Year Data Set
- Appourchaux, T., Chaplin, W.J., Elsworth, Y., Isaak, G.R., McLeod, C.P., Miller, B.A., and New, R. 1999, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 45-46: A Comparison of Low-Degree Solar p-Mode Frequencies from Bison and LOI
- Appourchaux, T., and Gizon, L. 1999, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 43-44: The Art of Fitting p-Mode Spectra

- Appourchaux, T., Rabello-Soares, M.C., and Gizon, L. 1998, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 167-168: LOI and GONG Low-Degree Rotational Splittings
- Arge, C.N., and Pizzo, V.J. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 423-430: Space Weather Forecasting at NOAA/SEC Using the Wang-Sheeley Model
- Arnaud, J. 1984, in Hydromagnetics of the Sun: Proceedings of the Fourth European Meeting on Solar Physics, Noordwijkerhout, The Netherlands, 1-3 October, 1984. ESA SP-220: Fe XIII 10747 Å and Fe XIV 5303 Å Coronal Emission Lines Polarization
- Arnaud, J. 1995, in La Polarimetrie, Outil Pour l'Etude de l'Activite Magnetique Solaire et Stellaire: Observatoire de Nice, 16-18 Novembre 1994. M. Faurobert-Scholl and H. Frisch, eds. (l'Observatoire de Paris). 39-50: La Mesure des Faibles Polarisations Solaires a Haute Resolution Spatiale
- Arrambide, M.R., Dunn, R.B., Healy, A.W., Porter, R., Widener, A.L., November, L.J., and Spence, G.E. 1984, in Astronomical Microdensitometry: Conference Proceedings, Goddard Space Flight Center, 11-13 Ma. 1983. Klinglesmith, ed., 243-254: The Sacramento Peak Fast Microphotometer
- Aschwanden, M.J. 1993, *Astrophys. J.* 416, 857-874: Quasi-Periodic Particle Injection into Coronal Loops
- Aschwanden, M.J., and Bastian, T.S. 1994, in Proceedings of Kofu Symposium, New Look at the Sun with Emphasis on Advanced Observations of Coronal Dynamics and Flares: Kofu Japan, 6-10 September 1993. S. Enome and T. Hirayama, eds. (Nobeyama Radio Observatory), 357-358: VLA Spectroscopy of Solar Active Regions
- Aschwanden, M.J., Bastian, T.S., Benz, A.O., and Brosius, J.W. 1992, *Astrophys. J.* 391, 380-392: Decimetric Solar Type U Bursts: VLA and Phoenix Observations
- Aschwanden, M.J., and Benz, A.O. 1997, *Astrophys. J.* 480, 825-839: Electron Densities in Solar Flare Loops, Chromospheric Evaporation Upflows, and Acceleration Sites
- Aschwanden, M.J., Lim, J., Gary, D.E., and Klimchuk, J.A. 1995, *Astrophys. J.* 454, 512-521: Solar Rotation Stereoscopy in Microwaves
- Atakan, A.K., Blass, W.E., Brault, J.W., Daunt, S.J., Halsey, G.W., Jennings, D.E., and Reuter, D.C. 1988, An Atlas of 13.37 μm Band of Propane: a Spatial Catalog from 700 to 800 cm<sup>-1</sup>
- Athay, R.G. 1990, *Solar Phys.* 126, 135-152: C IV Plasma Flow Near Active Region Filaments
- Athay, R.G., and Dere, K.P. 1989, *Astrophys. J.* 346, 514-522: Temperature and Center-Limb Variations of Transition Region Velocities
- Athay, R.G., and Dere, K.P. 1991, *Astrophys. J.* 381, 323-332: Velocity Gradients in the Chromosphere-Corona Transition Region

- Athay, R.G., Jones, H.P., and Zirin, H. 1985, *Astrophys. J.* 288, 363- : Magnetic Shear. I. Hale Region 16918
- Athay, R.G., Jones, H.P., and Zirin, H. 1985, *Astrophys. J.* 291, 344- : Magnetic Shear. II. Hale Region 17244
- Athay, R.G., Jones, H.P., and Zirin, H. 1986, *Astrophys. J.* 303, 877-883: Magnetic Shear. III. Hale Region 17255
- Athay, R.G., and Klimchuk, J.A. 1987, *Astrophys. J.* 318, 437-444: The Magnetic and Velocity Structure Adjacent to Solar Active Regions
- Athay, R.G., Klimchuk, J.A., Jones, H.P., and Zirin, H. 1986, *Astrophys. J.* 303, 884-891: Magnetic Shear. IV. Hale Regions 16740, 16815, and 16850
- Auchere, F., Boulade, S., Koutchmy, S., Smartt, R.N., Delaboudiniere, J.P., Georgakilas, A., Gurman, J.B., and Artzner, G.E. 1998, *Astron. Astrophys.* 336, L57-L60: The Prolate Solar Chromosphere
- Auchere, F., Delaboudiniere, J.P., Kouchmy, S., and Boulade, S. 1998, in *ESA SP-421, Solar Jets and Coronal Plumes: Proceedings of an International Meeting, Guadeloupe France, 23-26 February 1998*. S. Koutchmy, P. Martens, and K. Shibata, eds., 245-247: The Polar Extension of the Solar Chromosphere
- Aulanier, G., Demoulin, P., Schmieder, B., Fang, C., and Tang, Y.H. 1998, *Solar Phys.* 183, 369-388: Magnetohydrostatic Model of a Bald-Patch Flare
- Aurass, H., Hofmann, A., and Urbarz, H.W. 1998, *Astron. Astrophys.* 334, 289-298: The 09 September 1989 Gamma Ray Flare-- Multi-Site Particle Acceleration and Shock-Excited Radio Emission During Quasiperpendicular and Quasiparallel Propagation
- Aurass, H., Vrsnak, B., Hofmann, A., and Rudzik, V. 1999, *Solar Phys.* 190, 267-293: Flares in Sigmoidal Coronal Structures-- A Case Study
- Avrett, E.H. 1995, in *Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994*. J. Kuhn and M. Penn, eds. (World Scientific), 303-311: Two-Component Modeling of the Solar IR CO Lines
- Ayres, T.R. 1990, in *IAU Symposium 138, Solar Photosphere: Structure, Convection, and Magnetic Fields*, J.O. Stenflo, ed. (Kluwer), 23-27: Thermal Bifurcation of the Outer Photosphere
- Ayres, T.R. 1995, in *Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994*. J. Kuhn and M. Penn, eds. (World Scientific), 289-302: Thermal Bifurcation Revisited
- Ayres, T.R., and Brault, J.W. 1990, *Astrophys. J.* 363, 705-717: Fourier Transform Spectrometer Observations of Solar Carbon Monoxide. III. Time-Resolved Spectroscopy of the Deltanu=1 Bands
- Ayres, T.R., and Rabin, D.M. 1995, *Astrophys. J.* 460, 1042-1063: Observations of Solar Carbon Monoxide with an Imaging Infrared Spectrograph. I. Thermal Bifurcation Revisited

- Ayres, T.R., Testerman, L., and Brault, J.W. 1986, *Astrophys. J.* 304, 542-559: Fourier Transform Spectrometer Observations of Solar Carbon Monoxide. II. Simultaneous, Cospatial Measurements of the Fundamental and First-Overtone Bands, and Ca II K, in Quiet and Active Regions
- Bachmann, K.T., and Brown, T.M. 1993, *Astrophys. J. Lett.* 411, L45-L48: p-Mode Frequency Variation in Relation to Global Solar Activity
- Bachmann, K.T., Duvall, T.L., Harvey, J.W., and Hill, F. 1995, *Astrophys. J.* 443, 837-842: Measurement of High-Degree Solar Oscillation Frequencies
- Bachmann, K.T., Duvall, T.L., Harvey, J.W., and Hill, F. 1995, in GONG 94: Helio- and Asteroseismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 156-159: Frequencies of High-Degree Solar Oscillations
- Bachmann, K.T., Schou, J., and Brown, T.M. 1993, *Astrophys. J.* 412, 870-879: Observations of Intermediate Degree Solar Oscillations: 1989 April-June
- Bachmann, K.T., Schou, J., and Brown, T.M. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 197-200: Observations of Intermediate Degree Solar Oscillations: April-June, 1989
- Bachmann, K.T., and White, O.R. 1994, *Solar Phys.* 150, 347-357: Observations of Hysteresis in Solar Cycle Variations Among Seven Solar Activity Indicators
- Badiali, M., Catala, C., Frandsen, S., Gough, D., Grec, G., Roca-Cortes, T., Schrijver, K., Volonte, S., Pace, O., Fridlund, M., Appourchaux, T., and Jones, A. 1994, STARS (Seismic Telescope for Astrophysical Research from Space): an Investigation of Stellar Structure and Evolution. ESA Science Division Report 94-8. (European Space Administration) 10 pp.
- Balasubramaniam, K.S., and Bianda, M. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmeli, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 132-139: Simultaneous High Resolution Spectroscopy of the Photosphere and Chromosphere
- Balasubramaniam, K.S., Harvey, J.W., and Rabin, D.M., eds. 1998, Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. Astronomical Society of the Pacific vol. 140. 578 pp. (Astron. Soc. Pacific).
- Balasubramaniam, K.S., and Keil, S.L. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific. Conf. Ser. Vol. 95.K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 189-195: A Search for Large-Scale Photospheric Flows as Drivers of Mass Ejections

Balasubramaniam, K.S., Keil, S.L., and Smartt, R.N. 1996, eds., Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific Conference Series Vol. 95. 628 pp.

Balasubramaniam, K.S., Keil, S.L., and Tomczyk, S. 1997, Ap. J. 482, 1065-1075: Stokes Profile Asymmetries in Solar Active Regions

Balasubramaniam, K.S., Milano, L., and Keil, S.L. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 189-195: Halpha Synoptic Observations of Flare-Filament Eruption Complex 1997 April 6-7

Balasubramaniam, K.S., and Petry, C.E. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 369-374: Magneto-Optic Effects on Fe I 1.56 Micron Line

Balasubramaniam, K.S., Radick, R.R., and Fox, J. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 415-422: A Search for Systematic Periodicities in Solar Flares

Balasubramaniam, K.S., and Regan, J. 1994, in Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 17-23: Latitude Dependence of Solar Activity from a Statistical Study of Flares from 1938 to 1992

Balasubramaniam, K.S., and Simon, G.W. 1994, eds., Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993 (Astron. Soc. Pacific). 421 pp.

Baliunas, S., and Saar, S. 1992, Astronomy 20, no. 5, 42-47: Unfolding Mysteries of Stellar Cycles

Balthasar, H. 1984, Solar Phys. 93, 219-241: Asymmetries and Wavelengths of Solar Spectral Lines and the Solar Rotation Determined from Fourier-Transform Spectra

Balthasar, H. 1985, Solar Phys. 99, 31-38: On the Contribution of Horizontal Granular Motions to Observed Limb-Effect Curves

Balthasar, H. 1988, Astron. Astrophys. Suppl. Ser. 72, 473-495: The Center-to-Limb Variation of Solar Spectral Lines

Bame, S.J., Goldstein, B.E., Gosling, J.T., Harvey, J.W., McComas, D.J., Neugebauer, M., and Phillips, J.L. 1993, Geophys. Res. Lett. 20, 2323-: Ulysses Observations of a Recurrent High Speed Solar Wind Stream and the Heliomagnetic Streamer Belt

Barr, L.D., and Livingston, W.C. 1992, in ESO 92 Telescope Conference, 343-347: Proposed Upgrade of the McMath Solar/Stellar Telescope to a 4-m with a 6-m Feed

Barr, L.D., and Livingston, W.C. 1993, in Metal Mirrors: Conference Proceedings, University College, London, 12-13 November, 1992, 53-65: Mirror Seeing Control in Thick, Solid Mirrors and the Planned Upgrade of the McMath-Pierce Solar Telescope

- Bartusiak, M. 1989, Discover 10, 45-52: The Sunspot Syndrome
- Bastian, T. 1987, Aperture Synthesis Observation of Solar and Stellar Radio Emission. PhD Thesis (University of Colorado)
- Bastian, T.S., Benz, A.O., and Gary, D.E. 1998, Ann. Rev. Astron. Astrophys. 36, 131-188: Radio Emission from Solar Flares
- Bastian, T.S., Dulk, G.A., and Leblanc, Y. 1996, Astrophys. J. 473, 539-549: High-Resolution Microwave Observations of the Quiet Solar Chromosphere
- Bastian, T.S., Ewell, M.W., and Zirin, H. 1993, Astrophys. J. 418, 510-518: A Study of Solar Prominences Near  $\lambda = 1$  Millimeter
- Bastian, T.S., and Gary, D.E. 1992, Solar Phys. 139, 357-385: Radio Observations of the M8.1 Solar Flare of 23 June, 1988: Evidence for the Energy Transport by Thermal Processes
- Basu, S. 1997, Mon. Not. Roy. Astron. Soc. 288, 572-584: Seismology of the Base of the Solar Convection Zone
- Basu, S. 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmieder, eds. (Kluwer), 137-150: The Seismic Sun
- Basu, S. 1998, Mon. Not. Roy. Astron. Soc. 298, 719-728: Effects of Errors in the Solar Radius on Helioseismic Inferences
- Basu, S., Antia, H.M., and Tripathy, S.C. 1998, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 705-: Ring Diagram Analysis of Velocity Fields Within the Solar Convection Zone
- Batchelor, D.A., Hindsley, K.P. 1991, Solar Phys. 135, 99- : X-Ray Observations of Filament Eruption in the 1980 May 21 Flare
- Baudin, F., Bocchialini, K., and Koutchmy, S. 1999, in Magnetic Fields and Oscillations: Third Advances in Solar Physics Euroconference, Potsdam Germany, 22-26 September, 1998. B. Schmieder, A. Hofmann, and J. Staude, eds. (Astron. Soc. Pacific), 232-237: Propagating Magneto-Acoustic Waves in the Network
- Baudin, F., Molowny-Horas, R., and Koutchmy, S. 1997, Astron. Astrophys. 326, 842-850: Granulation and Magnetism in the Solar Atmosphere
- Beck, J.G., Hathaway, D.H., and Simon, G.W. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific. Conf. Ser. Vol. 95.K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 196-199: Observing Large-Scale Solar Surface Flows with GONG: Investigation of a Key Element in Solar Activity Buildup

- Beck, J.G., Hill, F., and Ulrich, R.K. 1995, in ESA SP 376, *Helioseismology: Proceedings, Fourth SOHO Workshop*, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 401-406: A Study of the Background Solar Velocity Spectrum Using GONG Data
- Beck, J.G., Ulrich, R.K., and Hill, F. 1995, in *GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings*, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 296-299: A Study of the Magnetic-Darkening Velocity Using GONG Modulation Images
- Beckers, J. M., Briggs, J. W., Fletcher, S., Gregory, S., Hill, F., Leon, E., Radick, R. R., and Wilkins, L. W., in SPIE 4853, *Astronomical Telescopes and Instrumentation: Innovative Telescopes and Instrumentation for Solar Astrophysics*. O.H. Siegmund, S. Fineschi, and M.A. Gunmin, eds. (SPIE) ( submitted ): First Analysis of Extended Source Seeing Monitor Observations
- Beckers, J.M. 1994, in SPIE 2198, *Instrumentation in Astronomy VIII. Astronomical Telescopes and Instrumentation for the 21st Century: Workshop Proceedings*, Kona Hawaii, 13-16 March 1994. E.R. Craine and D.L. Crawford, eds.: Imaging with Array Detectors Using Chopping and Other Forms of Differential Detection
- Beckers, J.M. 1994, in SPIE 2199, *Advanced Technology Telescopes V: Workshop Proceedings*, Kona Hawaii, 13-16 March 1994. L.M. Stepp, ed.: Estimating the Effects of Nitrate Mining Activities on the Astronomical Site Quality of the Cerro Paranal Observatory
- Beckers, J.M. 1994, in *Solar Surface Magnetism: NATO Advanced Research Workshop*, Soesterberg The Netherlands, 1-5 November, 1993. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 501-506: Solar Surface Magnetism: Quests for Observations
- Beckers, J.M. 1995, in *Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop*, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 145-161: CLEAR: a Concept for a Coronagraph and Low Emissivity Astronomical Reflector
- Beckers, J.M. 1996, *Solar Phys.* 169, 431-442: Comments on the Next Generation of Ground-Based Solar Telescopes
- Beckers, J.M. 1997, in *Advances in the Physics of Sunspots: First Advances in Solar Physics Euroconference*, Tenerife Spain, 2-6 October, 1996. B. Schmieder, J.C. del Toro Iniesta, and M. Vazquez, eds.: Progress Report on a Feasibility Study of a Large Optical/Infrared Solar Telescope (CLEAR)
- Beckers, J.M. 1998, *Astron. Astrophys. Suppl. Ser.* 129, 191-194: On the Effect of Narrow-Band Filters on the Diffraction Limited Resolution of Astronomical Telescopes
- Beckers, J.M. 1998, *Astron. Soc. Pacific Conf. Ser.* 155, ASPE '97: ASPE Workshop Proceedings (Second), Preveza Greece, 7-11 October, 1997. C. Alissandrakis and B. Schmieder, eds., 255-259: Results of Site Testing for a Large Visible/Infrared Telescope
- Beckers, J.M. 1998, in SPIE 3352, *Advanced Technology Optical/IR Telescopes VI: Conference Proceedings*, Kona Hawaii, 23-25 March, 1998. L. M. Stepp, ed., 588-602: Design of a Large, Low-Scattered Light Telescope for Solar Observations

- Beckers, J.M. 1998, in SPIE 3355, Optical Astronomical Instrumentation: Conference Proceedings, Kona Hawaii, 26-28 March, 1998. S. D'Odorico, ed., 955-961: The Effect of Telecentric Use of Narrow-Band Filters on Diffraction-Limited Imaging
- Beckers, J.M. 1999, in Adaptive Optics for Astronomy. R.F. Roddier et al, eds. (Cambridge University Press), 235-252: Adaptive Optics for Solar Astronomy
- Beckers, J.M. 1999, in Astron. Soc. Pacific Conf. Ser. 184, Magnetic Fields and Oscillations: Third Advances in Solar Physics Euroconference, Potsdam Germany, 22-26 September, 1998. B. Schmieder, A. Hofmann, and J. Staude, eds. (Astron. Soc. Pacific), 309-313: The Determination of Seeing, Isoplanatic Patch Size and Coherence Time by Solar Shadow Band Ranging
- Beckers, J.M. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 177-185: The Advanced Solar Telescope. II. Technical Aspects
- Beckers, J.M. 1999, in Instrumentation for Large Telescopes: Workshop Proceedings (7th), Tenerife Canary Islands, 1996. J.M. Rodr-Alquez Espinosa, ed. (Cambridge University Press), 1-33: Techniques for High Angular Resolution Astronomical Imaging
- Beckers, J.M., Christou, J.C., Probst, R.G., Ridgway, S.T., and Von der Luhe, O. 1988, in Very Large Telescopes and Their Instrumentation: ESO Conference Proceedings, Garching, Germany, 21-24 March, 1988. M.H. Ulrich, ed.: First Results with the NOAO 2-D Speckle Camera for Infrared Wavelengths
- Beckers, J.M., and Goad, L.E. 1990, in Instrumentation for Ground-Based Optical Astronomy Present and Future: Workshop Proceedings, Santa Cruz, California, 13-24 July, 1987. L.B. Robinson, ed. (Springer-Verlag), 315-336: Image Reconstruction Using Adaptive Optics
- Beckers, J.M., Leon, E., Mason, J., and Wilkins, L. 1997, Solar Phys. 176, 23-36: Solar Scintillometry: Calibration of Signals and its Use for Seeing Measurements
- Beckers, J.M., and Mason, J. 1998, in SPIE 3352, Advanced Technology Optical/IR Telescopes VI: Conference Proceedings, Kona Hawaii, 23-25 March, 1998. L. M. Stepp, ed., 858-867: Site Survey for a Large Solar Telescope
- Beckers, J.M., and Melnick, J. 1994, in SPIE 2199, Advanced Technology Telescopes V: Workshop Proceedings, Kona Hawaii, 13-16 March 1994. L.M. Stepp, ed.: Effects of Heat Sources in the Telescope Beam on Astronomical Image Quality
- Beckers, J.M., and Rutten, R.J. 1998, New Astronomy Reviews 42, 489-492: Site Tests for CLEAR by Solar Scintillometry
- Bell, E.F., Hill, F., and Harvey, J.W. 1999, Solar Phys. 185, 15-34: Estimation of Seeing Quality Using Low-Resolution Solar Image Data
- Bellot Rubio, L.R., Ruiz Cobo, B., and Collados, M. 1997, Astrophys. J. Lett. 478, L45-L48: Flux-Tube Model Atmospheres and Stokes V Zero-Crossing Wavelengths

- Bellot Rubio, L.R., Ruiz Cobo, B., and Collados, M. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 61-69: Structure of a Facular Region from the Inversion of High Spatial and Temporal Resolution Stokes Spectra
- Benevolenskaya, E.E. 1998, *Astrophys. J. Lett.* 509, L49-L52: A Model of the Double Magnetic Cycle of the Sun
- Benkhaldoun, Z., and Siher, E. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 109-113: Photometry Analysis Using Oukaimeden IRIS Data
- Benner, D.C., Devi, V.M., Rinsland, C.P., and Ferry-Leeper, P.S. 1988, *Appl. Opt.* 27, 1588-1597: Absolute Intensities of CO<sub>2</sub> Lines in the 3140-3410 cm.<sup>-1</sup> Spectral Region
- Benner, D.C., and Rinsland, C.P. 1985, *J. Mol. Spectr.* 112, 18-25: Identification and Intensities of the "Forbidden" 3nu32 Band of 12C16O<sub>2</sub>
- Benner, D.C., Rinsland, C.P., Devi, V.M., Smith, M.A., and Atkins, D. 1995, *J. Quan. Spectr. Rad. Trans.* 173, 705-721: A Multispectrum Nonlinear Least Squares Fitting Technique
- Benson, J.A., Mozurkewich, D., and Jefferies, S.M. 1998, in SPIE 3350, Astronomical Interferometry: Conference Proceedings. R.D. Reasenberg, ed., 493-496: Active Fringe Tracking at the NPOI
- Benz, A.O., Krucker, S., Acton, L.W., and Bastian, T.S. 1997, *Astron. Astrophys.* 320, 993-1000: Fine Structure of the X-Ray and Radio Emissions of the Quiet Solar Corona
- Berger, T.E., Schrijver, C.J., Shine, R.E., Tarbell, T.D., Title, A.M., and Scharmer, G. 1995, *Astrophys. J.* 454, 531-544: New Observations of Subarcsecond Photospheric Bright Points
- Bernasconi, P.N., Keller, C.U., Povel, H.P., and Stenflo, J.O. 1995, *Astron. Astrophys.* 302, 533-542: Direct Measurements of Flux Tube Inclinations in Solar Plages
- Bernasconi, P.N., Keller, C.U., Solanki, S.K., and Stenflo, J.O. 1998, *Astron. Astrophys.* 329, 704-720: Complex Magnetic Fields in an Active Region
- Bernasconi, P.N., Keller, C.U., Stenflo, J.O. 1994, in Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 131-136: Direct Measurements of Fluxtube Inclinations in Solar Plages
- Bernasconi, P.N., Rust, D.M., Murphy, G.A., and Eaton, H.A. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 279-287: High Resolution Polarimetry with a Balloon-Borne Telescope: the Flare Genesis Experiment

- Bernath, P.F. 1987, J. Chem. Phys. 86, 4838-4842: The Vibration-Rotation Emission Spectrum of CH(X<sub>2</sub>Pi)
- Bernath, P.F. 1992, Adv. Space Res. 12, no. 3, 15-23: Laboratory Astrophysics and Molecular Astronomy of Pure Carbon Molecules
- Bernath, P.F. 1992, Chem. Phys. Lett. 167, 91-122: High-Resolution Infrared Spectroscopy of Transient Molecules
- Bernath, P.F. 1992, in Atomic and Molecular Data for Space Astronomy: 21st IAU Meeting, Buenos Aires, 23 July- 1 August, 1991. P.L. Smith and W.L. Wiese, eds.: Atomic and Molecular Data Needed for Analysis of Infrared Spectra from ISO and SIRTF
- Bernath, P.F. 1993, in Astronomical Infrared Astronomy: Future Observational Directions. Workshop Proceedings, Calgary, Alberta, 16-19 June 1992. S. Kwok, ed., 251-258: Infrared Spectroscopy of Astrophysical Molecules
- Bernath, P.F. 1996, Chem. Soc. Rev. 25, 111-115: Infrared Fourier Transform Emission Spectroscopy
- Bernath, P.F., Black, J.H., and Brault, J.W. 1985, Astrophys. J. 298, 375-381: The Spectrum of Magnesium Hydride
- Bernath, P.F., Brazier, C.R., Olsen, T., Hailey, R., and Fernando, W.T. 1991, J. Mol. Spectr. 147, 16-26: Spectroscopy of the CH Free Radical
- Bernath, P.F., Rogers, S.A., O'Brien, L.C., Brazier, C.R., and McLean, A.D. 1988, Phys. Rev. Lett. 60, 197-199: Theoretical Predictions and Experimental Detection of the SiC Molecule
- Berrilli, F., Ermolli, I., Florio, A., and Pietropaolo, E. 1999, Astron. Astrophys. 344, 965-972: Average Properties and Temporal Variations of the Geometry of Solar Network Cells
- Bertello, L., Caccin, B., Francia, P., and Pietropaolo, E. 1992, Astrophys. J. 401, 768-774: New Observations of 5-Minute Oscillations in the Opposite Flanks of Solar Fraunhofer Lines. I. The Effect of Varying the Spectral and Temporal Resolution
- Bertello, L., Restaino, S.R. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/ Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 265-273: A Search for Existence of Large-Scale Motions on the Sun
- Bertello, L., and Restaino, S.R. 1993, Astron. Astrophys. 273, 260-266: Some Evidence for Large-Scale Motions on the Sun
- Berton, R., and Sakurai, T. 1985, Solar Phys. 96, 93-111: Stereoscopic Determination of the Three-Dimensional Geometry of Coronal Magnetic Loops
- Bhatnagar, A. 1998, II. Astron. Soc. India 26, 157-160: International Collaboration-- Global Oscillation Network Group (GONG)
- Bhatnagar, A., Jain, K., and Tripathy, S.C. 1999, Astrophys. J. 521, 885-888: GONG p-Mode Frequency Changes with Solar Activity

- Biemont, E., and Brault, J.W. 1986, Phys. Scripta 34, 751-758: The Infrared Spectrum of Magnesium (1800< sigma <9000 cm.-1) and an Extension of the Term Systems of Mg I and Mg II
- Biemont, E., and Brault, J.W. 1987, Phys. Scripta 35, 286-295: The Spectrum of Al I and Al II in the Infrared (1800 <sigma< 9000 cm.-1)
- Biemont, E., Brault, J.W., Delbouille, L., and Roland, G. 1985, Astron. Astrophys. Suppl. Ser. 61, 107-125: An Investigation of Iron in the Infrared Solar Spectrum Based on FTS Laboratory Measurements
- Biemont, E., Brault, J.W., Delbouille, L., and Roland, G. 1985, Astron. Astrophys. Suppl. Ser. 61, 185-190: Identification of Chromium Lines in the Infrared Solar Spectrum Based on New Interferometric Measurements
- Biemont, E., Brault, J.W., Delbouille, L., and Roland, G. 1986, Astron. Astrophys. Suppl. Ser. 65, 21-25: The Nickel Spectrum in the Infrared. Application to the Solar Spectrum
- Biemont, E., Grevesse, N., Faires, L.M., Marsden, G., Lawler, J.E., and Whaling, W. 1989, Astron. Astrophys. 209, 391-398: Lifetimes and Transition Probabilities in V II and the Solar Abundance of Vanadium
- Birch, A.C., and Kosovichev, A.G. 1998, Astrophys. J. 503, L187-L190: Latitudinal Variation of Solar Subsurface Rotation Inferred from p-Mode Frequency Splittings Measured with SOI-MDI and GONG
- Birch, A.C., and Kosovichev, A.G. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 679-684: Subphotospheric Convective Flows Determined by Ring-Diagram Analyses of SOI-MDI Observations
- Birk, M., and Brault, J.W. 1988, Mikrochim. Acta 2, 243-247: Detector Quantum Efficiency: an Important Parameter for FT-IR Spectroscopy
- Bizzarri, A., and Huber, M.C. 1990, Phys. Rev. A 42, 5422-5424: Transition Probabilities from the 6s6p 1P01 Resonance Level of Neutral Barium
- Blaise, J., Worden, E.F., and Conway, J.G. 1988, J. Opt. Soc. Am. B 5, 2093-2105: Revisions and Additions to the Energy Levels of Neutral Curium, 244Cm I
- Blaise, J., Wyart, J.F., Engleman, R., and Palmer, B.A. 1988, J. Opt. Soc. Am. B 5, 2087-2092: Precision Isotope Shifts for the Heavy Elements
- Blass, W.E., Halsey, G.W., Susskind, J., Reuter, D.C., and Jennings, D.E. 1990, J. Mol. Spectr. 141, 334-345: Rotational Parameters of the First Torsional State of Ethane from Lower State Combination Differences in nu9+nu4-nu4
- Bocchialini, K., Baudin, F., and Koutchmy, S. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 423-429: Wave Properties of the Chromosphere in He I 1083 nm and Ca II K

- Bocchialini, K., Vial, J.C., and Koutchmy, S. 1994, *Astrophys. J. Lett.* 423, L67-L70: Dynamical Properties of the Chromosphere In and Out of the Solar Magnetic Network
- Bocchialini, K., Vial, J.C., and Koutchmy, S. 1994, in IAU Colloquium 144, Solar Coronal Structures. V. Rusin, P. Heinzel, and J.C. Vial, eds., 123-126: Wave Properties in the Upper Chromosphere and at the Base of the Corona
- Bocchialini, K., Vial, J.C., and Koutchmy, S. 1994, in *Space Science Reviews* 70, 57-63: The Chromospheric Network Dynamics as Derived from the Analysis of CaII K and HeI 1083 nm Lines
- Bocchialini, K., Vial, J.C., Koutchmy, S., and Zirker, J.B. 1994, in Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 389-394: Analysis of Chromospheric Proxies of Coronal Bright Points
- Bocchialini, K., and Koutchmy, S. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 499-504: Chromospheric Oscillations from Simultaneous Sequences of HeI 1093 and CaII K 393.4 Spectroscopic Measurements
- Bogart, R.S., Discher de Sa, L.A., Gonzalez Hernandez, I., Patron Recio, J., Haber, D.A., Toomre, J., Hill, F., Rhodes, E.J., Xue, Y., and the SOI Ring Diagrams Team 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmider, eds. (Kluwer), 111-: Plane-Wave Analysis of SOI Data
- Bogart, R.S., Hill, F., Toussaint, R., Hathaway, D.H., and Duvall, T.L. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 429-432: Artificial Data for Testing Helioseismology Algorithms
- Bogart, R.S., Sa, L.A., Duvall, T.L., Haber, D.A., Toomre, J., and Hill, F. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHOWorkshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 147-150: Plane-Wave Analysis of Solar Acoustic-Gravity Waves: a (Slightly) New Approach
- Bogart, R.S., Sa, L.A., Haber, D.A., and Hill, F. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 151-152: Preliminary Results from Plane-Wave Analysis of Helioseismic Data
- Bogdan, T.J., and Braun, D.C. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 1, 31-45: Active Region Seismology
- Bogdan, T.J., Braun, D.C., Lites, B.W., and Thomas, J.H. 1998, *Astrophys. J.* 492, 379-389: The Seismology of Sunspots: a Comparison of Time-Distance and Frequency-Wavenumber Methods
- Bogdan, T.J., Brown, T.M., Lites, B.W., and Thomas, J.H. 1993, *Astrophys. J.* 406, 723-734: The Absorption of p-Modes by Sunspots: Variations with Degree and Order

- Bogdan, T.J., Gilman, P.A., Lerche, I., and Howard, R.F. 1988, *Astrophys. J.* 327, 451-456: Distribution of Sunspot Umbral Areas, 1917-1982
- Bogod, V.M., Gelfreikh, G.B., Willson, R.F., Lang, K.R., Opeikina, L.V., Shatilov, V., and Tsvetkov, S.V. 1992, *Solar Phys.* 141, 303-323: Very Large Array-Ratan 600 Observations of a Solar Active Region
- Boice, D. 1985, The Neutral Sodium D II Line in Late-Type Stars. PhD Thesis (New Mexico State University)
- Bonaccini, D. 1988, in Very Large Telescopes and Their Instrumentation: ESO Conference Proceedings, Garching, Germany, 21-24 March, 1988, 1103-1114: Infrared Imaging Filter with Lithium Niobate Double Channel Fabry-Perot Interferometer
- Bonaccini, D. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 241-259: The 20 mA FWHM Passband Tunable Filter: Basic Characteristics and Experimental Results
- Bonaccini, D., Cauzzi, G., Falchi, A., Falciani, R., and Smaldone, L.A. 1990, *Astrophys. Space Sci.* 170, 117-119: Two-Dimensional High-Resolution Spectroscopy of Quiet Regions on the Sun
- Bonaccini, D., Degl'Innocenti, E.L., Smaldone, L.A., and Tamblyn, P. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 251-256: High Resolution Spectropolarimetry of an Active Region
- Bonaccini, D., and Smartt, R.N. 1988, *Appl. Opt.* 27, 5095-5102: Lithium Niobate Double Channel Fabry-Perot Interferometer for Solar Corona Uses
- Bonaccini, D., and Stauffer, F.R. 1990, *Astron. Astrophys.* 229, 272-278: High Resolution Solar Bidimensional Spectroscopy with a Universal Birefringent Filter in Tandem with a Fabry-Perot Interferometer: Tests and Experimental Results
- Bonet, J.A., Marquez, I., Vazquez, M., and Wohl, H. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 299-303: The Limb Effect of the KI 769.9 Nanometer Line in Quiet Regions
- Bonet, J.A., Marquez, I., and Wohl, H. 1988, *Astron. Astrophys.* 198, 322-330: Temporal and Center-to-Limb Variations of the KI 769.9 nm Line Profiles in Quiet and Active Solar Regions
- Bopp, B.W., and Dempsey, R.C. 1989, *Publ. Astron. Soc. Pacific* 101, 516-519: A New Orbit for the RS Canum Venaticorum Binary Sigma Geminorum
- Bopp, B.W., Dempsey, R.C., and Maniak, S. 1988, *Astrophys. J. Suppl. Ser.* 68, 803-: H-alpha Spectroscopy of Active Chromosphere Stars. I. Six G-K Giants
- Bopp, B.W., Saar, S.H., Ambruster, C., Feldman, P., Dempsey, R.C., Allen, M., Ambruster, C., and Barden, S.P. 1989, *Astrophys. J.* 339, 1059-1072: The Active Chromosphere Binary HD 17433 (VY Ari)

- Boris, J.P., Devore, C.R., Golub, L., Howard, R.F., Low, B.C., Sheeley, N.R., Simon, G.W., and Tsinganos, K.C. 1984, in Solar-Terrestrial Physics, Present and Future: a Report Based on the Solar-Terrestrial Physics Workshop, December 1982 to November 1983. NASA RP-1120. D.M. Butler and K. Papadopoulos, eds., 34 pp. :Chapter 3: Evolution of Solar Magnetic Flux
- Bornmann, P., Winkelman, J.R., Cook, D., Speich, D., and Kohl, T. 1997, in Solar-Terrestrial Predictions V: Workshop Proceedings, Hitachi Japan, 23-27 January 1996. G. Heckman, K. Marubashi, M.A. Shea, D.F. Smart, and R. Thompson, eds. (RWC, Hiraso Solar-Terr. Res. Center), 141-: Automated Solar Image Processing for Flare Forecasting
- Bornmann, P.L. 1985, *Astrophys. J.* 293, 595-608: A New Method for Determining Temperature and Emission Measure During Solar Flares from Light Curves of Soft X-Ray Line Fluxes
- Bornmann, P.L. 1985, *Solar Phys.* 102, 111-130: Further Analysis of Temperature and Emission Measure During the Decay Phase of Solar Flares Derived from Soft X-Ray Light Curves
- Bornmann, P.L. 1986, in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium, Sunspot, New Mexico, 20-24 August, 1985. D.F. Neidig, ed., 428-430: Turbulence as a Proposed Intermediate Energy Storage Mechanism During Solar Flares
- Bornmann, P.L. 1987, *Astrophys. J.* 313, 449-455: Turbulence as a Contributor to Intermediate Energy Storage Mechanisms During Solar Flares
- Bornmann, P.L., and Matheson, L.D. 1990, *Astron. Astrophys.* 231, 525-535: Solar Flare Plasma Properties Derived from the Disk-Integrating GOES X-Ray Sensors During an Eclipse
- Borovik, V.N., Kurbanov, M.S., Mikhalutza, V.P., and Plotnikov, V.M. 1989, in Solar Magnetic Fields and Corona, vol. 1. R.B. Teplitskaya, ed. (Nauka: Novosibirsk), 313-: Radio Characteristics of Coronal Holes, Filaments, and Filament Cavities Based on RATAN-600 Solar Observations
- Bos, R. J. 1984, Observations of Individual Solar Eigenmodes: Their Properties and Implications. PhD Thesis (University of Arizona)
- Bouchard, O., Koutchmy, S., November, L.J., Vial, J.C., and Zirker, J.B. 1994, in IAU Colloquium 144, Solar Coronal Structures. V. Rusin, P. Heinzel, and J.C. Vial, eds., 593-596: Very High Resolution Analysis of the Dynamics of a Coronal Plasmoid
- Bouwer, S.D. 1992, *Solar Phys.* 142, 365-389: Periodicities of Solar Irradiance and Solar Activity Indices II
- Bouwer, S.D. 1992, in Solers22: Proceedings of the Workshop on the Solar Electromagnetic Radiation Study for Solar Cycle 22: Boulder, Colorado, June, 1991. R.F. Donnelly, ed. (NTIS), 371-: A Suggested Proxy Index for Estimating Solar Lyman-beta
- Bragg, S.L., Lawton, S.A., and Wiswall, C.E. 1985, *Optics Lett.* 10, 321-323: Absolute Measurements of Absorption at the Iodine-Laser Frequency in Atmospheric Gases
- Brajsa, R., Pohjolainen, S., Ruzdjak, V., Sakurai, T., Urpo, S., Vrsnak, B., and Wohl, H. 1996, *Solar Phys.* 163, 79-91: Helium 10830 Å Measurements of the Sun

- Brandt, P.N., Mauter, H.A., and Smartt, R.N. 1987, *Astron. Astrophys.* 188, 163-168: Day-Time Seeing Statistics at Sacramento Peak Observatory
- Brandt, P.N., and Solanki, S.K. 1990, *Astron. Astrophys.* 231, 221-234: Solar Line Asymmetries and the Magnetic Filling Factor
- Brandt, P.N., Steinegger, M. 1990, in IAU Symposium 138, Solar Photosphere: Structure, Convection, and Magnetic Fields, J.O. Stenflo, ed. (Kluwer), 41-46: Average Variations of Photospheric FeI and FeII Line Parameters as Function of the Magnetic Filling Factor
- Brandt, P.N., and Steinegger, M. 1998, *Solar Phys.* 177, 287-294: On the Determination of the Quiet-Sun Center-to-Limb Variation in Ca II K Spectroheliograms
- Brandt, P.N., Stix, M., and Weinhardt, H. 1994, *Solar Phys.* 152, 119-124: Modelling Solar Irradiance Variations with an Area Dependent Photometric Sunspot Index
- Brants, J. J. 1985, Observational Study of the Birth of a Solar Active Region. PhD Thesis (Utrecht Universitet)
- Brants, J. J. 1985, *Solar Phys.* 95, 15-36: High-Resolution Spectroscopy of Active Regions. 2. Line-Profile Interpretation, Applied to an Emerging Flux Region
- Brants, J. J. 1985, *Solar Phys.* 98, 197-217: High-Resolution Spectroscopy of Active Regions: 3. Relations Between the Intensity, Velocity, and Magnetic Structure in an Emerging Flux Region
- Brants, J. J., and Steenbeck, C.M. 1985, *Solar Phys.* 96, 229-252: Morphological Evolution of an Emerging Flux Region
- Brault, J.W. 1985, in High Resolution in Astronomy: Fifteenth Advanced Course of the Swiss Society of Astronomy and Astrophysics. A Benz et al, eds. (Observatoire de Geneve), 1-61: Fourier Transform Spectrometry
- Brault, J.W. 1987, *Mikrochim. Acta* 3, 215-227: High Precision Fourier Transform Spectrometry: the Critical Role of Phase Corrections
- Brault, J.W. 1996, *Appl. Opt.* 35, 2891-2896: New Approach to High-Precision Fourier Transform Spectrometer Design
- Braun, D.C. 1988, The Interaction of High-Degree P-Mode Oscillations with Solar Active Regions. PhD Thesis (University of Hawaii)
- Braun, D.C. 1995, *Astrophys. J.* 451, 859:- Scattering of p-Modes by Sunspots. I. Observations
- Braun, D.C. 1995, in GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 250-259: Sunspot Seismology: New Observations and Prospects
- Braun, D.C. 1997, *Astrophys. J.* 487, 447:- Time-Distance Sunspot Helioseismology with GONG Data
- Braun, D.C., and Duvall, T.L. 1990, *Solar Phys.* 129, 83-94: p-Mode Absorption in the Giant Active Region of 10 March, 1989

- Braun, D.C., Duvall, T.L., and Jefferies, S.M. 1990, in *Progress of Seismology of the Sun and Stars: Proceedings of the Oji International Seminar Held at Hakone, Japan, 11-14 December 1989*. Y. Osaki and H. Shibahashi, eds. (Springer-Verlag), 181-187: Observations of p-Mode Absorption in Active Regions
- Braun, D.C., Duvall, T.L., and LaBonte, B.J. 1988, *Astrophys. J.* 335, 1015-1025: The Absorption of High-Degree P-Mode Oscillations in and Around Sunspots
- Braun, D.C., Duvall, T.L., LaBonte, B.J., Jefferies, S.M., Harvey, J.W., and Pomerantz, M.A. 1992, *Astrophys. J. Lett.* 391, L113-L116: Scattering of p-Modes by a Sunspot
- Braun, D.C., Duvall, T.L., and LaBonte, J. 1987, *Astrophys. J. Lett.* 319, L27-L31: Acoustic Absorption by Sunspots
- Braun, D.C., and Fan, Y. 1998, *Astrophys. J. Lett.* 508, L105-L108: Helioseismic Measurements of the Subsurface Meridional Flow
- Braun, D.C., LaBonte, B.J., and Duvall, T.L. 1990, *Astrophys. J.* 354, 372-381: The Spatial Distribution of p-Mode Absorption in Active Regions
- Braun, D.C., LaBonte, B.J., Duvall, T.L., Jefferies, S.M., Pomerantz, M.A., and Harvey, J.W. 1993, in *GONG 1992: Seismic Probing of the Sun and Stars. Conference Proceedings*, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 77-80: The P-Mode Scattering Properties of a Sunspot
- Braun, D.C., Lindsey, C., Fan, Y., and Fagan, M. 1998, *Astrophys. J.* 502, 968-986: Seismic Holography of Solar Activity
- Braun, D.C., and Lindsey, C.A. 1999, *Astrophys. J.* 513, L79-L82: Helioseismic Images of an Active Region Complex
- Braun, D.C., Lindsey, C.A., Fan, Y., and Jefferies, S.M. 1992, *Astrophys. J.* 392, 739-745: Local Acoustic Diagnostics of the Solar Interior
- Braun, V., and Bernath, P.F. 1994, *J. Mol. Spectr.* 167, 282-287: Infrared Emission Spectroscopy of HBr
- Bravo, S., Mendoza, B., Perez-Enriquez, R. 1991, *J. Geophys. Res.* 96, 5387-: Coronal Holes as Sources of Large-Scale Solar Wind Disturbances and Geomagnetic Perturbations
- Brazier, C.R., and Bernath, P.F. 1985, *J. Mol. Spectr.* 114, 163-173: Laser and Fourier Transform Spectroscopy of the 2 pi -2 sigma + Transition of SrOH
- Brazier, C.R., Carrick, P.G., and Bernath, P.F. 1992, *J. Chem. Phys.* 95, 919-926: Rotational Analysis of the 000 Band of the A3E - X3A2 System of Methylnitrene
- Brazier, C.R., O'Brien, L.C., and Bernath, P.F. 1987, *J. Chem. Phys.* 86, 3078-3081: Fourier Transform Detection of Laser Induced Fluorescence from the CCN Free Radical
- Brazier, C.R., O'Brien, L.C., and Bernath, P.F. 1989, *J. Chem. Phys.* 91, 7384-7386: The A3Epsilon- - x3Pi Transition of the SiC Radical

- Briand, C., and Solanki, S.K. 1995, *Astron. Astrophys.* 299, 596-610: Empirical Models of Solar Magnetic Elements: Constraints Imposed by Mg I Stokes Profiles
- Brickhouse, N.S., and LaBonte, B.J. 1988, *Solar Phys.* 115, 43-60: Mass and Energy Flow Near Sunspots
- Brosius, J.W., Davila, J.M., Jones, H.P., Thompson, W.T., Thomas, R.J., Holman, G.D., White, S.M., Gopalswamy, N., and Kundu, M.R. 1993, in IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 291-294: Analysis of EUV, Microwave, and Magnetic Field Observations of Solar Plage
- Brosius, J.W., Davila, J.M., Thomas, R.J., Saba, J.L., Hara, H., and Monsignori-Fossi, B. 1997, *Astrophys. J.* 477, 969-981: The Structure and Properties of Solar Active Regions and Quiet-Sun Areas
- Brosius, J.W., Davila, J.M., Thomas, R.J., and White, S.M. 1997, *Astrophys. J.* 488, 488-498: Coronal Magnetography of a Solar Active Region Using Coordinated SERTS and VLA Observations
- Brosius, J.W., Davila, J.M., Thompson, W.T., Thomas, R.J., Holman, G.D., Gopalswamy, N., White, S.M., Kundu, M.R., and Jones, H.P. 1993, *Astrophys. J.* 411, 410-417: Simultaneous Observations of Solar Plage with the Solar Extreme Ultraviolet Rocket Telescope and Spectrograph (SERTS), the VLA, and the Kitt Peak Magnetograph
- Brosius, J.W., Thomas, R.J., and Davila, J.M. 1999, *Astrophys. J.* 526, 494-504: SERTS-95 Measurements of Wavelength Shifts in Coronal Emission Lines Across a Solar Active Region
- Brown, L.R. 1988, *Appl. Opt.* 27, 3275-3279: Methane Line Parameters from 3700 to 4136 cm<sup>-1</sup>
- Brown, L.R., Crisp, J.A., Crisp, D., Perrin, A., Naumenko, O.V., Smirnov, M.A., and Sinitsa, L.N. 1996, *J. Mol. Spectr.* 188, 148-: The Absorption Spectrum of H<sub>2</sub>S Between 2150 and 4260 cm<sup>-1</sup>: Analysis of the Positions and Intensities in the First [2nu<sub>2</sub>, nu<sub>1</sub>, and nu<sub>3</sub>] and Second [3nu<sub>2</sub>, nu<sub>1</sub> + nu<sub>2</sub>, and nu<sub>2</sub> + nu<sub>3</sub>] Triad Regions
- Brown, L.R., Farmer, C.B., Rinsland, C.P., and Toth, R.A. 1987, *Appl. Opt.* 26, 5154-5182: Molecular Line Parameters for the Atmospheric Trace Molecule Spectroscopy (ATMOS) Experiment
- Brown, L.R., Gunson, M.R., Toth, R.A., Irion, F.W., Rinsland, C.P., and Goldman, A. 1996, *Appl. Opt.* 35, 2828-2848: 1995 Atmospheric Trace Molecule Spectroscopy (ATMOS) Linelist
- Brown, L.R., Loete, M., and Hilico, J.C. 1989, *J. Mol. Spectr.* 133, 273-311: Line Strengths of the nu<sub>2</sub> and nu<sub>4</sub> Bands of 12CH<sub>4</sub> and 13CH<sub>4</sub>
- Brown, L.R., and Margolis, J.S. 1996, *J. Quan. Spectr. Rad. Trans.* 56, 283-294: Empirical Line Parameters of NH<sub>3</sub> from 4791 to 5294 cm<sup>-1</sup>
- Brown, L.R., and Peterson, D.B. 1994, *J. Mol. Spectr.* 168, 593-606: An Empirical Expression for Linewidths of Ammonia from Far-Infrared Measurements
- Brown, L.R., and Plymate, C. 1996, *J. Quan. Spectr. Rad. Trans.* 56, 263-282: H<sub>2</sub>-Broadened H<sub>2</sub>O in Four Infrared Bands Between 55 and 4045 cm<sup>-1</sup>

- Brown, L.R., Rinsland, C.P., and Zander, R. 1992, in Spectroscopy of the Earth's Atmosphere and Interstellar Molecules. (Academic Press): Remote Sensing of the Atmosphere by High Resolution Infrared Spectroscopy
- Brown, L.R., and Toth, R.A. 1985, J. Opt. Soc. Am. B 2, 842-856: The Comparison of the Frequencies of NH<sub>3</sub>, CO<sub>2</sub>, N<sub>2</sub>O.C., and CH<sub>4</sub> as Infrared Calibration Standards
- Brown, T.M. 1985, Nature 317, 591-594: Solar Rotation as a Function of Depth and Latitude
- Brown, T.M., Bogdan, T.J., Lites, B.W., and Thomas, J.H. 1992, Astrophys. J. Lett. 394, L65-L68: Localized Sources of Propagating Acoustic Waves in the Solar Photosphere
- Brown, T.M., Christensen-Dalsgaard, J., Dziembowski, W.A., Goode, P., Gough, D.O., and Morrow, C.A. 1989, Astrophys. J. 343, 526-546: Inferring the Sun's Internal Angular Velocity from Observed p-Mode Frequency Splittings
- Brown, T.M., and Morrow, C.A. 1987, Astrophys. J. 314, L21-L26: Depth and Latitude Dependence of Solar Rotation
- Brueckner, G.E., Howard, R.A., Koomen, M.A. et al 1993, in ESA SP-348, Coronal Streamers, Coronal Loops, and Coronal and Solar Wind Compositions: Proceedings of the First SOHO Workshop, Annapolis Maryland, 25-28 August, 1992. Clare Mattock, ed. (ESA): The Large Angle Spectroscopic Coronagraph (LASCO): Visible Light Coronal Imaging and Spectroscopy
- Bruevich, E.A. 1995, Astronomy Reports 39, 78-82: H-alpha Line Profile in a Gas-Dynamical Model of Solar Flares
- Bruls, J.H., and Solanki, S.K. 1993, Astron. Astrophys. 273, 293-: The Chromospheric Temperature Rise in Solar Magnetic Flux Tubes
- Bruls, J.H., Solanki, S.K., Rutten, R.J., and Carlsson, M. 1995, Astron. Astrophys. 293, 225-239: Infrared Lines as Probes of Solar Magnetic Features
- Bruning, D. 1992, Astronomy 20, 48-54: One Day on the Sun
- Bruning, D.H. 1984, Astrophys. J. 281, 830-838: The Applicability of the Fourier Convolution Theorem to the Analysis of Late-Type Stellar Spectra
- Bruning, D.H., and Saar, S.H. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 145-151: Line Asymmetries in Late-Type Dwarf Photospheres
- Bruning, D.H., and Saar, S.H. 1990, in Cool Stars, Stellar Systems, and the Sun: Proceedings of the Sixth Cambridge Workshop, Seattle, WA, 18-21 Sept. 1989. G. Wallerstein, ed., 165-: Rotational Enhancement of Line Asymmetries in F9-G2 Dwarfs
- Brynildsen, N., Brekke, P., Fredvik, T., Haugan, S.V., Kjeldseth-Moe, O., Maltby, P., Harrison, R.A., Pike, C.D., Rimmele, T.R., Thompson, W.T., and Wilhelm, K. 1998, in ESA SP-404, The Corona and Solar Wind Near Minimum Activity: Proceedings, Fifth SOHO Workshop, Oslo Norway, 17-

20 June 1997, 245-250: EUV Line Emission and Time Dependence in the Sunspot Region  
NOAA 7981

Brynildsen, N., Brekke, P., Fredvik, T., Haugan, S.V., Kjeldseth-Moe, O., Maltby, P., Harrison, R.A., Pike, C.D., Rimmele, T.R., Thompson, W.T., and Wilhelm, K. 1998, in ESA SP-404, The Corona and Solar Wind Near Minimum Activity: Proceedings, Fifth SOHO Workshop, Oslo Norway, 17-20 June 1997, 251-256: Transition Region Velocities and Line Profiles in the Sunspot Region NOAA 7981

Brynildsen, N., Brekke, P., Fredvik, T., Haugan, S.V., Kjeldseth-Moe, O., Maltby, P., Harrison, R.A., Pike, C.D., Rimmele, T.R., Thompson, W.T., and Wilhelm, K. 1998, in *Solar Phys.* 179, 279-312: EUV Spectroscopy of the Sunspot Region NOAA 7981 Using SOHO. II. Velocities and Line Profiles

Brynildsen, N., Brekke, P., Fredvik, T., Haugan, S.V., Kjeldseth-Moe, O., Maltby, P., Harrison, R.A., Pike, C.D., Rimmele, T.R., Thompson, W.T., and Wilhelm, K. 1998, in *Solar Phys.* 179, 43-74: EUV Observations of the Sunspot Region NOAA 7981 Using SOHO. I. Line Emission and Time Dependence

Brynildsen, N., Brekke, P., Fredvik, T., Haugan, S.V., Kjeldseth-Moe, O., Maltby, P., Harrison, R.A., Rimmele, T.R., Thompson, W.T., and Wilhelm, K. 1998, in ESA SP-404, The Corona and Solar Wind Near Minimum Activity: Proceedings, Fifth SOHO Workshop, Oslo Norway, 17-20 June 1997, 257-262: The Non-Uniformity in the Sunspot Transition Region

Brynildsen, N., Brekke, P., Haugan, S.V., Kjeldseth-Moe, O., Maltby, P., Harrison, R.A., Rimmele, T.R., Thomson, T., and Wilhelm, K. 1998, in ASPE '97: ASPE Workshop Proceedings (Second), Preveza Greece, 7-11 October, 1997. C. Alissandrakis and B. Schmieder, eds., 171:- Three-Dimensional EUV Imaging of Sunspot Regions Observed with SOHO

Brynildsen, N., Kjeldseth-Moe, O., and Maltby, P. 1996, *Astrophys. J.* 462, 534-546: Quiet-Sun Connection Between the C IV Resonance Lines and the Photospheric Magnetic Field

Brynildsen, N., Maltby, P., Brekke, P., Fredvik, T., Haugan, S.V., Kjeldseth-Moe, O., and Wikstol, O. 1998, *Astrophys. J.* 502, L85-L90: Flows in Sunspot Plumes Detected with the Solar and Heliospheric Observatory

Bumba, V. 1987, *Bull. Astron. Inst. Czech.* 38, 92-101: Search for Giant Elements of Convection with the Aid of Magnetic Tracers

Bumba, V., Klvana, M., Kalman, B., and Gyori, L. 1993, *Astron. Astrophys.* 276, 193-210: Evolution, Activity, Magnetic Fields, Line-of-Sight and Proper Motions in the Solar Active Region NOAA 6659 (June 3-16, 1991)

Bumgarner, R.E., Choe, J., Kukolich, S.G., and Butcher, R.J. 1988, *J. Mol. Spectr.* 132, 261-276: High Resolution Spectroscopy of the nu6 and nu8 Bands of Formic Acid

Burke, I.E., and Tapping, K.F. 1995, *Solar Phys.* 157, 295-314: Imaging the Sun at 21 cm: Budgeting the S-Component

- Bush, R.I., Hoeksema, J.T. 1995, in ESA SP 376, *Helioseismology: Proceedings, Fourth SOHO Workshop*, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 1, 209-210: Working Group 8: *Helioseismology Intercomparisons*
- Bykov, A.D., Naumenko, O.V., Smirnov, M.A., Sinitsa, L.N., and Brown, L.R. et al 1994, *Can. J. Phys.* 72, 989-1000: *The Infrared Spectrum of H<sub>2</sub>S from 1 to 5 μm*
- Cacciani, A., DiMartino, V., Jefferies, S.M., and Moretti, P.F. 1999, in *SOHO 6/GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings*, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 617-620: *Magnetic Oscillations in an Active Region Around a Unipolar Sunspot Close to the Sun*
- Cacciani, A., Moretti, P.F., DiMartino, V., and Jefferies, S.M. 1997, in *IAU Symposium 181, Sounding Solar and Stellar Interiors*. J. Provost and F.X. Schmider, eds. (Kluwer): *Search for Alfvén Waves in the Solar Atmosphere*
- Cacciani, A., Moretti, P.F., and Rodgers, W.E. 1997, *Solar Phys.* 174, 115-128: *Measuring Doppler and Magnetic Fields Simultaneously*
- Caccin, B., Donati-Falchi, A., Falciani, R., Smaldone, L.A., and Tozzi, G.P. 1987, *Solar Phys.* 112, 383-386: *Observational Maps of the Moments of Strong Line Profiles on the Solar Disk*
- Caccin, B., Falchi, A., Falciani, R., Roberti, G., and Smaldone, L.A. 1984, *Adv. Space Res.* 4, no. 7, 215-219: *Bidimensional Spectroscopy of the Solar Chromosphere During the Maximum Year*
- Calvet, N., Basri, G., Imhoff, C.L., and Giampapa, M.S. 1985, *Astrophys. J.* 293, 575-583: *Simultaneous Observations of CaII K and MgII K in T Tauri Stars*
- Campbell, J.M., Klapstein, D., Dulick, M., Bernath, P.F., and Wallace, L. 1995, *Astrophys. J. Suppl. Ser.* 101, 237-254: *Infrared Absorption and Emission Spectra of SiO*
- Camy-Peyret, C., Flaud, J., Mandin, J., Chevillard, J., Brault, J.W., Ramsay, D.A., Vervloet, M., and Chauville, J. 1985, *J. Mol. Spectr.* 113, 208-228: *The High Resolution Spectrum of Water Vapor Between 16,500 and 22,700 cm.<sup>-1</sup>*
- Camy-Peyret, C., Flaud, J., Perrin, A., Devi, V.M., Rinsland, C.P., and Smith, M.H. 1986, *J. Mol. Spectr.* 118, 345-354: *The Hybrid-Type Bands nu(1) and nu(3) of <sup>16</sup>O <sup>16</sup>O<sup>18</sup>O: Line Positions and Intensities*
- Camy-Peyret, C., Flaud, J., Rinsland, C.P., Smith, M.H., Devi, V.M., and Goldman, A. 1990, *J. Mol. Spectr.* 139, 353-360: *Line Parameters for Ozone Hot Bands in the 4.8 μm Spectral Region*
- Camy-Peyret, C., Flaud, J., Smith, M.H., Rinsland, C.P., Devi, V.M., Plateaux, J.J., and Barbie, A. 1990, *J. Mol. Spectr.* 141, 134-144: *The 3.3 μm Bands of Ozone: Line Positions and Intensities*
- Cane, H.V., and Richardson, I.G. 1997, *Geophys. Res.* 102, 17445-17449: *What Caused the Large Geomagnetic Storm of November 1978?*
- Cane, H.V., Richardson, I.G., and Harvey, K.L. 1991, *J. Geophys. Res.* 96, 19525-19528: *Filament Disappearances and Associated Shocks of May 1979*

- Canfield, R.C. 1986, *Adv. Space Res.* 6, no. 6, 167-176: Impulsive Phase Explosive Dynamics
- Canfield, R.C. 1986, in *Solar Flares and Coronal Physics Using P/OF as a Research Tool: Workshop Proceedings*, Marshall Space Flight Center, Alabama, 8-10 May, 1985. E. Tandberg-Hanssen et al, eds. NASA CP- 2421, 120-131: Optical Imaging Spectroscopy
- Canfield, R.C. 1986, in *The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium Sunspot, NM, 20-24 August, 1985*. D.F. Neidig, ed., 10-24: Impulsive Phase Chromospheric Flare Dynamics
- Canfield, R.C., Bely-Dubau, F., Broen, J.C., Dulk, G.A., Emslie, A.G., Enome, S., Gabriel, A.H., Kundu, M.R., Melrose, D., Neidig, D.F., et al 1986, in *Energetic Phenomena on the Sun: SMM Flare Workshop Proceedings*, Goddard Space Flight Center, June 1983 and Feb. 1984. M. Kundu and B. Woodgate, eds. NASA CP- 2401, 1-46: Chapter 3: Impulsive Phase Transport
- Canfield, R.C., and Gunkler, T.A. 1985, *Astrophys. J.* 288, 353-362: Energetic Electron Heating and Chromospheric Evaporation During a Well-Observed Compact Flare
- Canfield, R.C., Gunkler, T.A., and Kiplinger, A.L. 1984, *Adv. Space Res.* 4, no. 7, 255-258: Observational Evidence for Chromospheric Footprint Penetration of Nonthermal Electrons During Two Well-Observed Flares
- Canfield, R.C., Kiplinger, A.L., Penn, M.J., and Wulser, J. 1990, *Astrophys. J.* 363, 318-325: H-alpha Spectra of Dynamic Chromospheric Processes in Five Well-Observed X-Ray Flares
- Canfield, R.C., Metcalf, T.R. 1987, *Astrophys. J.* 321, 586-592: The Hydrogen-alpha Spectral Counterparts of Solar Hard X-Ray Microflares
- Canfield, R.C., Metcalf, T.R., Strong, K.T., and Zarro, D.M. 1987, *Nature* 326, 165-166: A Novel Observational Test of Momentum Balance in a Solar Flare
- Canfield, R.C., and Pevtsov, A.A. 1998, in *Synoptic Solar Physics: 18th NSO/SP Summer Workshop*, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 131-143: Helicity of Solar Active-Region Magnetic Fields
- Canfield, R.C., Pevtsov, A.A., and McClymont, A.N. 1996, in *Magnetic Reconnection in the Solar Atmosphere*, ASP Conference Series 111. R. Bentley and J. Mariska, eds., 341-346: Magnetic Chirality and Coronal Reconnection
- Canfield, R.C., Zarro, D.M., Metcalf, T.R., and Lemen, J.R. 1990, *Astrophys. J.* 348, 333-340: Momentum Balance in Four Solar Flares
- Cannon, A.T., and Marquette, W.H. 1991, *Solar Phys.* 131, 69-78: The Evolution and Orientation of Early Cycle 22 Active Regions
- Carlsson, M., Rutten, R.J., and Shchukina, N.G. 1992, *Astron. Astrophys.* 253, 567-585: The Formation of the Mg I Emission Features Near 12  $\mu\text{m}$
- Caron, R. 1986, *l'Astronomie* 100, 520-524: Utilisation d'une Monture a Trois Degres de Liberte Pour l'Observation de la Couronne Solaire Monochromatique

- Carrick, P.G., Brazier, C.R., Bernath, P.F., and Engelking, P.C. 1987, J. Am. Chem. Soc. 109, 5100-5102: The Structure of the Methylnitrene Radical
- Carter, C.S., Snodgrass, H.B., and Bryja, C. 1992, Solar Phys. 139, 13-24: Telluric Water Vapor Contamination of the Mount Wilson Solar Doppler Measurements
- Catala, C. et al 1992, in Astron. Astrophys. 275, 245-255: Multi-Site Continuous Spectroscopy. I. Overview of the MUSICOS 1989 Campaign Organization
- Catala, C., Bohm, T., Donati, J.F. et al, 1994, Solar Phys 155, 185-193: Azimuthal Structures in the Wind and Chromosphere of the Herbig Ae Star AB Aur. Preliminary Results from the MUSICOS 1992 Campaign
- Catura, R.C., Joki, E.G., Whittemore, T.E., Brookover, W.J., and Giampapa, M.S. 1988, in SPIE 879, Sensing, Discrimination and Signal Processing; and Superconducting Materials and Instrumentation: Los Angeles, CA, 12-14 January, 1988. Nichols and Ionson, eds., 20-28: Extreme-Ultraviolet Multilayer Mirror Performance: Recent Test Results
- Cauzzi, G. 1991, Notes on the Calibration of the JHU-APL Solar Vector Magnetograph at NSO/Sac Peak. NSO Technical Report 1991-002.
- Cauzzi, G. 1992, LEST Technical Report 56, Two-Dimensional Solar Spectroscopy with a Narrow Passband Filter.
- Cauzzi, G. 1992, in LEST Foundation Technical Report no. 56, Software for Solar Image Processing: Proceedings from LEST Mini-Workshop, Oslo, Norway, 14-15 August, 1992. O. Engvold, ed. (Institute of Theoretical Physics), 19-28: Two-Dimensional Solar Spectroscopy with a Narrow Passband Filter
- Cauzzi, G., Consolini, G., Berrilli, F., Smaldone, L.A. et al 1998, Memorie della Societa Astronomica Italiana 69, 647-: Properties of Solar Granulation Cells in Quiet Regions as Derived from a Time Series of White Light Images
- Cauzzi, G., Falchi, A., Falciani, R., Hiei, E., and Smaldone, L.A. 1996, in International Astronomical Union Colloquium no. 153. Y. Uchida, T. Kosugi, and H.S. Hudson, eds. (Kluwer), 433-: Minor Photospheric and Chromospheric Magnetic Activity and Related Coronal Signatures
- Cauzzi, G., Falchi, A., Falciani, R., and Smaldone, L.A. 1992, in Solar Physics and Astrophysics at Interferometric Resolution: an International Workshop to Present SIMURIS. Paris France, 17-19 February, 1992. ESA SP-344. L. Dame and T.D. Guyenne, eds., 141-144: Observation of Solar Flares at High Resolution
- Cauzzi, G., Falchi, A., Falciani, R., and Smaldone, L.A. 1993, in Adv. Space Res. 13, no. 9, 311-315: High Temporal and Spatial Resolution Observations of a Solar Flare on June 7, 1991
- Cauzzi, G., Falchi, A., Falciani, R., and Smaldone, L.A. 1996, Astron. Astrophys. 306, 625-637: Coordinated Studies of Solar Activity Phenomena. II. The Velocity Field Pattern in an Elementary Flare

- Cauzzi, G., Falchi, A., Falciani, R., Smaldone, L.A., Schwartz, R.A., and Hagyard, M. 1995, Astron. Astrophys. 299, 611-620: Coordinated Observations of Solar Activity Phenomena. I. Multispectral Study of an Elementary Flare
- Cauzzi, G., and Smaldone, L.A. 1991, in SPIE 1318, Optical Spectroscopic Instrumentation and Techniques for the 1990s: Technical Conference, Las Cruces, New Mexico, 4-6 June, 1990. B. McNamara and J.M. Lerner, eds., 193-203: Bi-Dimensional Solar Spectroscopy with the 20 mA Filter: Capabilities and Constraints
- Cauzzi, G., Smaldone, L.A., Balasubramaniam, K.S., and Keil, S.L. 1993, Solar Phys. 146, 207-227: On the Calibration of Line-of-Sight Magnetograms
- Cauzzi, G., Smaldone, L.A., Bonaccini, D., and Falciani, R. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 261-271: Some Remarks on the Data Analysis Problems in Solar Two-Dimensional Spectroscopy
- Cauzzi, G., Vial, J.C., Falciani, R., Falchi, A., and Smaldone, L.A. 1997, in Advances in the Physics of Sunspots: First Advances in Solar Physics Euroconference, Tenerife Spain, 2-6 October, 1996. B. Schmieder, J.C. del Toro Iniesta, and M. Vazquez, eds., 309-314: Dynamics of Minor Solar Activity: Coordinated Observations
- Chackerian, C. 1998, National Institute of Science and Technology Special Publication no. 926, Absolute Infrared Intensities for Standards and Reactive Molecules.
- Chackerian, C., Brown, L.R., Lacome, N., and Tarrago, G. 1998, J. Mol. Spectr. 191, 148-: Methyl Chloride n5 Region Line Shape Parameters and Rotational Constants for the n2, n5 and 2n3 Vibrational Bands
- Chackerian, C., Freedman, R.S., Giver, L.P., and Brown, L.R. 1998, J. Mol. Spectr. 192, 215-: The NO Vibrational Fundamental Band 02-Broadening Coefficients
- Chackerian, C., Goorvitch, D., Benidar, A., Farreno, R., Guelachvili, G., Martin, P.M., Abrams, M.C., and Davis, S.P. 1992, J. Quant. Spectr. 48, 667-673: Rovibrational Intensities and Electric Dipole Moment Function of the Chi1P Hydroxyl Radical
- Champion, J.P., Hilico, J.C., and Brown, L.R. 1989, J. Mol. Spectr. 133, 244-255: The Vibrational Ground State of 12CH4 and 13CH4
- Champion, J.P., Hilico, J.C., Wenger, C., and Brown, L.R. 1989, J. Mol. Spectr. 133, 256-272: Analysis of the nu2/nu4Dyad of 12CH4 and 13CH4
- Chang, E.S., and Deming, D. 1996, Solar Phys. 165, 257-274: Observation of Infrared Lines in a Prominence at 1-5 Microns
- Chang, H., Chou, D., and Sun, M. 1999, Astrophys. J. 526, L53-L56: In Search of Emerging Magnetic Flux Underneath the Solar Surface with Acoustic Imaging
- Charbonneau, P., Dikpati, M., and Gilman, P.A. 1999, Astrophys. J. 526, 523-537: Stability of the Solar Latitudinal Differential Rotation Inferred from Helioseismic Data

- Cheikh, M. 1988, Spectroscopie Infrarouge a Haute Resolution et Photodissociation a l'Aide d'un Laser a CO d'une Molecule Asymetrique: le Chlorure de Nitrosyle. PhD Thesis (Universite de Paris-Sud, Centred'Orsay). 184 pp.
- Cheikh, M., Alamiche, C., Chevillard, J., and Hubbard, R. 1986, Chem. Phys. Lett. 125, 283-285: Study of the nu1 Infrared Band of Nitrosyl Chloride
- Chevillard, J., Mandin, J., Camy-Peyret, C., and Flaud, J. 1986, Can. J. Phys. 64, 746-761: The First Hexad (040), (120), (021), (200), (101), (002) of H<sub>2</sub>18O: Experimental Energy Levels and Line Intensities
- Chevillard, J., Mandin, J., Flaud, J., and Camy-Peyret, C. 1986, J. Quan. Spectr. Rad. Trans. 36, 395-399: The 2nu2+ nu3- nu2 Hot Band of H<sub>2</sub> 18O between 4800 and 6000 cm.<sup>-1</sup>: Line Positions and Intensities
- Chevillard, J., Mandin, J., Flaud, J., and Camy-Peyret, C. 1987, Can. J. Phys. 65, 777-789: H<sub>2</sub>18O: Line Positions and Intensities Between 9500 and 11,500 per Centimeter. The (041), (220), (121), (300), (201), (102) and (003) Interacting States
- Chevillard, J.P., Mandin, J.Y., Flaud, J.M., and Camy-Peyret, C. 1985, Can. J. Phys. 63, 1112-1127: H<sub>2</sub>18: The (030), (110), and (011) Interacting States. Line Positions and Intensities for the 3nu2, nu1+ nu2, and nu2+ nu3 Bands
- Chiang, W.H., Petro, L.D., and Foukal, P.V. 1987, Solar Phys. 110, 129-138: A Photometric Search for Solar Giant Convection Cells
- Chidester, S.D., Harvey, J.W., and Hubbard, R.P. 1991, Appl. Opt. 30, 12-13: Measurement of Crystal Retarders
- Chitre, S.M. 1999, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 471-482: Synthesis of Solar-Stellar Seismology-- Meeting Summary
- Chitre, S.M., and Antia, H.M. 1998, II. Astron. Soc. India 26, 143-148: Probes of the Solar Interior
- Chiuderi Drago, F., Alissandrakis, C.E., Bentley, R.D., and Philips, A.T. 1998, Solar Phys. 182, 459-476: Microwave, Soft and Hard X-Ray Observations of Solar Flares-- A Self-Consistent Model of the hARE sITE
- Choe, J.I., Kwak, D.K., and Kukolich, S.G. 1987, J. Mol. Spectr. 121, 75-83: Fourier Transform Spectra of the 2100 cm<sup>-1</sup> Bands of HCN
- Choe, J.I., Tipton, T., and Kukolich, S.G. 1986, J. Mol. Spectr. 117, 292-307: Fourier Transform Spectra of the 3300 per Centimeter Bands of HCN
- Chou, D.Y., LaBonte, B.J., Braun, D.C., and Duvall, T.L. 1991, Astrophys. J. 372, 314-320: Power Spectra of Solar Convection
- Christensen-Dalsgaard, J., Dappen, W., Ajukov, S.V., (14 authors), Harvey, J.W., Hill, F., Houdek, C.A., Iglesias, A.G., Kosovichev, A.G., Leibacher, J.W. et al 1996, Science 272, 1286-1292: The Current State of Solar Modeling

- Christensen-Dalsgaard, J., Duvall, T.L., Gough, D.O., Harvey, J.W., and Rhodes, E.J. 1985, Nature 315, 378-82: Speed of Sound in the Solar Interior
- Christensen-Dalsgaard, J., Schou, J., Thompson, M.J., and Toomre, J. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 41-45: The Sensitivity of Various Mode Sets for Probing Differential Rotation Shear Points
- Christensen-Dalsgaard, J., Schou, J., Thompson, M.J., and Toomre, J. 1995, in GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 212-215: Hunting for Azimuthal Jets and Shearing Flows in the Solar Convective Zone
- Christopoulou, E.B., Georgakilas, A.A., and Kouchmy, S. 1999, in ESA SP-448, 9th European Meeting on Solar Physics: Magnetic Fields and Solar Processes. Workshop Proceedings, Florence Italy, 12-18 September 1999. B. Fleck and A. Wilson, eds. (ESA), 119-: Chromospheric Mass Motions Associated with an Emerging Flux Region
- Christopoulou, E.B., Georgakilas, A.A., and Kouchmy, S. 1999, in ESA SP-448, 9th European Meeting on Solar Physics: Magnetic Fields and Solar Processes. Workshop Proceedings, Florence Italy, 12-18 September 1999. B. Fleck and A. Wilson, eds. (ESA), 49-: New Results About Running Penumbral Waves
- Christopoulou, E.B., Georgakilas, A.A., and Kouchmy, S. 1999, in Magnetic Fields and Oscillations: Third Advances in Solar Physics Euroconference, Potsdam Germany, 22-26 September, 1998. B. Schmieder, A. Hofmann, and J. Staude, eds. (Astron. Soc. Pacific), 103-107: Running Penumbral Waves in Sunspots
- Christou, J.C. 1985, Seeing Effects and Their Calibration for Astronomical Speckle Interferometry Observations PhD Thesis (New Mexico State University)
- Christou, J.C., Hege, E.K., and Jefferies, S.M. 1995, in SPIE 2566, Advanced Imaging Technologies and Commercial Applications. N. Clarke and J.D. Ginglewski, eds., 134-: Speckle Deconvolution Imaging Using an Iterative Algorithm
- Christou, J.C., Hege, E.K., and Jefferies, S.M. 1995, in Signal Recovery and Synthesis, OSA Technical Digest Series 11 (OSA), 70-: Multiframe Blind Deconvolution for Object and PSF Recovery for Astronomical Imaging
- Christou, J.C., Hege, E.K., and Jefferies, S.M. 1997, in Adaptive Optics:, Workshop Proceedings, Maui Hawaii, July 1996. R. Tyson and R. Fugate, eds., OSA Technical Digest Series 13, 130-: Post-Processing of Adaptive Optics Images: Blind Deconvolution Analysis
- Christou, J.C., Hege, E.K., Jefferies, S.M., and Keller, C.U. 1994, in SPIE 2200, Amplitude and Intensity Interferometry II: Workshop Proceedings, Kona Hawaii, 13-16 March 1994. J.B. Breckinridge, ed., 433-444: Application of Multi-Frame Iterative Blind Deconvolution for Diverse Astronomical Imaging
- Christou, J.C., Jefferies, S.M., and Robison, M. 1994, in The Restoration of HST Images and Spectra II. R. Hanisch and R. White, eds., 212- : Blind Deconvolution of HST Simulated Data

- Clark, T.A., Lindsey, C., Rabin, D.M., and Livingston, W.C. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 133-138: Eclipse Measurements of the Distribution of CO Emission Above the Solar Limb
- Clark, T.A., Naylor, D.A., Tompkins, G.J., and Lindsey, C.A. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 173-178: Near IR Observations of the 11 July 1991 Total Solar Eclipse from Mauna Kea, Hawaii
- Cliver, E.W., Dennis, B.R., Kiplinger, A.L., Kane, S.R., Neidig, D.F., Sheeley, N.R., and Koomen, M.J. 1986, Adv. Space Res. 6, no. 6, 249-252: Solar Gradual Hard X-Ray Bursts: Observations and an Interpretation
- Cliver, E.W., Dennis, B.R., Kiplinger, A.L., Kane, S.R., Neidig, D.F., Sheeley, N.R., and Koomen, M.J. 1986, Astrophys. J. 305, 920-935: Solar Gradual Hard X-Ray Bursts and Associated Phenomena
- Cliver, E.W., Kahler, S.W., Neidig, D.F., Cane, H.V., Richardson, I.G., Kallenrode, M.B., and Wibberenz, G. 1995, in Proceedings of the 24th International Cosmic Ray Conference. Vol. 4 (International Union of Pure and Applied Physics), 257-: Extreme 'Propagation' of Solar Energetic Particles
- Coffey, H.E., and Wilkinson, D.C. 1991, in MAX '91: Workshop no. 3, Estes Park, Colorado, 3-7 June, 1990. R.M. Winglee and A.L. Kiplinger, eds., 267-279: Some Comparisons of the Forbush Decrease Periods of 24-25 April 1984 and 13-14 March 1989
- Coffey, M.T., Mankin, W.G., Goldman, A., Rinsland, C.P., Harvey, G.A., Devi, V.M., and Stokes, G.M. 1985, Geophys. Res. Lett. 12, 199-202: Infrared Measurements of Atmospheric Ethane ( $C_2H_6$ ) from Aircraft and Ground-Based Solar Absorption Spectra in the 3000 per Centimeter Region
- Collados, M., Keller, C.U., and Steiner, P. 1995, LEST Technical Report 61, LEST Detector and Data Acquisition Systems: I. Specifications
- Connes, P., Shaklan, S., and Roddier, F. 1987, in Interferometric Imaging in Astronomy: Proceedings of the Joint Workshop on High-Resolution Imaging from the Ground Using Interferometric Techniques, Oracle, Arizona, January 12-15, 1987. J.W. Goad, ed. (ESO/NOAO), 165-168: A Fiber-Linked Ground-Based Array
- Conway, J.G., and Worden, E.F. 1984, J. Opt. Soc. Am. B 1, 778-794: Isotope Shift of Uranium in the Infrared Region Between 1817 and 5598 per Centimeter
- Conway, J.G., Worden, E.F., Brault, J.W., Hubbard, R.P., and Wagner, J. J. 1984, Atom. Dat. Nuc. Dat. Tab. 31, 299-358: Uranium Spectrum Between 1.8 and 5.5 Microns Emitted from a Hollow Cathode
- Cook, J.W. 1991, in Mechanisms of Chromospheric and Coronal Heating: Conference Proceedings, Heidelberg, Germany, 5-8 June, 1990. P. Ulmschneider, E.R. Priest, and R. Rosner, eds. (Springer-Verlag), 83-96: High Spatial Resolution Observations of the Solar Transition Region: Spicules and Microflares

- Cook, J.W. 1992, in Electromechanical Coupling of the Solar Atmosphere, D.S. Spicer, P. MacNeice, , eds., AIP Conf. Proc. 267, 55-: Magnetic Fields, Oscillations, and Heating in the Quiet Sun Temperature Minimum Region
- Cook, J.W. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 287-294: Magnetic Fields, Oscillations, and Heating in the Quiet Sun Temperature Minimum Region from Ultraviolet Observations at 1600 Å
- Cook, J.W., Brueckner, G.E. 1991, in Solar Interior and Atmosphere, A. Cox, W.C. Livingston, M.S. Matthews, eds., Univ.Arizona Press, 996-: Fine Structure of the Solar TransitionRegion- Observations and Interpretation
- Cook, J.W., Brueckner, G.E., Bartoe, J.D., and Socker, D.G. 1984, Adv. Space Res. 4, no. 8, 59-62: HRTS Observations of Specular Emission and Transition Region Temperatures Above the Solar Limb
- Cook, J.W., and Ewing, J.A. 1990, Astrophys. J. 355, 719-725: Relationship of Magnetic Field Strength and Brightness of Fine Structure Elements in the Solar Temperature Minimum Region
- Corbard, T. 1998, Inversion des Mesures Heliosismiques: La Rotation Interne du Soleil. PhD Thesis (Universite de Nice-Sophia Antipolis).
- Coulter, R., Kuhn, J.R., and Rimmele, T. 1996, Solar Phys. 163, 7-19: Using Scintillation Measurements to Achieve High Spatial Resolution in Photometric Solar Observations
- Coulter, R.L., and Kuhn, J.R. 1994, in Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 37-42: RISE/PSPT as an Experiment to Study Active Region Irradiance and Luminosity Evolution
- Coulter, R.L., and Stauffer, F.R. 1990, in CCDs in Astronomy: Workshop Proceedings, Tucson, Arizona, 6-8 September, 1989. G. Jacoby, ed., 188-191: CCD Camera System at the NSO/SP Vacuum Tower Telescope
- Cox, A.N., Livingston, W.C., and Matthews, M.S. 1991, eds., Solar Interior and Atmosphere: Conference Proceedings, Tucson, AZ, 15-18 November, 1988. (Univ. of Arizona). 1416 pp.
- Craine, E.R., Giampapa, M.S., and Hott, D.A. 1994, in SPIE 2198, Instrumentation in Astronomy VIII. Astronomical Telescopes and Instrumentation for the 21st Century: Workshop Proceedings, Kona Hawaii, 13-16 March 1994. E.R. Craine and D.L. Crawford, eds., 1398-: An Extrasolar Planetary Search Using a Network of Automated Telescopes
- Cram, L.E., and Giampapa, M.S. 1987, Astrophys. J. 323, 316-324: Formation of Chromospheric Lines in Cool Dwarf Stars
- Cross, E.W. 1992, in SPIE CR41, Lens Design: Critical Reviews of Optical Science and Technology. Smith, ed., 225-267: Eccentric Pupil Reflecting Telescope Development
- Csepura, G., and Nagy, I. 1986, in SMA Workshop Proceedings, Irkutsk, USSR, 17-21 June 1985: Sunspot Motions Before Large Flares (Hale Region 18405 During 3-9 June, 1982)

- Curry, J.J., Den Hartog, E.A., and Lawler, J.E. 1997, *J. Opt. Soc. Am. B* 14, 2788-2799: Radiative Lifetimes of Dy I and Dy II
- Cutispoto, G., and Giampapa, M.S. 1988, *Pub. Astron. Soc. Pacific* 100, 1452-1460: Variability of Chromospheric Lines in Late-Type Dwarf Stars
- D'Silva, S. 1994, *Astrophys. J.* 435, 881-887: Acoustic Mode Mixing in Sunspots
- D'Silva, S. 1995, *Astrophys. J.* 443, 444-449: Brunt-Vasala Growth Rate and the Radial Emergence of Equipartition Fields
- D'Silva, S. 1995, *Astrophys. J.* 448, 459-469: Flux Retraction and Recycling: Negative Buoyancy Induced Oscillations as an Alternative to Parker's Thermal Relaxation Oscillations
- D'Silva, S. 1995, in *GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings*, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 276-279: Acoustic Mode-Mixing in Sunspots
- D'Silva, S. 1996, *Astrophys. J.* 462, 519-533: Measuring the Solar Internal Rotation Using Time-Distance Helioseismology: I. The Forward Approach
- D'Silva, S. 1996, in *Astrophys. J.* 469, 964-975: Theoretical Foundations of Time-Distance Helioseismology
- D'Silva, S., and Duvall, T.L. 1995, *Astrophys. J.* 438, 454-462: Time-Distance Helioseismology in the Vicinity of Sunspots
- D'Silva, S., Duvall, T.L., Jefferies, S.M., and Harvey, J.W. 1996, *Astrophys. J.* 471, 1030-1043: Helioseismic Tomography
- D'Silva, S., and Howard, R.F. 1993, *Solar Phys.* 148, 1-9: Limits on the Magnetic Field Strength at the Base of the Solar Convection Zone
- D'Silva, S., and Howard, R.F. 1994, *Solar Phys.* 151, 213-230: Sunspot Rotation and the Field Strengths of Subsurface Flux Tubes
- D'Silva, S., and Howard, R.F. 1995, *Solar Phys.* 159, 63-88: Sunspot Velocity Correlations: Are They Due to Reynolds Stresses or to the Coriolis Force on Rising Flux Tubes?
- Dame, L. 1985, in *Theoretical Problems in High Resolution Solar Physics: Proceedings of the MPA/LPARL Workshop*, Munich, 16-18 September, 1985. H.U. Schmidt, ed., 241-243: The Chromospheric Dynamics of Fine Structures
- Dame, L. 1985, in *Theoretical Problems in High Resolution Solar Physics: Proceedings of the MPA/LPARL Workshop*, Munich, 16-18 September, 1985. H.U. Schmidt, ed., 244-250: Meso-Scale Structures: an Oscillatory Phenomenon?
- Dame, L., Gouttebroze, P., and Malherbe, J.M. 1984, *Astron. Astrophys.* 130, 331-340: Observation and Analysis of Intensity Oscillations in the Solar K-Line

- Dame, L., and Martic, M. 1987, *Astrophys. J.* 314, L15-L19: Observation and Oscillatory Properties of Mesostructures in the Solar Chromosphere
- Dame, L., Martic, M., Brown, W.A., Bruner, M.E., Strong, K., Suematsu, Y., Tsuneta, S., and Schmieder, B. 1996, in *Adv. Space Res.* 17, no. 4/5, 189-192: Coordinated SPDE Rocket, Yohkoh and Ground Observations of an Emerging Flux Region and a Filament
- Dara, H.C., Alissandrakis, C.E., and Koutchmy, S. 1987, *Solar Phys.* 109, 19-29: Small-Scale Motions Over Concentrated Magnetic Regions of the Quiet Sun
- Dara, H.C., Alissandrakis, C.E., and Koutchmy, S. 1990, *Solar Phys.* 126, 403-406: Velocity Pattern of Small Scale Magnetic Fields
- Dara, H.C., Alissandrakis, C.E., and Koutchmy, S. 1990, in IAU Symposium 138. *Solar Photosphere: Structure, Convection, and Magnetic Fields. Workshop Proceedings*, Kiev, USSR, 15-20 May, 1989. E.A. Gurtenko and J.O. Stenflo, eds. (Kluwer), 153-156: Small Scale Motions Over Concentrated Magnetic Field Regions of the Quiet Sun
- Dara, H.C., Alissandrakis, C.E., and Koutchmy, S. 1991, in *Solar Polarimetry: Workshop Proceedings*, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 257-262: Small Scale Magnetic Field Mapping with High Temporal Resolution
- Dara, H.C., Alissandrakis, C.E., Zachariadis, T.G., and Georgakilas, A.A. 1997, *Astron. Astrophys.* 322, 653-658: Magnetic and Velocity Field in Association with Ellerman Bombs
- Dara, H.C., Koutchmy, S., and Alissandrakis, C.E. 1993, *Astron. Astrophys.* 277, 648-652: Photospheric and Chromospheric Magnetic Field Structure of a Bipolar Sunspot Region
- Dara, H.C., Koutchmy, S., and Suematsu, Y. 1998, in *ESA SP-421, Solar Jets and Coronal Plumes: Proceedings of an International Meeting*, Guadeloupe France, 23-26 February 1998. S. Koutchmy, P. Martens, and K. Shibata, eds., 255-262: Properties of Hydrogen-alpha Spicules from Disk and Limb High-Resolution Observations
- Dara, H.C., Zachariadis, T., Alissandrakis, C., and Koutchmy, S. 1999, in *JOSO Annual Report 1998*, 135-136: Mg Bright Points and the Corresponding Velocity Pattern
- Dara-Papamargariti, H., and Koutchmy, S. 1985, in *High Resolution in Solar Physics: Eighth IAU European Regional Astronomy Meeting*, Toulouse, 17-21 September, 1984, 231-235: Magnetic and Velocity Field Analysis of a Quiet Region near the Center of the Sun
- Darvann, T.A. 1991, Solar Horizontal Flows and Differential Rotation Determined by Local Correlation Tracking of Granulation. MS Thesis (University of Oslo).
- Darvann, T.A. 1994, in *IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings*, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 259-264: Measurements of Horizontal Flows in 1.6  $\mu\text{m}$  Granulation
- Darvann, T.A., and Dunn, R.B. 1987, LEST Foundation Technical Report 26, 71-78: The Foucault Test for Solar Telescopes

- Darvann, T.A., and Koutchmy, S. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 483-488: The IR Contrast of Magnetic Elements Obtained from High Spatial Resolution Observations at 1.6μm
- Darvann, T.A., Koutchmy, S., and Zirker, J.B. 1990, in IAU Colloquium 117, Dynamics of Prominences: Workshop Proceedings, Hvar, Yugoslavia, 25-29 September, 1989. E. Tandberg-Hanssen and V. Ruzdjak, eds., 239-: High Resolution Analysis of Quiescent Prominences at NSO/Sacramento Peak Observatory
- Daunt, S.J., Atakan, A.K., Blass, W.E., Halsey, G.W., Jennings, D.E., Reuter, D.C., Susskind, J., and Brault, J.W. 1984, *Astrophys. J.* 280, 921-936: The 12 Micron Band of Ethane: High-Resolution Laboratory Analysis with Candidate Lines for Infrared Heterodyne Searches
- Davis, S.P., Abrams, M.C., Phillips, J.G., and Rao, M.L. 1988, *J. Opt. Soc. Am. B* 5, 2280-2285: Infrared Bands of the C<sub>2</sub> Phillips System
- Davis, S.P., Abrams, M.C., Rao, M.L., and Brault, J.W. 1991, *J. Opt. Soc. Am. B* 8, 198-200: CN Vibration-Rotation Spectrum
- Davis, S.P., Abrams, M.C., Sandalphon, Brault, J.W., and Rao, M.L. 1988, *J. Opt. Soc. Am. B* 5, 1838-1847: Improved Molecular Parameters for the Ballik-Ramsay System of Diatomic Carbon (b3Sigma-g -> a3Piu)
- Davis, S.P., and Brault, J.W. 1987, *J. Opt. Soc. Am. B* 4, 20-24: Infrared Emission Band Spectrum of Si<sub>2</sub>
- Davis, S.P., Littleton, J.E., and Phillips, J.G. 1986, *Astrophys. J.* 309, 449-454: Transition Rates for the TiO beta, delta, phi, gamma', gamma, and alpha Systems
- Davis, S.P., and Pecynner, R. 1988, *J. Opt. Soc. Am. B* 5, 1995-2005: Rotational Analysis of the 3Pi0+-1 Sigma+ System of Indium Iodide
- Davis, S.P., Shortenhaus, D., Stark, G., Engleman, R., Phillips, J.G., and Hubbard, R.P. 1986, *Astrophys. J.* 303, 892-896: Oscillator Strengths of the Cn Red System
- Davis, S.P., Smith, W.H., Brault, J.W., Pecynner, R., and Wagner, J. 1984, *Astrophys. J.* 287, 455-460: Oscillator Strengths of the C<sub>2</sub> A1 piu --X1 sigma1g Phillips system
- de Bergh, C., Lutz, B.L., Owen, T., Brault, J.W., and Chauville, J. 1986, *Astrophys. J.* 311, 501-510: Monodeuterated Methane in the Outer Solar System. II. Its Detection on Uranus at 1.6 Microns
- De Jager, C., Boelee, A., and Rust, D.M. 1984, *Solar Phys.* 92, 245-258: Spatial Development of X-Ray Emission During the Impulsive Phase of a Solar Flare
- De La Beaujardiere, J., Kiplinger, A.L., and Canfield, R.C. 1992, *Astrophys. J.* 401, 761-767: Coordinated Spectral and Temporal Halpha Observations of a Solar Flare
- De Toma, G., Quemerais, E., and Sandel, B.R. 1997, *flAstrophys. J.* 491, 980-992: Long-Term Variation of the Interplanetary H Ly A Glow: Voyager UVS Measurements and Implications for the Solar Ly A Irradiance

- DeKeyser Wing, T. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 625-626: GONG Magnetic Field Images
- DeVore, C.R. 1986, The Theory and Simulation of the Evolution of the Large-Scale Solar Magnetic Field. PhD Thesis (Princeton)
- DeVore, C.R., Sheeley, N.R., Boris, J.P., Young, T.R., and Harvey, K.L. 1985, Aust. J. Phys. 38, 999-1007: Numerical Simulations of Large-Scale Solar Magnetic Fields
- DeVore, C.R., Sheeley, N.R., Boris, J.P., Young, T.R., and Harvey, K.L. 1985, Solar Phys. 102, 41-49: Simulations of Magnetic-Flux Transport in Solar Active Regions
- Degenhardt, D., and Lites, B.W. 1994, in Solar Magnetic Fields: Symposium Proceedings, Freiburg Germany, 29 June-- 2 July, 1993. M. Schuessler and W. Schmidt, eds. (Cambridge Univ. Press), 185-187: Material Flows in Sunspots
- Degiacconi, C.G., Kneubuhl, F.K., and Huguenin, D. 1985, Astrophys. J. 298, 918-933: Far-Infrared Solar Imaging from a Balloon-Borne Platform
- Del Toro Iniesta, J., Semel, M., Collados, M., Almeida, J.S. 1987, in The Sun: Tenth European Regional Astronomy Meeting of the IAU. Vol. I, 265-: Contiuum Intensity and Magnetic Flux of Solar Fluxtubes
- Del Toro Iniesta, J., Semel, M., Collados, M., Almeida, J.S. 1990, Astron. Astrophys. 227, 591-599: Spectropolarimetry of Solar Faculae: High Spatial Resolution Results
- Delannee, C., Kouchmy, S., Delaboudiniere, J.P., Hochedez, J.F., Vial, J.C., Dara, H., and Georgakilas, A. 1998, in ESA SP-421, Solar Jets and Coronal Plumes: Proceedings of an International Meeting, Guadeloupe France, 23-26 February 1998. S. Koutchmy, P. Martens, and K. Shibata, eds., 129-133: Polar Jets and Plasmoids: Results from JOP 57
- Delbouille, L., Grevesse, N., and Sauval, A.J. 1985, in High Resolution in Solar Physics: Eighth IAU European Regional Astronomy Meeting, Toulouse, 17-21 September, 1984, 108-112: The Interest of Simultaneous Spectral and Spatial High Resolution Spectroscopy in the Infrared
- Deming, D., Boyle, R.J., Jennings, D.E., and Wiedemann, G. 1988, Astrophys. J. 333, 978-995: Solar Magnetic Field Studies Using the 12-Micron Emission Lines. I. Quiet Sun Time Series and Sunspot Slices
- Deming, D., Espenak, F., Jennings, D.E., and Brault, J.W. 1986, in The Astrophysics of Brown Dwarfs: Workshop Proceedings, Fairfax, Virginia, October, 1985. M. Kafatos and R.S. Harrington, eds. (Cambridge Univ. Press): The Convective Noise Floor for the Detection of Low-Mass Companions to Solar-Type Stars
- Deming, D., Espenak, F., Jennings, D.E., Brault, J.W., and Wagner, J. 1987, Astrophys. J. 316, 771-787: On the Apparent Velocity of Integrated Sunlight. I. 1983-1985

- Deming, D., Glenar, D.A., Kaufl, H.U., and Espenak, F. 1988, in IAU Symposium 123, Advances in Helio- and Asteroseismology. J. Christensen-Dalsgaard and S. Frandsen, eds., 425-428: Infrared Helioseismology: Detection of the Chromospheric Mode
- Deming, D., Glenar, D.A., Kaufl, H.U., Hill, A.A., and Espenak, F. 1986, Nature 322, 232-234: Infrared Helioseismology: Detection of the Chromospheric Mode
- Deming, D., Hewagama, T., Jennings, D.E., Osherovich, V., Wiedemann, G., and Zirin, H. 1990, Astrophys. J. 364, L49-L52: Observations of the 12.3 Micron Mg I Emission Line During a Major Solar Flare
- Deming, D., Hewagama, T., Jennings, D.E., Wiedemann, G. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 341-355: Polarimetry in the Infrared
- Deming, D., Hillman, J. J., Kostiuk, T., Mumma, M.J., and Zipoy, D.M. 1984, Solar Phys. 94, 57-74: Thermal Bifurcation in the Upper Photosphere Inferred from Heterodyne Spectroscopy of O.R.tational Lines
- Deming, D., Jennings, D.E., Jefferies, J.T., and Lindsey, C.A. 1991, in Solar Interior and Atmosphere: Conference Proceedings, Tucson, AZ, 15-18 November, 1988. A.N. Cox, W.C. Livingston, and M.S. Matthews, eds. (Univ. of Arizona Press), 933-963: Physics of the Infrared Spectrum
- Deming, D., and Plymate, C. 1994, Astrophys. J. 426, 382-386: On the Apparent Velocity of Integrated Sunlight. II. 1983-1992 and Comparisons with Magnetograms
- Demoulin, P., R., Farmer, C.B., Rinsland, C.P., and Zander, R. 1991, J. Geophys. Res. 96, 13003-13008: Determination of Absolute Strengths of Molecular Nitrogen Quadrupole Lines from High-Resolution Ground-Based IR Solar Observations
- Dempsey, R.C. 1991, Line Profile Asymmetries in Chromospherically Active Stars. PhD Thesis (University of Toledo).
- Dempsey, R.C., Bopp, B.W., Strassmeier, K.G., Granados, A.F., Henry, G.W., and Hall, D.S. 1992, Astrophys. J. 392, 187-200: Line Profile Asymmetries in Chromospherically Active Stars
- Den Hartog, E.A., Duquette, D.W., and Lawler, J.E. 1987, J. Opt. Soc. Am. B 4, 48-63: Absolute Transition Probabilites in TaI and Wi
- Deng, Y., Ai, G., Wang, J., Song, G., Zhang, B., and Ye, X. 1997, Solar Phys. 173, 207-221: Reports on Test Observations with the Multi-Channel Solar Telescope
- Deng, Y., Wang, J., and Harvey, J.W. 1999, Solar Phys. 186, 13-23: High-Latitude Solar Rotation Traced by Magnetic Elements
- Denker, C., Restaino, S.R., and Radick, R.R. 1994, in Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992. R.R. Radick, ed., 86-88: A Comparison of Two Wavefront Sensors
- Dere, K.P. 1991, Adv. Space Res. 11, no. 5, 191-: High Resolution Solar Physics from Rockets

- Dere, K.P. 1992, in Electromechanical Coupling of the Solar Atmosphere, D.S. Spicer, P. MacNeice, , eds., AIP Conf. Proc. 267, 63-: Explosive Events and Magnetic Reconnection in the Solar Atmosphere
- Dere, K.P. 1994, Adv. Space Res. 14, no. 4, 13-22: Explosive Events, Magnetic Reconnection, and Coronal Heating
- Dere, K.P. 1996, Astrophys. J. 472, 864-873: The Rate of Magnetic Reconnection Observed in the Solar Atmosphere
- Dere, K.P., Bartoe, J.D., and Brueckner, G.E. 1986, Astrophys. J. 305, 947-953: High-Resolution Telescope and Spectrograph Images of the Solar Chromosphere and Transition Zone
- Dere, K.P., Bartoe, J.D., and Brueckner, G.E. 1989, Astrophys. J. Lett. 345, L95-L97: Transition Zone Flows Observed in a Coronal Hole on the Solar Disk
- Dere, K.P., Bartoe, J.D., and Brueckner, G.E. 1991, J. Geophys. Res. 96, 9399-9407: Explosive Events and Magnetic Reconnection in the Solar Atmosphere
- Detweiler, H.L., Yoss, K.M., Radick, R.R., and Becker, S. 1984, Astron. J. 89, 1038-1049: The Radial Velocity of the Hyades Cluster
- Deubner, F. 1988, Astron. Astrophys. 204, 301-305: Has Turbulent Granular Decay Been Observed?
- Deubner, F. 1989, Astron. Astrophys. 216, 259-264: Mesogranulation--a Convective Phenomenon
- Deubner, F. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 195-205: Granulation and Waves?
- Deubner, F. 1990, in IAU Symposium 138, Solar Photosphere: Structure, Convection, and Magnetic Fields. Workshop Proceedings, Kiev, USSR, 15-20 May, 1989. E.A. Gurtovenko and J.O. Stenflo, eds. (Kluwer), 217-228: Waves and Oscillations in the Non-Magnetic Photosphere
- Deubner, F., and Fleck, B. 1989, Astron. Astrophys. 213, 423-428: Dynamics of the Solar Atmosphere. I. Spatio-Temporal Analysis of Waves in the Quiet Solar Atmosphere
- Deubner, F., and Fleck, B. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 339-343: Gravity Waves
- Deubner, F., and Fleck, B. 1990, Astron. Astrophys. 228, 506-512: Dynamics of the Solar Atmosphere III. Cell-Network Distinctions of Chromospheric Oscillations
- Deubner, F., Fleck, B., Marmolino, C., and Severino, G. 1990, Astron. Astrophys. 236, 509-514: Dynamics of the Solar Atmosphere. IV. Evanescence Waves of Small Amplitude
- Deubner, F.L. 1984, in Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings, Sunspot, New Mexico, 25-29 Jul. 1983. S.L. Keil, ed., 14-18: Power Spectra of Short Period Oscillations

- Deubner, F.L. 1984, in Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings, Sunspot, New Mexico, 25-29 Jul. 1983. S.L. Keil, ed., 2-13: On the Phase Relations of High Degree P-Modes
- Deubner, F.L. 1985, in Chromospheric Diagnostics and Modelling: Workshop Proceedings, Sunspot, New Mexico, August 13-1. 1984. B.W. Lites, ed., 279-281: Oscillations as a Diagnostic of Chromospheric Structure
- Deubner, F.L., Endler, F., and Staiger, J. 1984, Mem. Soc. Astron. Italiana 55, 135-146: Phase Relations of High Degree Modes Revisited
- Deubner, F.L., Fleck, B., Schmitz, F., and Straus, T. 1992, Astron. Astrophys. 266, 560-567: Dynamics of the Solar Atmosphere. V. Partial Reflection and Forced Oscillation, and Their Signature in Phase Diagrams
- Devi, V.M., Benner, D.C., and Rinsland, C.P. 1984, Molecular Spectroscopy: 39th Symposium Proceedings, Columbus, Ohi. 1983: Molecular Parameters for CO<sub>2</sub> Bands in the 3.73-4.17 Micron Spectral Region
- Devi, V.M., Benner, D.C., Rinsland, C.P., and Smith, M.A. 1996, in Symposium on Molecular Spectroscopy (50th): Ohio State University, Columbus Ohio, 12-16 June, 1995, 105-: CO<sub>2</sub> Bands in the 3350-3700 cm<sup>-1</sup> Region: Ro-Vibrational Constants and Absolute Intensities.
- Devi, V.M., Benner, D.C., Rinsland, C.P., Smith, M.A., and Parmar, D.S. 1996, in Research Signposts: Recent Research Developments in Geophysical Research. 119-148: Recent Research Developments in Geophysical Research
- Devi, V.M., Benner, D.C., Smith, M.A., and Rinsland, C.P. 1997, J. Mol. Spectr. 182, 221-238: Air-Broadening and Shift Coefficients of O<sub>3</sub> Lines in the nu<sub>2</sub> Band and Their Temperature Dependence
- Devi, V.M., Benner, D.C., Smith, M.H., and Rinsland, C.P. 1991, Appl. Opt. 30, 287-304: Measurements of Air-, N<sub>2</sub>-, and O<sub>2</sub>-Broadened Halfwidths and Pressure-Induced Line Shifts in the nu<sub>3</sub> Band of 13 CH<sub>4</sub>
- Devi, V.M., Flaud, J., Camy-Peyret, C., Rinsland, C.P., and Smith, M.H. 1987, J. Mol. Spectr. 125, 174-183: Line Positions and Intensities for the nu<sub>1</sub>+ nu<sub>2</sub> and nu<sub>2</sub>+ nu<sub>3</sub> Bands of 16O<sub>3</sub>
- Devi, V.M., Perrin, A., Flaud, J., Camy-Peyret, C., Rinsland, C.P., and Smith, M.H. 1990, J. Mol. Spectr. 143, 381-388: Line Positions and Intensities for the gamma<sub>2</sub> + 3gamma<sub>3</sub> Band of 16O<sub>3</sub> around 2.7 micrometers
- Devi, V.M., Rinsland, C.P., and Benner, D.C. 1984, Appl. Opt. 23, 4067-4075: Absolute Intensity Measurements of CO<sub>2</sub> Bands in the 2395-2680 per Centimeter Region
- Devi, V.M., Rinsland, C.P., Smith, M.H., and Benner, D.C. 1985, Appl. Opt. 24, 2788-2791: Measurements of 12CH<sub>4</sub> nu<sub>4</sub> Band Halfwidths Using a Tunable Diode Laser System and a Fourier Transform Spectrometer
- Devi, V.M., Rinsland, C.P., Smith, M.H., and Benner, D.C. 1988, Appl. Opt. 27, 2296-2308: Air-Broadened Lorentz Halfwidths and Pressure-Induced Line Shifts in the nu<sub>4</sub> Band of 13CH<sub>4</sub>

- Dialetis, D., Macris, C., Prokakis, T., and Sarris, E. 1985, in High Resolution Solar Physics: Workshop Proceedings, Toulouse, France, 17-21 September, 1984. R. Muller, ed. Lecture Notes in Physics 233 , 164-168: Fine Structure and Evolution of Solar Granules
- Dialetis, D., Macris, C., Prokakis, T., and Sarris, E. 1986, Astron. Astrophys. 168, 330-334: The Lifetime and Evolution of Solar Granules
- Ding, M.D., and Fang, C. 1989, Astron. Astrophys 225, 204-212: A Semi-Empirical Model of Sunspot Penumbra
- Dobson, A.K. 1987, Activity Rotation Relations for Lower Main Sequence Stars. PhD Thesis (New Mexico State University)
- Dobson, A.K. 1987, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings ( 5th), Boulder, Colorado, 8-11 July, 1987. J.L. Linsky and R.E. Stencel, eds., 309-311: X-Rays, Color, and the Vaughn-Preston Gap
- Dobson, A.K. 1990, Pub. Astron. Soc. Pacific 102, 88-95: Activity, Metallicity, Helium, and the Hyades Anomaly
- Dobson, A.K., Donahue, R.A., Radick, R.R., and Kadlec, K.L. 1990, in Sixth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: Proceedings, Boulder, Colorado. G. Wallerstein, ed., 132-135: Variance Components in Ca II H + K Time-Series Observations
- Dobson, A.K., and Radick, R.R. 1986, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings ( 4th), Santa Fe NM, 16-18 October, 1985. M. Zeilik and D.M. Gibson, eds., 202-204: On a Technique for Inferring Sizes of Stellar Active Regions
- Dobson, A.K., and Radick, R.R. 1989, Astrophys. J. 344, 907-914: Coronal Activity-- Rotation Relations for Lower Main Sequence Stars
- Doe, L.A., Duvall, T.D., Harvey, J.W., Johnson, D., Jones, H.P., and Recely, F. 1987, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 499-510 (Mar. 1986--Feb. 1987). H.E. Coffey, ed. (NOAA): Kitt Peak Magnetograms
- Doe, L.A., Duvall, T.D., Harvey, J.W., Johnson, D., Jones, H.P., and Recely, F. 1987, Solar-Geophysical Data, Part 1 (Prompt Reports), no. 499-510 (Mar. 1986--Feb. 1987). H.E. Coffey, ed. (NOAA): Solar Magnetic Field Synoptic Maps
- Doerr, A., and Kock, M. 1985, J. Quan. Spectr. Rad. Trans. 33, 307-317: Ni II Oscillator Strengths
- Doerr, A., Kock, M., Kwiatkowski, M., and Werner, K. 1985, J. Quan. Spectr. Rad. Trans. 33, 55-62: Lifetimes and Oscillator Strengths of Neutral Vanadium
- Donahue, R.A., and Baliunas, S.L. 1992, Solar Phys. 141, 181-197: Periodogram Analysis of 240 Years of Sunspot Records
- Donahue, R.A., Dobson, A.K., and Baliunas, S.L. 1997, Solar Phys. 171, 191-209: Stellar Active Region Evolution. I. Estimated Lifetimes of Chromospheric Active Regions and Active Region Complexes

- Donahue, R.A., and Keil, S.L. 1995, Solar Phys. 159, 53-62: The Solar Surface Differential Rotation from Disk-Integrated Chromospheric Fluxes
- Donahue, R.A., Restaino, S.R., and Keil, S.L. 1994, Solar Phys. 149, 257-265: Solar and Stellar Chromospheric Contrast. I. The Disk-Integrated Solar K-Line
- Donati-Falchi, A., Falciani, R., Sambuco, A.M., and Smaldone, L.A. 1984, Astron. Astrophys. Suppl. Ser. 55, 425-438: Analysis of Solar Flares Optical Spectra. III. The Line Emission of the June . 1980 White Light Flare
- Donati-Falchi, A., Falciani, R., and Smaldone, L.A. 1984, Astron. Astrophys. 131, 256-266: Analysis of the Optical Spectra of Solar Flares: II. The Energetics of the June . 1980 White Light Flare
- Donati-Falchi, A., Falciani, R., and Smaldone, L.A. 1984, in Hydromagnetics of the Sun: Proceedings of the Fourth European Meeting on Solar Physics, Noordwijkerhout, The Netherlands, 1-3 October, 1984. ESA SP-220: Energetics and Velocity Fields in Spatial Small-Scale Magnetic Structures
- Donati-Falchi, A., Falciani, R., and Smaldone, L.A. 1985, Astron. Astrophys. 152, 165-169: Analysis of Solar Flare Optical Spectra. IV. The Blue Continuum of White Light Flares
- Donati-Falchi, A., Falciani, R., and Smaldone, L.A. 1986, in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium Sunspot, NM, 20-24 August, 1985. D.F. Neidig, ed., 59-70: Bidimensional Spectroscopy Observations of the 13 June 1980 Flare
- Donati-Falchi, F., Falciani, R., and Smaldone, L.A. 1985, in High Resolution in Solar Physics: Eighth IAU European Regional Astronomy Meeting, Toulouse, 17-21 September, 1984, 172-177: Line Profiles and Longitudinal Velocity Field in Seeing-Limited Small Scale Atmospheric Structures
- Donea, A.C., Braun, D.C., and Lindsey, C. 1999, Astrophys. J. 513, L143-L146: Seismic Images of a Solar Flare
- Donea, A.C., Braun, D.C., and Lindsey, C. 1999, in JOSO Annual Report 1998, 124-125: Seismic Images of the Solar Flare of July 9, 1996
- Donnelly, R.F. 1987, Solar Phys. 109, 37-58: Temporal Trends of Solar EUV and UV Full-Disk Fluxes
- Donnelly, R.F., Harvey, J.W., and Heath, D.F., Repoff, T.P. 1985, J. Geophys. Res. 90, 6267-6273: Temporal Characteristics of the Solar UV Flux and HeI Line at 1083 nm
- Donnelly, R.F., and Heath, D.F. 1985, Adv. Space Res. 5, no. 3, 145-148: Solar Ultraviolet Radiation Variations and Their Stratospheric and Climatic Effects
- Donnelly, R.F., Hinteregger, H.E., and Heath, D.F. 1986, J. Geophys. Res. 91, 5567-5578: Temporal Variations of Solar EUV, UV, and 10830 Å Radiations
- Donnelly, R.F., and Puga, L.C. 1990, Solar Phys. 130, 369-390: Thirteen-Day Periodicity and the Center-to-Limb Dependence of UV, EUV, and X-Ray Emission of Solar Activity

- Donnelly, R.F., White, O.R., and Livingston, W.C. 1994, Solar Phys. 152, 69-76: The Solar Ca II K Index and the Mg II Core-to-Wing Ratio
- Dorotovic, I., Sobotka, M., Brandt, P.N., and Simon, G.W. 2002, Astron. Astrophys. 387, 665-671: Evolution and Motions of Small-Scale Photospheric Structures Near a Large Solar Pore
- Dorotovic, I., Sobotka, M., Brandt, P.N., and Simon, G.W. 2002, in ESA SP-506, 10th European Solar Physics Meeting: Solar Variability: From Core to Outer Frontiers. Workshop Proceedings, Prague, Czech Republic, 9-14 Sep 2002. (ESA) ( submitted ): Evolution of Small-Scale Structures in and around a Large Solar Pore
- Doschek, G., Antiochos, S., (5 authors), Leibacher, J.W., MacNeice, P., McWhirter, R., Moore, R., Rabin, D.M., Rust, D., and Shine, R. 1986, in Energetic Phenomena on the Sun, M. Kundu and B. Woodgate, eds. NASA CP- 2439,: Chapter 4: Chromospheric Explosions
- Douay, M. Rogers, S.A., Bernath, P.F. 1989, Mol. Phys. 64, 425-436: Infrared Fourier Transform Spectroscopy of XeH<sup>+</sup>
- Douay, M., Nietmann, R., and Bernath, P.F. 1988, J. Mol. Spectr. 131, 250-260: New Observations of the A1Piu - X1 Sigma<sup>+</sup>g Transition (Phillips System) of C2
- Douay, M., Nietmann, R., and Bernath, P.F. 1988, J. Mol. Spectr. 131, 261-271: The Discovery of Two New Infrared Electronic Transitions of C2: B1deltag - A1Piu and B'1Sigma<sup>+</sup>g - A1 Pigu
- Dowdy, J.F. 1987, On the Magnetic Structure and Energy Balance of EUV- Emitting Plasma in the Quiet Sun. PhD Thesis (University of Alabama)
- Dowdy, J.F. 1993, Astrophys. J. 411, 406-409: Observational Evidence for Hotter Transition Region Loops Within the Supergranular Network
- Dowdy, J.F., and Rabin, D.M. Moore, R.L. 1986, Solar Phys. 105, 35-45: On the Magnetic Structure of the Quiet Transition Region
- Doyle, J.G., Van Den Oord, G.H., and O'Shea, E. 1997, Astron. Astrophys. 327, 365-376: Randomly Sampling the Chromospheric Peak Power Distribution
- Drescher, T., and Wohl, H. 1984, in Hydromagnetics of the Sun: Proceedings of the Fourth European Meeting on Solar Physics, Noordwijkerhout, The Netherlands, 1-3 October, 1984. ESA SP-220: On the Determination of the Solar Rotation and Indications of the Solar Differential Rotation from an Analysis of Solar Integrated Light
- Druesne, P., Borgnino, J., Martin, F., Ricort, G., and Aime, C. 1989, Astron. Astrophys. 217, 229-236: Speckle Interferometric Study of the Solar Granulation from Centre to Limb
- Dulick, M., Zhang, K.Q., Guo, B., and Bernath, P.F. 1998, J. Mol. Spectr. 188, 14-26: Far and Near Infrared Emission Spectroscopy of LiH and LiD
- Dumey, B.R. 1997, fIAstrophys. J. 486, 1065-1077: On a Babcock-Leighton Solar Dynamo Model with a Deep-Seated Generating Layer for the Toroidal Magnetic Field

- Dunn, R.B. 1984, LEST Foundation Technical Report no. 3, 45 p: Window Considerations for Lest
- Dunn, R.B. 1985, Solar Phys. 100, 1-20: High Resolution Solar Telescopes
- Dunn, R.B. 1985, in High Resolution in Solar Physics: Eighth IAU European Regional Astronomy Meeting, Toulouse, 17-21 September: Professor Rosch, Pic Du Midi and High Resolution
- Dunn, R.B. 1987, LEST Foundation Technical Report 26, 79-85: Site Testing Telescope Configurations
- Dunn, R.B. 1987, in Adaptive Optics in Solar Observations: Workshop Proceedings, Freiburg, 8-9 September, 1987. F. Merkle, O. Engvold, and R. Falomo, eds. LEST Technical Report 28, 243-254: Specifications of the LEST Adaptive Optical System
- Dunn, R.B. 1987, in Adaptive Optics in Solar Observations: Workshop Proceedings, Freiburg, 8-9 September, 1987. F. Merkle, O. Engvold, and R. Falomo, eds. LEST Technical Report 28, 263-268: Conclusion (Definition of Immediate and Long-Term Actions)
- Dunn, R.B. 1987, in Adaptive Optics in Solar Observations: Workshop Proceedings, Freiburg, 8-9 September, 1987. F. Merkle, O. Engvold, and R. Falomo, eds. LEST Technical Report 28, 87-106: Adaptive Optical System at NSO/Sac Peak
- Dunn, R.B. 1988, in The Role of Fine-Scale Magnetic Fields in the Structure of the Solar Atmosphere: Workshop Proceedings, Tenerife (Canary Islands), 6-12 October, 1986 (Cambridge Univ. Press), 374-376: Summary of the Round Table Discussion
- Dunn, R.B. 1991, in SPIE 1271, Adaptive Optics: International Congress on Optical Sciences and Engineering, The Hague, Netherlands, 12-15 March, 1990, 216-231: NSO/SP Adaptive Optics Program
- Dunn, R.B. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 140-146: High Resolution: a Retrospective
- Dunn, R.B., and Darvann, T.A. 1990, in Turbulence Power Spectral Density: Workshop Proceedings, Albuquerque, N.M., December, 1989: Using the Sun to Study the Earth's Atmosphere
- Dunn, R.B., and November, L.J. 1985, in High Resolution in Solar Physics: Eighth IAU European Regional Astronomy Meeting, Toulouse, 17-21 September, 1984. R. Muller, ed., 85-90: Collages of Granulation Pictures
- Dunn, R.B., November, L.J., Colley, S.A., and Streander, G.W. 1989, Opt. Engr. 28, 126-130: The National Solar Observatory Polarimeter
- Dunn, R.B., Simon, G.W., Smartt, R.N., and Zirker, J.B. 2000, Solar Phys. 191, 227-229: Obituary: John W. Evans
- Dunn, R.B., and Smartt, R.N. 1991, Adv. Space Res. 11, no. 5, 139-148: High Resolution Telescopes at the National Solar Observatory

- Dunn, R.B., and Spence, G.E. 1984, in Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings, Sunspot, New Mexico, 25-29 Jul. 1983. S.L. Keil, ed., 88-89: Granulation Data Set
- Dunn, R.B., Streander, G.W., Hull, W., and Wilkins, L.M. 1992, in SPIE 1543, Active and Adaptive Optical Components. Mark Ealey, ed., 88-100: NSO/Sac Peak Continuous Face-Plate Adaptive Mirror
- Dunn, R.B., Streander, G.W., and Von der Luhe, O. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 53-70: Adaptive Optical System at Sac Peak: a Progress Report
- Dupree, A., Penn, M.J., and Jones, H.P. 1996, *Astrophys. J. Lett.* 467, L121-L124: He I 10830 Å Wing Asymmetry in Polar Coronal Holes: Evidence for Radial Outflows
- Duquette, D.W. 1985, Transition Probabilities in the First Spectra of Niobium, Rhodium, Hafnium, Tantalum, and Tungsten. PhD Thesis (University of Wisconsin)
- Duquette, D.W., Den Hartog, E.A., and Lawler, J.E. 1986, *J. Quan. Spectr. Rad. Trans.* 35, 281-301: Absolute Transition Probabilities in NBI and HFI and a Solution to the Problem of Missing Infrared Branches
- Duquette, D.W., and Lawler, J.E. 1985, *J. Opt. Soc. Am. B* 1, 1948-1952: Branching Ratios and Transition Probabilities in Rhodium I
- Durney, B.R. 1984, NSO Technical Report T1-84: On the Numerical Solutions of the Mean Equations in the Turbulent-Convective Theory of Differential Rotation
- Durney, B.R. 1984, in Solar Seismology from Space: Conference Proceedings, Snowmass, Colorado, August, 17-19 1983. R.K. Ulrich, ed.: On the Influence of Turbulent Motions in Non-Radial Oscillations
- Durney, B.R. 1985, *Astrophys. J.* 297, 787-798: On Theories of Rotating Convection Zones
- Durney, B.R. 1987, in Nonlinear Dynamics of Rotating Magnetic Systems: Workshop Proceedings, UCLA, 4-8 August, 1987. P.H. Roberts, ed. (UCLA), 18-20: On the Implications of the Taylor-Proudman Constraint for the Solar Dynamo
- Durney, B.R. 1987, in The Internal Solar Angular Velocity: Theory, Observations, and Relationships to Solar Magnetic Fields. Workshop Proceedings, Sunspot, New Mexico, 11-14 August, 1986. B.R. Durney and S. Sofia, eds. (Kluwer), 235-262: The Generalization of Mixing Length Theory to Rotating Convection Zones and Applications to the Sun
- Durney, B.R. 1988, *Astron. Astrophys.* 191, 374-380: A Simple Dynamo Model and the Anisotropic alpha-Effect
- Durney, B.R. 1989, *Astrophys. J.* 338, 509-527: On the Behavior of the Angular Velocity in the Lower Part of the Solar Convection Zone

- Durney, B.R. 1989, *Astrophys. J.* 351, 682-686: On the Numerical Calculation of the Solar Rotational Splitting Coefficients
- Durney, B.R. 1989, *Solar Phys.* 123, 197-216: Some Controversial Issues in Theories of the Solar Differential Rotation and Dynamo
- Durney, B.R. 1991, *trophys. J.* 378, 378-397: Observational Constraints on Theories of the Solar Differential Rotation
- Durney, B.R. 1993, *Astrophys. J.* 407, 367-379: On the Solar Differential Rotation: Meridional Motions Associated with a Slowly Varying Angular Velocity
- Durney, B.R. 1999, *Astrophys. J.* 511, 945-957: The Taylor-Proudman Balance and the Solar Rotational Data
- Durney, B.R., Cram, L.E., Guenther, D.B., Keil, S.L., and Lytle, D.M. 1985, *Astrophys. J.* 292, 752-762: A Search for Long-Lived Velocity Fields at the Solar Poles
- Durney, B.R., De Young, D.S., and Passot, T.P. 1990, *Astrophys. J.* 362, 709-721: On the Generation of the Solar Magnetic Field in a Region of Weak Buoyancy
- Durney, B.R., De Young, D.S., and Roxburgh, I.W. 1993, *Solar Phys.* 145, 207-225: On the Generation of the Large-Scale and Turbulent Magnetic Fields in Solar-Type Stars
- Durney, B.R., Goode, P.R., and Hill, F. 1988, *Astrophys. J.* 326, 486-489: On the Expansion of the Rotational Eigenfrequencies in Legendre Polynomials
- Durney, B.R., and Hill, F. 1989, in GONG Report no. 4, The CfA Inversion Workshop, 98-104: On a Preliminary Analysis of the Rotational Splitting Data
- Durney, B.R., Keil, S.L., and Lytle, D.M. 1984, *Astrophys. J.* 281, 455-457: On the Rotation Rate of Polar Features in the Sun
- Durney, B.R., and Sofia, S. 1987, eds., The Internal Solar Angular Velocity: Theory, Observations and Relationship to Solar Magnetic Fields. Workshop Proceedings, Sunspot, New Mexico, 11-14 August, 1986 (Boston: Kluwer) 373 pp.
- Duvall, T.L. 1985, in *Transactions of the IAU 19A*, 97-100: Solar Oscillations
- Duvall, T.L. 1995, in *ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995*. J.T. Hoeksema, ed. (ESA), Volume 1, 107-111: Other Groundbased Observations
- Duvall, T.L. 1995, in *GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994*. R. Ulrich, ed. (Astronomical Society of the Pacific), 465-474: Time-Distance Helioseismology: an Update
- Duvall, T.L., D'Silva, S., Jefferies, S.M., Harvey, J.W., and Schou, J. 1996, *Nature* 379, 235-237: Downflows Under Sunspots Detected by Helioseismic Tomography

- Duvall, T.L., Dziembowski, W.A., Goode, P.R., Gough, D.O., Harvey, J.W., and Leibacher, J.W. 1984, Nature 310, 22-25: The Internal Rotation of the Sun
- Duvall, T.L., and Harvey, J.W. 1984, Nature 310, 19-22: Rotational Frequency Splitting of Solar Oscillations
- Duvall, T.L., and Harvey, J.W. 1986, in Seismology of the Sun and the Distant Stars: Proceedings of NATO ASI Workshop, Cambridge, England, June 1985. D.O. Gough, ed. (Reidel), 105-116: Solar Doppler Shifts: Sources of Continuous Spectra
- Duvall, T.L., Harvey, J.W., Jefferies, S.M., and Pomerantz, M.A. 1991, Astrophys. J. 373, 308-316: Measurements of High Frequency Solar Oscillation Modes
- Duvall, T.L., Harvey, J.W., Libbrecht, K.G., Popp, B.D., and Pomerantz, M.A. 1988, Astrophys. J. 324, 1158-1171: Frequencies of Solar P-Mode Oscillations
- Duvall, T.L., Harvey, J.W., and Pomerantz, M.A. 1986, Antarctic Journal of the U.S. 21, 280-281: Rotation of the Solar Interior
- Duvall, T.L., Harvey, J.W., and Pomerantz, M.A. 1986, Nature 321, 500-501: Latitude and Depth Variation of Solar Rotation
- Duvall, T.L., Harvey, J.W., and Pomerantz, M.A. 1987, in The Internal Solar Angular Velocity: Theory, Observations, and Relationship to Solar Magnetic Fields. Workshop Proceedings, Sunspot, New Mexico, 11-14 August, 1986. B.R. Durney and S. Sofia, eds. (Kluwer), 19-22: Latitude and Depth Variation of Solar Rotation
- Duvall, T.L., Harvey, J.W., and Pomerantz, M.A. 1988, in IAU Symposium 123, Advances in Helio- and Asteroseismology. J. Christensen-Dalsgaard and S. Frandsen, eds., 37-39: Intermediate Degree Solar Oscillations
- Duvall, T.L., Jefferies, S.M., Harvey, J.W., Osaki, Y., and Pomerantz, M.A. 1993, Astrophys. J. 410, 829-836: Asymmetries of Solar Oscillation Line Profiles
- Duvall, T.L., Jefferies, S.M., Harvey, J.W., and Pomerantz, M.A. 1993, Nature 362, 430-432: Time-Distance Helioseismology
- Duvall, T.L., Jefferies, S.M., Pomerantz, M.A., and Harvey, J.W. 1994, in Applications of Time Series in Astronomy and Meteorology: Workshop Proceedings, Padova Italy, 6-10 September, 1993. O. Lessi, ed. (S.M. Legatoria: Padova), 179-182: The Frequency Variation of Solar Acoustic Wave Travel Times
- Eason, E.L., Giampapa, M.S., Radick, R.R., Worden, S.P., and Hege, E.K. 1992, Astron. J. 104, 1161-1173: Spectroscopic and Photometric Observations of a Five-Magnitude Flare Event on UV Ceti
- Eason, E.L.E., Worden, S.P., Klimke, A., and Africano, J.L. 1984, Publ. Astron. Soc. Pacific 96, 372-375: A Photometric Study of the Cataclysmic Variable, LX Serpentis
- Eaton, J.A. 1990, IAU Inf. Bull. Var. Stars 3640. Rotational Velocities of G and K Giants. 4 pp.

- Elmore, D.F. 1988, in SPIE 891, Polarization Considerations for Optical Systems: Los Angeles, 11-12 January, 1988. R. Chipman, ed., 84-90: Measurement of the Polarization Properties of the NSO Vacuum Tower Telescope: Physically Constrained Approach
- Elmore, D.F., Lites, B.W., Tomczyk, S., Skumanich, A.P., Dunn, R.B., Schuenke, J.A., Streander, K.V., Leach, T.W., Chambellan, C.W., Hull, H.K., and Lacey, L.B. 1992, in SPIE 1746, Polarization Analysis and Measurement: San Diego California, 19-21 July, 1992. R. Chipman, ed., 22-33: The Advanced Stokes Polarimeter: a New Instrument for Solar Magnetic Field Research
- Elowitz, M., Hill, F., and Duvall, T.L. 1989, *J. Comput. Phys.* 80, 506-511: A Test of a Modified Algorithm for Computing Spherical Harmonic Coefficients Using an FFT
- Elste, G. 1985, in High Resolution in Solar Physics: Eighth IAU European Regional Astronomy Meeting, Toulouse, 17-21 September, 1984, 169-171: Temperature Gradients in the Solar Granulation
- Elste, G. 1986, *Solar Phys.* 107, 47-56: Manganese and Carbon Lines as Temperature Indicators
- Elste, G. 1988, in Solar Radiative Output Variation: Workshop Proceedings, Boulder, CO, 9-11 November, 1987, 204-215: Limb Darkening Variations
- Elste, G.H. 1990, *Solar Phys.* 126, 37-45: Asymmetries in Limb Darkening Reanalyzed
- Engleman, R. 1985, *J. Opt. Soc. Am. B* 2, 1934-1941: Accurate Energy Levels for Neutral Platinum
- Engleman, R. 1989, *Astrophys. J.* 340, 1140-1143: The Structure and Wavelength of Some Pt II Lines of Astrophysical Interest
- Engleman, R., and Brault, J.W. 1995, in *Astron. Soc. Pacific Conf. Ser.* 81. Workshop Proceedings, Brussels Belgium, 29 Aug.- 2 Sept. 1994 (A.S.P.), 229-230: The Infrared Spectrum of Neutral Sulphur (S I)
- Engleman, R., Cowan, R.D., and Peek, J.M. 1988, *J. Opt. Soc. Am. B* 5, 2294-2297: Some Forbidden Lines of Platinum
- Engleman, R., Keller, R.A., and Miller, C.M. 1985, *J. Opt. Soc. Am. B* 2, 897-902: Effect of Optical Saturation on Hyperfine Intensities in Optogalvanic Spectroscopy
- Engleman, R., and Palmer, B.A. 1984, *J. Opt. Soc. Am. B* 1, 782-787: Precision Isotope Shifts for the Heavy Elements. III. Singly Ionized Thorium (Th II)
- Engvold, O., and Keil, S.L. 1986, in Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985 and 8-10 April, 1986. A.I. Poland, ed. NASA CP- 2442, 169-175: Vertical Motions in Quiescent Prominences Observed in the He I 10830 Å Line
- Erdwurm, W., and Pintar, J.A. 1996, in Astronomical Data Analysis Software and Systems V: Tucson, Arizona, 23-25 October, 1996. G.H. Jacoby and J. Barnes, eds. (Astronomical Society of the Pacific), 513-516. : Storing and Distributing GONG Data
- Ermolli, I., Berrilli, F., Florio, A., and Pietropaolo, E. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W.

- Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 223-230: Chromospheric Network Properties Derived from One Year of PSPT Images
- Ermolli, I., Fofi, M., Bernacchia, C., Berrilli, F., Caccin, B., Egidi, A., and Florio, A. 1998, Solar Phys. 177, 1-10: The Prototype RISE-PSPT Instrument Operating in Rome
- Erofeev, D.V. 1996, Solar Phys 167, 25-45: Rigidly Rotating Modes of the Solar Magnetic Field
- Erofeev, D.V. 1997, Solar Phys 175, 45-58: The Relationship Between Kinematics and Spatial Structure of the Large-Scale Solar Magnetic Field
- Erofeev, D.V. 1998, Solar Phys 182, 21-35: Kinematics and Evolution of Local Features of the Large-Scale Magnetic Field I. Kinematical Characteristics
- Eselevich, V.G., and Tong, Y. 1997, Geophys. Res. 102, 4681-4690: New Results on the Site of Initiation of Coronal Mass Ejections and an Interpretation of Observation of Their Interaction with Streamers
- Esser, R. 1994, Space Science Reviews 70, 331-340: Unsolved Problems of Solar Wind Expansion: Can We Learn Anything from SOHO?
- Esser, R., Brickhouse, N.S., Habbal, S.R., Altrock, R.C., and Hudson, H.S. 1995, J. Geophys. Res. 100, 19829-19838: Using Fe X 6374 Å and Fe XIV 5303 Å Spectral Line Intensities to Study the Effect of Line of Sight Integration on Coronal Temperature Inferences
- Ewald, R., Imhoff, C.L., and Giampapa, M.S. 1986, in ESA SP-263, New Insights in Astrophysics: Eight Years of UV Astronomy with IUE. Symposium Proceedings, London, England, 14-16 July, 1986, 205-207: IUE Observations of the Eruptive Pre-Main Sequence Object FU Orionis
- Fainshtein, V.G. 1997, Solar Phys 174, 413-435: An Investigation of Solar Factors Governing Coronal Mass Ejection Characteristics
- Fainshtein, V.G., Rudenko, G.V., and Grechey, V.V. 1998, Solar Phys 181, 133-158: An Investigation of the Large-Scale Magnetic Field Variations in the Corona Prior to and After CME Eruptions
- Faires, L.M., Palmer, B.A., and Brault, J.W. 1985, Spectrochimica Acta 40B, 135-143: Line Width and Line Shape Analysis in the Inductively Coupled Plasma by High Resolution Fourier Transform Spectrometry
- Faires, L.M., Palmer, B.A., Engleman, R., and Niemczyk, T.M. 1985, Spectrochimica Acta 40B, 545-551: ICP Argon Emission in the Near Infrared 1-2 micron by High Resolution Fourier Transform Spectrometry
- Faires, L.M., Palmer, B.A., Engleman, R., and Niemczyk, T.M. 1985, Spectrochimica Acta 39B, 819-828: Temperature Determinations in the Inductively Coupled Plasma Using a Fourier Transform Spectrometer
- Falchi, A., Falciani, R., Cauzzi, G., and Vial, J.C. 1999, in Astron. Soc. Pacific Conf. Ser. 184, Magnetic Fields and Oscillations: Third Advances in Solar Physics Euroconference, Potsdam Germany, 22-26 September, 1998. B. Schmieder, A. Hofmann, and J. Staude, eds. (Astron. Soc. Pacific), 261- : Multiwavelength Analysis of Network Bright Points

- Falchi, A., Falciani, R., and Smaldone, L.A. 1990, *Adv. SpaceRes.* 11, no. 5, 585-: Needs and Constraints for Coordinated Programs of Photospheric and Chromospheric Studies of Flares
- Falchi, A., Falciani, R., and Smaldone, L.A. 1990, *Astron. Astrophys. Suppl. Ser.* 84, 601-: Analysis of Solar Flares Optical Spectra. V. Sensitivity of the Hydrogen Balmer Signatures and the Na-D2 Line Profile to Different Energy Transport Mechanisms
- Falchi, A., Falciani, R., and Smaldone, L.A. 1992, *Astron. Astrophys.* 256, 255-263: Analysis of the Optical Spectra of the Solar Flares. VI. Velocity Fields in the 13 June 1980 Flare Area.
- Falchi, A., Falciani, R., Smaldone, L.A., and Tozzi, G.P. 1987, *Solar Phys.* 114, 29-45: Bidimensional Spectroscopy of Network Bright Points. I. Morphological Properties
- Falchi, A., Qiu, J., and Cauzzi, G. 1997, *Astron. Astrophys.* 328, 371-380: Chromospheric Evidence for Magnetic Reconnection
- Falchi, A., Qiu, J., and Cauzzi, G. 1998, in *JOSO Annual Report 1997*, 149-: Chromospheric Evidence for Magnetic Reconnection in a Two-Ribbon Flare
- Falciani, R. 1984, *Mem. Soc. Astron. Italiana* 55, 787-799: Ground-Based Optical Observations During SMM
- Falciani, R., Machado, M.E. Mattig, W., and Simon, G.W., eds. 1991, *Opening Frontiers in Solar Research: COSPAR Workshop*, The Hague, Netherlands, 27 June-- 5 July, 1990 (Published in *Adv. Space Res.* 11, no. 5). 300 pp.
- Falconer, D.A., Davila, J.M., and Thomas, R.J. 1997, *Astrophys. J.* 482, 1050-1064: Relative Elemental Abundances of the Quiet Solar Corona as Determined by SERTS
- Falconer, D.A., Moore, R.L., Porter, J.G., Gary, G.A., and Shimizu, T. 1997, *Astrophys. J.* 482, 519-534: Neutral-Line Magnetic Shear and Enhanced Coronal Heating in Solar Active Regions
- Falconer, D.A., Moore, R.L., Porter, J.G., and Hathaway, D.H. 1998, *Astrophys. J.* 501, 386-396: Network Coronal Bright Points: Coronal Heating Concentrations Found in the Solar Magnetic Network
- Fan, Y., Braun, D.C., and Chou, D.Y. 1995, *Astrophys. J.* 451, 877-888: Scattering of p-Modes by Sunspots. II. Calculations of Phase Shifts from a Phenomenological Model
- Fan, Y., and Fisher, G.H. 1996, *Solar Phys.* 166, 17-41: Radiative Heating and the Buoyant Rise of Magnetic Flux Tubes in the Solar Interior
- Fan, Y., Fisher, G.H., and McClymont, A.N. 1994, *Astrophys. J.* 436, 907-928: Dynamics of Emerging Active Region Flux Loops
- Fang, C., Mouradian, Z., Banos, G., Dumont, S., and Pecker, J.-C.. 1984, *Solar Phys.* 91, 61-70: Structure and Physics of Solar Faculae IV. Chromospheric Granular Structure
- Fang, C., Zhang, Q.Z., Yin, S.Y., and Livingston, W.C. 1988, *Scientia Sinica Series A* 31, 842-852: Height-Varying Semi-Empirical Models of a Quiescent Prominence

- Farnik, F., Hudson, H., and Watanabe, T. 1997, Astron. Astrophys. 320, 620-630: Yohkoh Observations of Flares with Flat Hard X-Ray Spectra
- Farnik, F., Karlicky, M., and Svestka, Z. 1999, Solar Phys. 187, 33-44: Long Transequatorial Interconnecting Loops of the New Solar Cycle
- Ferguson, D.H., and Giampapa, M.S. 1992, in SPIE 1697, 274-: Next Generation Ultraviolet Astronomy with the Deep Ultraviolet Observatory
- Fernando, W.T., and Bernath 1991, J. Mol. Spectr. 145, 392-402: Fourier Transform Spectroscopy of the A1II - X1Sigma+ Transition of BH and BD
- Fernando, W.T., O'Brien, L.C., and Bernath, P.F. 1990, J. Mol. Spectr. 139, 461-464: Fourier Transform Emission Spectroscopy of the A1Epsilon+ -X1Epsilon+ Transition of CuD
- Fernando, W.T., O'Brien, L.C., and Bernath, P.F. 1991, J. Chem. Phys. 93, 8482-8487: Fourier Transform Emission Spectroscopy: the B4rnSigma mi X4rnSigma Transition of BC
- Fierry Fraillon, D., Gelly, B., Schmider, F.X., Hill, F., Fossat, E., and Pantel, A. 1998, Astron. Astrophys. 333, 362-368: Power Spectrum Modelisation of Helioseismic Data: an Application to the Measurement of Solar p-Mode Uncertainties
- Fierry Fraillon, D., Gelly, B., and the Golf Team 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 165-166: Power Law of EpsilonGamma as a Function of Frequency
- Fischer, G., Hill, F., Jones, W., Leibacher, J.W., McCurnin, W., and Stebbins, R.T. 1987, GONG Report no. 3: Operation of the GONG Site Survey Instrument
- Fischer, G., Hill, F., Jones, W., Leibacher, J.W., McCurnin, W., Stebbins, R.T., and Wagner, J.J. 1986, Solar Phys. 103, 33-39: A Simple Irradiance Monitor for Testing Solar Global Oscillation Network Sites
- Fisher, G.H., Fan, Y., and Howard, R.F. 1995, Astrophys. J. 438, 463-471: Comparison Between Theory and Observation of Active Region Tilts
- Fisher, G.H., Fan, Y., Longcope, D.W., and Linton, M.G. 1996, in International Astronomical Union Colloquium no. 153. Y. Uchida, T. Kosugi, and H.S. Hudson, eds. (Kluwer): The Dynamics of Magnetic Flux Tubes in the Solar Convection Zone-- a Study of Active Region Formation
- Flaud, J., Camy-Peyret, C., Brault, J.W., Rinsland, C.P., and Cariolle, D. 1988, Geophys. Res. Lett. 15, 261-264: Nighttime and Daytime Variation of Atmospheric NO<sub>2</sub> from Ground-Based Infrared Measurements
- Flaud, J., Camy-Peyret, C., Devi, V.M., Rinsland, C.P., and Smith, M.H. 1986, J. Mol. Spectr. 118, 334-344: The nu(1) and nu(3) Bands of 16O18O16O: Line Positions and Intensities

- Flaud, J., Camy-Peyret, C., Devi, V.M., Rinsland, C.P., and Smith, M.H. 1987, *J. Mol. Spectr.* 122, 221-228: The nu1 and nu3 Bands of  $^{18}\text{O}_3$  and  $^{18}\text{O}^{16}\text{O}^{18}\text{O}$ : Line Positions and Intensities
- Flaud, J., Camy-Peyret, C., Devi, V.M., Rinsland, C.P., and Smith, M.H. 1987, *J. Mol. Spectr.* 124, 209-217: The nu1 and nu3 Bands of  $^{16}\text{O}_3$ : Line Positions and Intensities
- Flaud, J., Camy-Peyret, C., Ngom, A., Devi, V.M., Rinsland, C.P., and Smith, M.H. 1989, *J. Mol. Spectr.* 133, 217-223: The nu2 Bands of  $^{16}\text{O}^{18}\text{O}$  and  $^{16}\text{O}^{16}\text{O}^{18}\text{O}$ : Line Positions and Intensities
- Flaud, J., Camy-Peyret, C., Rinsland, C.P., Devi, V.M., Smith, M.H., and Goldman, A. 1990, *Appl. Opt.* 29, 3667-3671: Improved Line Parameters for Ozone Bands in the 10  $\mu\text{m}$  Spectral Region
- Flaud, J., Camy-Peyret, C., Rinsland, C.P., Smith, M.H., and Devi, V.M. 1990, *Atlas of Ozone Spectral Parameters from Microwave to Medium Infrared*. (Academic Press). 599 pp.
- Fleck, B., and Deubner, F. 1989, *Astron. Astrophys.* 224, 245-252: Dynamics of the Solar Atmosphere II. Standing Waves in the Solar Chromosphere
- Fleck, B., Deubner, F.L., Hofmann, J., and Steffens, S. 1994, in *Chromospheric Dynamics: Proceedings of a Mini-Workshop Held at the Institute of Theoretical Astrophysics, University of Oslo, Norway, 6-8 June 1994*. M. Carlsson, ed. (University of Oslo), 103-109: Wave Propagation in the Solar Chromosphere: Some New Results from CaII K, CaII 8542, and HeI 10830 Observations
- Fleck, B., Deubner, F.L., Maier, D., and Schmidt, W. 1994, in *IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992*. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 65-70: Observations of Solar Oscillations in He I 10830 Å
- Fleming, T., Schmitt, J.H., and Giampapa, M.S. 1995, *Astrophys. J.* 450, 401-410: Correlations of Coronal X-Ray Emission with Activity, Mass, and Age of the Nearby K and M Dwarfs
- Fleming, T.A. 1988, Optical Analysis of an X-Ray Selected Sample of Stars. PhD Thesis (University of Arizona)
- Fleming, T.A., and Giampapa, M.S. 1989, *Astrophys. J. Lett.* 346, 299-302: A Search for Chromospheres at Faint Magnitudes
- Fleming, T.A., Giampapa, M.S., Schmitt, J.H., and Bookbinder, J.A. 1992, in *Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th)*, Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pac.), 93-: The Nature of the Dynamo at the End of the Main Sequence: a ROSAT Survey of the Late M Dwarfs
- Fleming, T.A., Giampapa, M.S., Schmitt, J.H., and Bookbinder, J.A. 1993, *Astrophys. J.* 410, 387-392: Stellar Coronae at the End of the Main Sequence: a Rosat Survey of the Late M Dwarfs
- Fleming, T.A., Schmitt, J.H., and Giampapa, M.S. 1994, in *Eighth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: Proceedings*, Athens Georgia, 11-14 October, 1993. J.P. Caillault, ed., 77-79: The X-Ray Luminosity Function of the Nearby K and M Dwarfs: Results from ROSAT

- Floyd, L.E., Reiser, P.A., Crane, P.C., Herring, L.C., Prinz, D.K., and Brueckner, G.E. 1998, Solar Phys. 177, 79-87: Solar Cycle 22 UV Spectral Irradiance Variability: Current Measurements by SUSIM UARS
- Foing, B.H. et al 1994, Astron. Astrophys. 292, 543-568: Active Surface Structures and First Detection of Optical Flares on HR 1099 from the MUSICOS 89 Campaign
- Foing, B.H. et al 1994, in Astron. Astrophys. 292, 543-568: Multi-Site Continuous Spectroscopy. II. First Detection of Exceptional Optical Flares on HR 1099 from the MUSICOS 89 Campaign
- Foing, B.H. et al, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson, Arizona, October, 1991. M. Giampapa and J. Bookbinder, eds. (Astron. Soc. Pac.), 637-: Active Surface Structures and Exceptional Optical Flares on HR 1099 from the MUSICOS 89 Campaign
- Foing, B.H., Bonnet, R.M., Dame, L., Bruner, M., Acton, L.W., and Brown, W.A. 1986, in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/ Solar Maximum Mission Symposium, 20-24 August, 1985. D.F. Neidig, ed., 319-330: XSST/TRC Rocket Observations of 13 July 1982 Flare
- Foing, B.H., Catala, C., and the MUSICOS Team 1990, in Progress of Seismology of the Sun and Stars: Proceedings of the Oji International Seminar Held at Hakone, Japan, 11-14 December 1989. Y. Osaki and H. Shibahashi, eds. (Springer-Verlag), 457-462: The MUSICOS Network for Multi-Site Continuous Spectroscopy
- Foing, B.H., Martic, M., Bonnet, R.M., Bruner, M.E., Acton, L.W., and Brown, W.A. 1988, Adv. Space Res. 8, no. 11, 153-156: Extreme Ultra-Violet Filtergrams and X-Ray Spectroscopy of Active Regions and Flares from TRC/XSST Rocket Campaigns
- Fontenla, J., Rovira, M., and Tandberg-Hanssen, E. 1997, Astrophys. J. 491, 925-932: Ultraviolet Events Observed in Active Regions. II. An Interpretation of Flaring Arches and Associated Small Flares
- Fontenla, J., Schmieder, B., Simnett, G.M., and Tandberg-Hanssen, E. 1994, Astrophys. J. 424, 1022-1031: Time Evolution of a Miniflare as Seen in Halpha, UV Lines, and X-Rays
- Fontenla, J.M., and Poland, A.I. 1989, Solar Phys. 123, 143-160: The Eruption of a Quiescent Prominence as Observed in UV lines
- Fontenla, J.M., Rabin, D.M., Hathaway, D.H., and Moore, R.L. 1993, Astrophys. J. 405, 787-797: Measurement of p-Mode Energy Propagation in the Quiet Solar Photosphere
- Fontenla, J.M., Svestka, Z., Farnik, F., and Tang, F.Y. 1991, Solar Phys. 134, 145-169: Flaming Arches
- Fontenla, J.M., Tandberg-Hanssen, E., Reichmann, E.J., and Filipowski, S. 1989, Astrophys. J. 344, 1034-1045: Ultraviolet Events Observed in Active Regions. I. Observations and Scenario
- Forsberg, P. 1987, The Spectrum and Term System of Neutral Titanium, Ti I. PhD Thesis (Lund University). 765 pp.
- Forsberg, P., and Johansson, S. 1986, Phys. Scripta 34, 759-765: The Absorption Spectrum of Titanium Between 1900 Angstroms and 2315 Angstroms

- Fort, B., Livingston, W.C., Monet, D., Prokofeva, V., Scherbakov, A., Wlerick, G., and Ye, B. 1985, in Transactions of the IAU 19A, 49-51: Photo-Electronic Image Devices
- Foukal, P. 1988, AFGL Technical Report 88-0012., 27 p: Measurement of Macroscopic Electric Fields in Solar Plasma Structures
- Foukal, P. 1989, Solar Phys. 120, 249-251: Comment on "Asymmetry and Variations of Solar Limb Darkening Along the Diameter Defined by Diurnal Motion in April 1981" by Neckel and Labs (1987)
- Foukal, P. 1990, Phil. Trans. Roy. Soc. London 330, 591-: Solar Luminosity Variations Over Timescales of Days to the Past Few Solar Cycles
- Foukal, P. 1990, Scientific American 262, 34-41: The Variable Sun
- Foukal, P., and Duvall, T.L. 1985, Astrophys. J. 296, 739-745: Differential Photometry of Magnetic Faculae
- Foukal, P., and Fowler, L. 1984, Astrophys. J. 281, 442-454: A Photometric Study of Heat Flow at the Solar Photosphere
- Foukal, P., Harvey, K., and Hill, F. 1991, Astrophys. J. Lett. 383, L89-L92: Do Changes in the Photospheric Magnetic Network Cause the 11-Year Variation of the Total Solar Irradiance?
- Foukal, P., Hoyt, C., and Gilliam, L.B. 1986, Astrophys. J. 303, 861-876: Electric Fields and Plasma Structure in Coronal Magnetic Loops
- Foukal, P., and Landman, D. 1986, in IAU Colloquium 86, Eighth International Colloquium on EUV and X-Ray Spectroscopy of Astrophysical and Laboratory Plasmas: Washington, D.C., 27-29 August 1984.: Interpretation of Electric Fields in Coronal Magnetic Loops
- Foukal, P., and Lean, J. 1988, Astrophys. J. 328, 347-357: Magnetic Modulation of Solar Luminosity by Photospheric Activity
- Foukal, P., and Lean, J. 1988, in Solar Radiative Output Variation: Workshop Proceedings, Boulder, CO, 9-11 November, 1987. P. Foukal, ed., 323-: A Model of Solar Luminosity Modulation by Magnetic Activity Between 1954-1984
- Foukal, P., Little, R., and Gilliam, L.B. 1987, Solar Phys. 114, 65-74: Paschen-Line Stark-Broadening as an Electric Field Diagnostic in Erupting Prominences
- Foukal, P., Little, R., Graves, J., Rabin, D.M., and Lynch, D. 1990, Astrophys. J. 353, 712-715: Infrared Imaging of Faculae at the Deepest Photospheric Layers
- Foukal, P.V., and Behr, B.B. 1995, Solar Phys. 156, 293-314: Testing MHD Models of Prominences and Flares with Observations of Solar Plasma Electric Fields
- Fox, K. 1984, Chem. Phys. Lett. 104, 21- : Trends for Intensities of Vibrational Overtones in Methane
- Fox, K. 1984, J. Chem. Phys. 80, 1367-1368: The Tetrahedral Symmetry of Each Vibration-Rotation State in Methane

- Fox, K. 1984, J. Phys. Chem. 88, 531- : Isotropic Dependence of Infrared Transition Moments in Methane
- Fox, K., and Jennings, D.E. 1985, J. Quan. Spectr. Rad. Trans. 33, 275-280: Measurements of Nitrogen, Hydrogen, and Helium-Broadened Widths of Methane Lines at 9030-9120 per Centimeter
- Fox, K., and Jennings, D.E. 1989, J. Quan. Spectr. Rad. Trans. 42, 201-206: Spectral Shifts of Methane Lines in Collisions with Hydrogen, Helium, Nitrogen, and Argon
- Fox, K., and Jennings, D.E. 1990, J. Mol. Structure 224, 1-6: Spectroscopic Studies of Methane in Collisions with Rare Gas Atoms and Diatomic Molecules
- Fox, K., Jennings, D.E., Stern, E.A., and Hubbard, R. 1988, J. Quan. Spectr. Rad. Trans. 39, 473-476: Measurements of Argon-, Helium, Hydrogen-, and Nitrogen- Broadened Widths of Methane Lines Near 9000 cm<sup>-1</sup>
- Fox, P., McIntosh, P., and Wilson, P.R. 1998, Solar Phys. 177, 375-393: Coronal Holes and the Polar Field Reversals
- Franco, M.L., Magazzu, A., and Stalio, R. 1984, in The Future of Ultraviolet Astronomy Based on Six Years of IUE Research: Proceedings of NASA Symposium, Goddard Space Flight Center, 3-5 April, 1984. J.M. Mead et al, eds. NASA CP-2349, 212-214: Interstellar Extinction in the Nucleus of H Per
- Frohlich, C. 1992, in Solers22: Proceedings of the Workshop on the Solar Electromagnetic Radiation Study for Solar Cycle 22: Boulder, Colorado, June, 1991. R.F. Donnelly, ed. (NOAA), 1-: Solar Irradiance Variability
- Frohlich, C., and Pap, J. 1989, Astron. Astrophys. 220, 272-280: Multi-Spectral Analysis of Total Solar Irradiance Variations
- Frohlich, C., Romero, J., Roth, H., (21 other authors), Jones, A.R. 1995, Solar Phys. 162, 101-128: Virgo: Experiment for Helioseismology and Solar Irradiance Monitoring
- Frum, C.I., Engleman, R., and Bernath, P.F. 1990, Chem. Phys. Lett. 167, 356-361: Fourier Transform Detection of the Vibration-Rotation Bands of IF
- Frum, C.I., Engleman, R., and Bernath, P.F. 1990, J. Chem. Phys. 93, 5457-5461: Fourier Transform Emission Spectroscopy at 13 mum: Vibration-Rotation Spectrum of SiS
- Frum, C.I., Engleman, R., and Bernath, P.F. 1991, J. Chem. Phys. 95, 1435-1440: Fourier Transform Emission Spectroscopy of BeF<sub>2</sub> at 6.5 microns
- Frum, C.I., Engleman, R., and Bernath, P.F. 1992, J. Mol. Spectr. 150, 566-575: Fourier Transform Emission Spectroscopy of the A'3Pi-X3Sigma- Transition of PtO
- Frum, C.I., Engleman, R., Hedderich, H.G., Bernath, P.F., Lamb, L.D., and Huffman, D.R. 1991, Chem. Phys. Lett. 176, 504-508: The Infrared Emission Spectrum of Gas Phase C<sub>60</sub> (buckminsterfullerene)

- Fu, Q., Kundu, M.R., and Schmahl, E.J. 1986, Solar Phys. 108, 99-111: Coronal Bright Points at 6 Centimeter Wavelength
- Gabriel, A.H., Charra, J., Grec, G., Robillot, J.M., Roca Cortes, T., Turck-Chieze, S., Ulrich, R., Basu, S., Baudin, F., Bertello, L., Boumier, P., Charra, M., Christensen-Dalsgaard, J., Decaudin, M., Dzitko, H., Foglizzo, T., Fossat, E., Garcia, R.A., Herreros, J.M., Lazrek, M., Palle, P.L., Petrou, N., Renaud, C., and Regulo, C. 1997, Solar Phys. 175, 207-226: Performance and Early Results from the GOLF Instrument Flown on the SOHO Mission
- Gaizauskas, V. 1985, in Chromospheric Diagnostics and Modelling: Workshop Proceedings, Sunspot, New Mexico, August 13-1. 1984. B.W. Lites, ed., 25-49: Observations of the Fine Structure of the Chromosphere
- Gaizauskas, V. 1986, Solar Phys. 105, 67-72: Flare Build-Up Study Workshop: National Solar Observatory, Sacramento Peak, NM 26-29 August, 1985
- Gaizauskas, V. 1986, in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium, 20-24 August, 1985. D.F. Neidig, ed., 37-50: Morphology of Flaring Kernels with Asymmetrically-Broadened H-alpha Emission
- Gaizauskas, V. 1987, Artificial Satellites 22, no. 1, 43-56: Active Solar Longitudes
- Gaizauskas, V. 1989, Solar Phys. 121, 135-152: Preflare Activity
- Gaizauskas, V. 1993, Adv. Space Res. 13, no. 9, 5-14: The Birth and Evolution of Solar Active Regions
- Gaizauskas, V. 1993, in IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 479-486: On Recurrent Solar Activity
- Gaizauskas, V. 1996, Solar Phys. 169, 357-366: Magnetic Reconnection as a Driver of Chromospheric Surges
- Gaizauskas, V. 1998, in IAU Colloquium 167. New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997. D. Webb, D.M. Rust and B. Schmeider, eds. (Kluwer), 257-264: Filament Channels: Essential Ingredients for Filament Formation
- Gaizauskas, V., and Harvey, K.L. 1986, Adv. Space Res. 6, no. 6, 17-24: Magnetic Shear Produced by Colliding Sunspots
- Gaizauskas, V., and Harvey, K.L. 1991, in Flares 22 Workshop: Dynamics of Solar Flares. Chantilly France, October 16-19, 1990. B. Schmieder and E. Priest, eds., 25-27: Collisions Between Nested Sunspots: a Pathway to Flares
- Gaizauskas, V., Harvey, K.L., and Poulx, M. 1994, Astrophys. J. 422, 883-898: Interactions Between Nested Sunspots. I. The Formation and Breakup of a Delta-Type Sunspot.
- Gaizauskas, V., Mandrini, C.H., Demoulin, P., Luoni, M.L., and Rovira, M.G. 1998, Astron. Astrophys. 332, 353-366: Interactions Between Nested Sunspots. II. A Confined X1 Flare in a Delta-Type Sunspot

- Gaizauskas, V., and McIntosh, P.S. 1986, Solar-Terrestrial Predictions: Workshop Proceedings ( 2nd), Meudon, France, 18-22 June, 1984. P.A. Simon et al, eds., 126-130: On the Flare Effectiveness of Recurrent Patterns of Solar Magnetic Fields
- Gaizauskas, V., and Tapping, K.F. 1988, *Astrophys. J.* 325, 912-926: Compact Sites of Microwave Emission at 2.8 Centimeter Wavelength Inside Solar Active Regions
- Gaizauskas, V., Zirker, J.B., Sweetland, C., and Kovacs, A. 1997, *Astrophys. J.* 479, 448-457: Formation of a Solar Filament Channel
- Gamache, R.R., Lynch, R., and Brown, L.R. 1996, *J. Quan. Spectr. Rad. Trans.* 56, 471-487: Theoretical Calculations of Pressure Broadening Coefficients for H<sub>2</sub>O Perturbed by Hydrogen or Helium Gas
- Garcia, R.A., Jefferies, S.M., Toner, C.G., and Palle, P.L. 1999, *Astron. Astrophys.* 346, L61-L64: Improving the Signal-to-Noise Ratio in Solar Oscillation Spectra
- Garcia, R.A., Palle, P.L., Turck-Chieze, S., Osaki, Y., Shibahashi, H., Jefferies, S.M., Gabriel, A.H., Grec, G., Robillot, J.M., Roca Cortes, T., and Ulrich, R.K. 1998, *Astrophys. J. Lett.* 504, L51-: High Frequency Peaks in the Power Spectrum of Solar Velocity Observations from the GOLF Experiment
- Garcia de la Rosa, J.I., Aballe, M.A., and Collados, M. 1989, *Solar Phys.* 124, 219-226: An Example of the Cancellation of Magnetic Fields During the Decay of an Active Region
- Garcia de la Rosa, J.I., and Collados, M. 1987, in *The Sun: Tenth European Regional Astronomy Meeting of the IAU, Vol. I*, 55-57: Detailed Processes Accompanying the Decay of an Active Region
- Gary, D.E., and Hurford, G.J. 1987, *Astrophys. J.* 317, 522-533: Multi-Frequency Observations of a Solar Active Region During a Partial Eclipse
- Gary, G.A. 1997, *Solar Phys.* 174, 241-263: Rendering Three-Dimensional Solar Coronal Structures
- Gary, G.A., and Rabin, D.M. 1995, *Solar Phys.* 157, 185-197: Line-of-Sight Magnetic Flux Imbalances Caused by Electric Currents
- Gaustad, J.E. 1987, in *IAU Symposium 18, Instrumentation and Research with Small Telescopes*. J. Hernshaw, ed., 449-450: Temperature and Brightness Variations on Betelgeuse
- Gavryusev, V.G., and Gavryuseva, E.A. 1998, in *New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997*. F.L. Deubner, ed., *IAU Symposium 185* (Kluwer), 153-156: Line Profiles and Rotational Splitting of Individual p-Modes
- Gavryusev, V.G., and Gavryuseva, E.A. 1999, in *New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997*. F.L. Deubner, ed., *IAU Symposium 185* (Kluwer), 227-228: Temporal Behavior of Solar p-Modes from GONG and GOLF Experiments
- Gavryuseva, E., and Gavryusev, V.G. 1999, *Solar Phys.* 189, 261-270: On the Difference Between Low-p-Mode Frequencies Seen in Velocity and in Intensity

- Gavryuseva, E., and Gavryusev, V.G. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 181-186: Power Asymmetry in the Components of the Rotational Multiplets of Dipole Oscillations
- Gavryuseva, E., and Gavryusev, V.G. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 187-192: The Parameters and the Accuracy of Low Spherical Degree Modes from GONG Observations
- Gavryuseva, E., and Gavryusev, V.G. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 921-926: Power of Global Solar Oscillations During Solar Activity Minimum
- Gavryuseva, E., and Gavryusev, V.G. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 927-932: On the Difference Between p-Mode Frequencies Seen in Velocity and Intensity
- Gavryuseva, E., Gavryusev, V.G., and Di Mauro, M.P. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 193-198: Rotational Split of Solar Acoustic Modes from GONG Experiment
- Geary, J.M., and Rabin, D.M. 1990, in SPIE 1235, 181-190: Solar IR Presensitization Photography
- Geary, J.M., and Rabin, D.M. 1992, in Optical Engr. 31, 2694-2696: Solar IR Presensitization Photography
- Georgakilas, A.A., Alissandrakis, C.E., and Zachariadis, T.G. 1990, Solar Phys. 129, 277-294: Mass Motions Associated with H-alpha Active Region Arch Structures
- Georgakilas, A.A., Christopoulou, E.B., and Kouchmy, S. 1999, in ESA SP-448, 9th European Meeting on Solar Physics: Magnetic Fields and Solar Processes. Workshop Proceedings, Florence Italy, 12-18 September 1999. B. Fleck and A. Wilson, eds. (ESA), 57-: Multiwavelength Observations of Ellerman Bombs
- Georgakilas, A.A., Christopoulou, E.B., and Kouchmy, S. 1999, in ESA SP-448, 9th European Meeting on Solar Physics: Magnetic Fields and Solar Processes. Workshop Proceedings, Florence Italy, 12-18 September 1999. B. Fleck and A. Wilson, eds. (ESA), 58-: Fine Structure of the Solar Chromosphere: Dynamics of Spicules and Fine Dark Mottles
- Georgakilas, A.A., Dara, H., Zacharidis, T., Alissandrakis, C.E., and Koutchmy, S. 1997, Solar Phys. 172, 133-138: Fine Structure of the Solar Atmosphere from Near-Limb Observations in Three Wavelengths
- Georgakilas, A.A., Dara, H., Zacharidis, T., Alissandrakis, C.E., Koutchmy, S., Delanee, C., Delaboudiniere, J.P., and Hochedez, J.F. 1998, in Astron. Soc. Pacific Conf. Ser. 155, Second Advances in Solar Physics Euroconference: Preveza Greece, 7-11 October, 1997 (Astron. Soc.

Pacific), 376:- Spicules and Macrospicules: Simultaneous H-Alpha and He II (304 Å) Observations

Georgakilas, A.A., Kouchmy, S., and Christopoulou, E.B. 1999, in ESA SP-448, 9th European Meeting on Solar Physics: Magnetic Fields and Solar Processes. Workshop Proceedings, Florence Italy, 12-18 September 1999. B. Fleck and A. Wilson, eds. (ESA), 59:- Dynamics and Nature of Macrospicules

Georgakilas, A.A., Koutchmy, S., and Alissandrakis, C.E. 1999, *Astron. Astrophys.* 341, 610-616: Polar Surges and Macrospicules: Simultaneous H-alpha and He II 304 /\*oA Observations

Georgakilas, A.A., Zachariadis, T.G., and Alissandrakis, C.E. 1993, *Solar Phys.* 146, 241-258: Evolution of an Active Region and Associated Halpha Arch Structures

George, S., Grays, A., and Engleman, R. 1988, *J. Opt. Soc. Am. B* 5, 1500-1502: The Spectrum of Au I in the Infrared Using a Fourier Transform Spectrometer

Georgobiani, D., Kuhn, J.R., and Beckers, J.M. 1995, *Solar Phys.* 156, 1-5: Using Eclipse Observations to Test Scintillation Models

Georgobiani, D., Kuhn, J.R., and Stein, R.F. 1997, in SCORe96, Solar Convection and Oscillations and Their Relationship: Workshop Proceedings, Aarhus Denmark, 27-31 May 1996. F.P. Pijpers, J. Christensen-Dalsgaard, and C.S. Rosenthal, eds., 127-130: Sound Speed Variations Near the Photosphere due to Entropy Perturbations in 3-D Numerical Experiments

Gerlei, O., Farnik, F., and Gestelyi, L. 1986, in SMA Workshop Proceedings, Irkutsk, USSR, 17-21 June 1985: Correlation of the Time Profiles of H-alpha and X-Ray Integral Intensities of Solar Flares

Gestlyi, L., Karlicky, M., Farnik, F., Gerlei, O., and Valniecek, B 1986, in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium, 20-24 August, 1985. D.F. Neidig, ed., 163-177: hite-Light Flare of 26 July 1981

Gezari, D., Livingston, W.C., and Varosi, F. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 559-566: Thermal Structure in Sunspots and Dynamic Solar Infrared Granulation Imaged at 4.8, 12.4, and 18.1 Microns

Giampapa, M.S. 1984, *Astrophys. J.* 277, 235-240: Lithium Abundances and Chromospheric Activity. I. Empirical Results

Giampapa, M.S. 1984, in Cool Stars, Stellar Systems, and the Sun: Cambridge Workshop Proceedings (3rd), Cambridge, Massachusetts, 5-7 October, 1983. S.L. Baliunas and L. Hartmann, eds., 14-26: Results from Ultraviolet Observations of T Tauri Stars

Giampapa, M.S. 1984, in Solar Irradiance Variations on Active Region Time Scales: Workshop Proceedings, Pasadena, California, June 20-21 1983. B.J. LaBonte et al, eds. NASA CP-2310, 173-184: Photometric Variations of Solar-Type Stars: Results of the Cloudfrost Survey

- Giampapa, M.S. 1984, in Space Research Prospects in Stellar Activity and Stellar Variability. F. Praderie and A. Mangeney, eds., 309-326: Direct and Indirect Methods of Measurement of Stellar Magnetic Fields
- Giampapa, M.S. 1985, *Astrophys. J.* 299, 781-784: The Filling Factor of Active Regions on the Surfaces of the DM Stars
- Giampapa, M.S. 1985, in Progress in Stellar Spectral Line Formation Theory: Workshop Proceedings, Trieste Italy, 4-7 September, 1984. J.E. Beckman and L. Crivellari, eds., 305-318: Stellar Surface Inhomogeneities and the Interpretation of Stellar Spectra
- Giampapa, M.S. 1986, in Rutherton Appleton Laboratory Technical Report 86-085. P. M. Gondhalekar, ed., 232-240: T Tauri Stars: Flare Characteristics and Flare Models
- Giampapa, M.S. 1987, *Sky and Tel.* 74, 142-146: The Solar-Stellar Connection
- Giampapa, M.S. 1987, ed., The SHIRSOG Workshop: Proceedings of a Workshop on Prospects for a New Synoptic High Resolution Spectroscopic Facility, Tucson, Arizona, 3 September, 1986. 149 pp.
- Giampapa, M.S. 1987, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings ( 5th), Boulder, Colorado, 8-11 July, 1987. J.L. Linsky and R.E. Stencel, eds., 236-249: Atmospheres of Stars in the Limit of Thin and Thick Convection Zones: the M Dwarf Stars
- Giampapa, M.S. 1987, in The SHIRSOG Workshop: Proceedings of a Workshop on Prospects for a New Synoptic High Resolution Spectroscopic Facility, Tucson, Arizona, 3 September, 1986. M.S. Giampapa, ed., 53-59: Synoptic Studies of T Tauri Stars
- Giampapa, M.S. 1988, in Solar Radiative Output Variation: Workshop Proceedings, Boulder, CO, 9-11 November, 1987. P. Foukal, ed., 241-249: Evolutionary Changes in the Ultraviolet and Extreme Ultraviolet Flux of the Sun
- Giampapa, M.S. 1990, *Nature* 348, 488-489: The Solar-Stellar Connection
- Giampapa, M.S. 1991, in The Astronomy and Astrophysics Encyclopedia. S.P. Maran, ed. (Van Nostrand), 753-: Stellar Magnetism-- Observed Properties
- Giampapa, M.S. 1992, in Surface Inhomogeneities on Late-Type Stars: Armagh Bicentenary Colloquium, 24-27 July, 1990. P.B. Byrne and D.J. Mullan, eds. (Springer-Verlag), 108-: Lithium in RS CVn Binaries and Related Chromospherically Active Stars
- Giampapa, M.S. 1992, in Surface Inhomogeneities on Late-Type Stars: Armagh Bicentenary Colloquium, 24-27 July, 1990. P.B. Byrne and D.J. Mullan, eds. (Springer-Verlag), 90-: Spectroscopic Signatures of Active Regions on Stellar Surfaces
- Giampapa, M.S. 1994, in Eighth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: Proceedings, Athens Georgia, 11-14 October, 1993. J.P. Caillault, ed., 509-519: Perspectives on the Relationship Between Activity and Fundamental Stellar Parameters

- Giampapa, M.S. 1994, in UV and X-Ray Spectroscopy of Laboratory and Astrophysical Plasmas. E. Silver and S. Kahn, eds. (Cambridge Univ. Press), 309:- Astronomy with the Deep UV Explorer Observatory
- Giampapa, M.S. 1997, in Ninth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: Proceedings, Florence Italy, 3-6 October, 1995. R. Pallavicini and A.K. Dupree, eds. (Astron. Soc. Pacific), 11-12: Advances in Solar-Stellar Physics I: Optical and Infrared Studies
- Giampapa, M.S. 1998, in Solar Analogs: Characteristics and Optimum Candidates. J.C. Hall, ed. (Lowell Observatory), 65:- A Survey of Chromospheric Activity in the Solar-Type Stars in M67
- Giampapa, M.S. et al 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pac), 629-636: Next Generation Ultraviolet Astronomy with the Deep Ultraviolet Explorer
- Giampapa, M.S. et al 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pac.), 282-284: Chromospheric Activity and Kinematics of the Very Low Mass M Dwarfs
- Giampapa, M.S., Basri, G., Johns, C.M., and Imhoff, C.L. 1993, *Astrophys. J. Suppl. Ser.* 89, 321:- A Synoptic Study of Halpha Line Profile Variability in the T Tauri Star SU Aurigae
- Giampapa, M.S., Craine, E.R., and Hott, A. 1995, *Icarus* 118, 199-210: Comments on the Photometric Method for the Detection of Extrasolar Planets
- Giampapa, M.S., Cram, L.E., and Wild, W.J. 1989, *Astrophys. J.* 345, 536-542: The Ca II Resonance Lines in the M Dwarf Stars without H-alpha Emission
- Giampapa, M.S., Golub, L., Peres, G., Serio, S., and Vaiana, G.S. 1984, in The Future of Ultraviolet Astronomy Based on Six Years of IUE Research: Proceedings of NASA Symposium, Goddard Space Flight Center, 3-5 April, 1984. J.M. Mead et al, eds. NASA CP-2349, 454-457: Active Late-Type Stars and the Applicability of Coronal Loop Models
- Giampapa, M.S., Golub, L., Peres, G., Serio, S., and Vaiana, G.S. 1985, *Astrophys. J.* 289, 203-212: Closed Coronal Structures. VI. Far Ultraviolet and X-Ray Emission from Active Late-Type Stars and the Applicability of Coronal Loop Models
- Giampapa, M.S., and Imhoff, C.L. 1985, in Protostars and Planets II: D.C. Black and M.S. Matthews, eds., 386-404: The Ambient Radiation Field of Young Solar Systems: Ultraviolet and X-Ray Emission from T Tauri Stars
- Giampapa, M.S., and Liebert, J. 1986, *Astrophys. J.* 305, 784-794: High Resolution H alpha Observations of M Dwarf Stars: Implications for Stellar Dynamo Models and Stellar Kinematic Properties at Faint Magnitudes
- Giampapa, M.S., and Liebert, J. 1986, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (4th), Santa Fe NM, 16-18 October, 1985. M. Zeilik and D.M. Gibson, eds., 62-63: The Nature of the Dynamo in the Very Late M Dwarf Stars

- Giampapa, M.S., Livingston, W.C., and Rabin, D.M. 1992, in Armagh Bicentenary Colloquium on Surface Inhomogeneities on Late-Type Stars, 24-27 July, 1990, 279-: Proposed Upgrade of the McMath Solar/Stellar Telescope to a Four-Meter Aperture
- Giampapa, M.S., Pilachowski, C., Barden, S., Green, R., and Osmer, P. 1987, in Instrumentation for Cosmology. R.L. Davies, ed., 53-: MOST: Multiple Object Spectroscopic Telescope
- Giampapa, M.S., Prosser, C., and Fleming, T. 1998, *Astrophys. J.* 501, 624-642: X-Ray Activity in the Open Cluster IC 4665
- Giampapa, M.S., Prosser, C.F., and Fleming, T.A. 1997, in 10th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun. J.A. Bookbinder and R. Donahue, eds., 2106-2114: Joint X-Ray and Optical Investigation of the Young Open Cluster IC 4665
- Giampapa, M.S., and Rosner, R. 1984, *Astrophys. J. Lett.* 286, L19-L22: The Appearance of Magnetic Flux on the Surfaces of the Early Main-Sequence F Stars
- Giampapa, M.S., Rosner, R., Kashyap, V., Fleming, T., Schmitt, J., and Bookbinder, J. 1995, *Astrophys. J.* 463, 707-725: The Coronae of Low Mass Dwarf Stars
- Giampapa, M.S., Rosner, R., Kashyap, V., Fleming, T., Schmitt, J., and Bookbinder, J. 1996, in IAU Colloquium 153, Magnetodynamic Phenomena in the Solar Atmosphere: Prototypes of Stellar Magnetic Activity. T. Kosugi and Y. Uchida, eds., 81-: Coronal Structure in M Dwarf Stars
- Giampapa, M.S., Simmons, J.E., Jaksha, D.B., and Perkins, E.L. 1994, in SPIE 2198, Instrumentation in Astronomy VIII. Astronomical Telescopes and Instrumentation for the 21st Century: Workshop Proceedings, Kona Hawaii, 13-16 March 1994. E.R. Craine and D.L. Crawford, eds., 302-: Upgrade of the McMath-Pierce Stellar Spectrograph
- Gilliland, R.L., and Baliunas, S.L. 1987, *Astrophys. J.* 314, 766-781: Objective Characterization of Stellar Activity Cycles. I. Methods and Solar Cycle Analyses
- Gilliland, R.L., Fisher, K., Mihalas, D., Fisher, R., Lockwood, W., Radick, R.R., and Ramsey, L. 1989, NCAR Technical Note 314+STR: HAO-Lowell-AFGL Solar Stellar Spectrophotometer Star Catalog. 56 pp.
- Gilman, P.A. 1986, in Physics of the Sun, 95-160: The Solar Dynamo
- Gilman, P.A., and Howard, R.F. 1985, *Astrophys. J.* 295, 233-240: Rotation Rates of Leader and Follower Sunspots
- Gilman, P.A., and Howard, R.F. 1986, *Astrophys. J.* 303, 480-485: Rotation and Expansion Within Sunspot Groups
- Ginet, G.P. 1994, *Astrophys. J.* 429, 899-908: Downflow Plumes and Entropy Balance in Deep Convection Zones
- Ginet, G.P., and Simon, G.W. 1992, *Astrophys. J.* 386, 359-363: On the Evidence for Mesogranules in Solar Power Spectra

- Giovanelli, R.G. 1985, Aust. J. Phys. 38, 1045-1066: The Sunspot Cycle and Solar Magnetic Fields. I. The Mechanism as Inferred from Observation
- Giver, L.P., Chackerian, C., Spencer, M.N., Brown, L.R., and Wattson, R.B. 1996, J. Mol. Spectr. 175, 104-111: The Rovibrational Intensities of the (4001) <- ()00 Pentad Absorption Bands of 12C18O2 Between 7284 and 7921 cm<sup>-1</sup>
- Gleckler, A.D. 1994, Edge-Matched Segmented Mirrors for Adaptive Optics. PhD Thesis (University of Arizona).
- Glenar, D.A., Hill, A.R., Jennings, D.E., and Brault, J.W. 1985, J. Mol. Spectr. 111, 403-414: Vibration-Rotation Parameters for High Temperature Silicon Monoxide from Sunspot Spectra
- Glenar, D.A., Kaufl, H.U., Deming, D., Kostiuk, T., and Mumma, M.J. 1988, in IAU Symposium 123, Advances in Helio- and Asteroseismology. J. Christensen-Dalsgaard and S. Frandsen, eds., 481-484: Infrared Heterodyne Spectroscopy: a Tool for Helioseismology
- Glenar, D.A., Reuter, D.C., Deming, D., and Chang, E.S. 1988, Astrophys. J. Lett. 35, L35-L38: Mg I Absorption Features in the Solar Spectrum Near 9 and 12 Microns
- Goad, L., and Beckers, J.M. 1989, SPIE 1114, Active Telescope Systems: Conference Proceedings, Orlando, Florida, 28-31 March, 1989, 73-81: A Near Infrared Astronomical Adaptive Optics System
- Goldman, A., Brown, L.R., Schoenfeld, W.G., Spencer, M.N., Chackerian, C., Giver, L.P., Dothe, H., Rinsland, C.P., Coudert, L.H., Dana, V., and Mandin, J.Y. 1999, J. Quan. Spectr. Rad. Trans. 61, 825:- Nitric Oxide Line Parameters: Review of 1986 HITRAN Update and New Results
- Goldman, A.F., Murcray, D.G., Murcray, J., Murcray, D.G., Kosters, J.J., Rinsland, C.P., Flaud, J., Camy-Peyret, C., and Barbe, A. 1989, J. Geophys. Res. 94, 8467-8473: Isotropic Abundances of Stratospheric Ozone from Balloon-Borne High Resolution Infrared Solar Spectra
- Golub, L. 1991, in Flare Physics in Solar Activity Maximum 22. Y. Uchida et al. , eds., 271:- X-Ray Observations of Global Solar Activity
- Golub, L. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson, Arizona, October, 1991. M. Giampapa and J. Bookbinder, eds. (Astron. Soc. Pac.), 193:- Structure of the Solar X-Ray Corona
- Golub, L. 1997, Solar Phys. 174, 99-114: Difficulties in Observing Coronal Structure
- Golub, L., Harvey, K.L., Herant, M., and Webb, D.F. 1989, Solar Phys. 124, 211-217: X-Ray Bright Points and He I lambda10830 Dark Points
- Golub, L., Harvey, K.L., and Webb, D.F. 1986, in Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985 and 8-10 April, 1986. A.I. Poland, ed. NASA CP- 2442, 365-367, 1986: Magnetogram and Soft X-Ray Comparisons of XBP and ER

- Gomez, M.T., Marmolino, C., Roberti, G., and Severino, G. 1987, *Astron. Astrophys.* 188, 169-177: Temporal Variations of Solar Spectral Line Profiles Induced by the 5-Minute Photospheric Oscillation
- Gomez, M.T., Marmolino, C., Roberti, G., and Severino, G. 1987, *Solar Phys.* 112, 227-232: Broadening and Shift of Fe I Lines Perturbed by Atomic Hydrogen
- Gondoin, P., Giampapa, M.S., and Bookbinder, J.A. 1985, *Astrophys. J.* 297, 710-718: Stellar Magnetic Field Measurements Utilizing Infrared Spectral Lines
- Gonzalez, W.D., Tsurutani, B.T., McIntosh, P.S., and Clua de Gonzalez, A.L. 1996, *Geophys. Res. Lett.* 23, 2577: Coronal Hole Active Region Current Sheet (CHARCS) Association with Intense Interplanetary and Geomagnetic Activity
- Gonzalez Hernandez, I., Patron, J., Bogart, R.S., and SOI Ring Diagram Team 1999, *Astrophys. J.* 510, L153-L156: Meridional Flows from Ring Diagram Analysis
- Goode, P., Strous, L., Rimmele, T.R., and Stebbins, R. 1998, *Astrophys. J. Lett.* 495, L27-L30: On the Origin of Solar Oscillations
- Goode, P.R. 1995, in ESA SP 376, *Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995*. J.T. Hoeksema, ed. (ESA), Volume 1, 199: Working Group 4: Magnetic Effects
- Goode, P.R., and Strous, L.H. 1996, *Bull. Astron. Soc. India* 24, 223-232: Observations of the Excitation of Solar Oscillations
- Goode, P.R., Strous, L.H., and Rimmele, T.R. 1998, in *New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997*. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 183-189: Local Properties of the Sun's Seismic Events
- Goode, P.R., Strous, L.H., Rimmele, T.R., Stein, R.F., and Nordlund, A. 1999, in *Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998*. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 456-464: The Excitation of Solar Oscillations-- Observations and Simulations
- Gopalswamy, N., Nitta, N., Manoharan, P.K., Raoult, A., and Pick, M. 1999, *Astron. Astrophys.* 347, 684-695: X-Ray and Radio Manifestations of a Solar Eruptive Event
- Gopalswamy, N., Shibasaki, K., DeForest, C.E., Bromage, B.J., and Del Zanna, G. 1998, in *Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997*. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 363-371: Multiwavelength Observations of a Coronal Hole
- Gopalswamy, N., White, S.M., Kundu, M.R. 1991, *Astrophys. J* 379, 366- : Large-Scale Features of the Sun at 20 Centimeter Wavelength
- Goss, L.M., Sharpe, S.W., Blake, T.A., Vaida, V., and Brault, J.W. 1999, *J. Phys. Chem. A* 103, 8620-8624: Direct Absorption Spectroscopy of Water Clusters

- Gough, D. 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmider, eds. (Kluwer), 397-424: Sounding Solar and Stellar Interiors: Conclusions and Prospects
- Gough, D., Leibacher, J.W., Scherrer, P., and Toomre, J. 1996, Science 272, 1281-1283: Perspectives in Helioseismology
- Gough, D.O., Kosovichev, A.G., Toomre, J., (10 authors), Goode, P.R., Guzik, J.A., Harvey, J.W., Hill, F., Leibacher, J.W. et al 1996, Science 272, 1296-1300: The Seismic Structure of the Sun
- Gough, D.O., and McIntyre, M.E. 1998, Nature 394, 755-757: Inevitability of a Magnetic Field in the Sun's Radiative Interior
- Gouttebroze, P., Vial, J.C., Bocchialini, K., Lemaire, P., and Leibacher, J.W. 1999, Solar Phys. 184, 253-266: Oscillations of the Upper Chromosphere
- Gramer, G., Demaison, J., Wlodarczak, G., Anttila, R., Hillman, J.J., and Jennings, D.E. 1990, Molecular Phys. 64, 921-: A Preliminary Determination of the A0 Rotational Constant of Propane
- Graves, E.J., and Pierce, A.K. 1986, Solar Phys. 106, 249-250: The Morphology of Solar Granulations and Dark Networks
- Gray, D.F., and Livingston, W.C. 1997, Astrophys. J. 474, 798-801: Monitoring the Solar Temperature: Empirical Calibration of the Temperature Sensitivity of C I lambda5380
- Gray, D.F., and Livingston, W.C. 1997, Astrophys. J. 474, 802-809: Monitoring the Solar Temperature: Spectroscopic Temperature Variations of the Sun
- Grinin, V.P., The, P.S., de Winter, D., Giampapa, M.S., Rostopchina, A., and Tambovsteva, L. 1994, Astron. Astrophys. 292, 165-174: The beta Pictoris Phenomenon Among Young Stars. I. The Case of the Herbig Ae Star UX Orionis
- Grossmann-Doerth, U., Keller, C.U., Schussler, M. 1996, Astron. Astrophys. 315 610-617: Observations of the Quiet Sun's Magnetic Field
- Grossmann-Doerth, U., Knolker, M., Schussler, M., and Solanki, S.K. 1994, Astron. Astrophys. 285, 648-654: The Deep Layers of Solar Magnetic Elements
- Gu, Y. 1995, in Chinese Science 46, no. 6: The Sun Never Sets: an Introduction to the Global Oscillation Network Group
- Gu, Y., Jefferies, J.T., Lindsey, C., and Avrett, E.H. 1997, Astrophys. J. 484, 960-978: A Stochastic Model of the Solar Atmosphere
- Gu, Y., Lindsey, C.A., Jefferies, J.T. 1995, Astrophys. J. 450, 318-333: Radiative Transfer in Stochastic Media
- Guelachvili, G., Birk, M., Bord, C.J., Brault, J.W., Brown, L.R., Carli, B., Cole, A.R., Evenson, K.M., Fayt, A., Hausmann, D., Johns, J.W., Kauppinen, J., Kou, Q., Maki, A.G., Toth, R.A. et al 1996, J. Mol. Spectr. 177, 164-179: High-Resolution Wavenumber Standards for the Infrared

- Guelachvili, G., Birk, M., Borde, C.J., Brault, J.W. et al 1994, Pure and Applied Chemistry 68, 193-208: High-Resolution Wave-Number Standards for the Infrared
- Guelachvili, G., Birk, M., Borde, C.J., Brault, J.W. et al 1996, Spectrochimica Acta 52A, 717-732: High-Resolution Wave-Number Standards for the Infrared
- Guenther, D.B., Demarque, P., and Krauss, L.M. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 469-471: Testing the Constancy of Newton's Gravitational Constant Using Helioseismology
- Guenther, D.B., Krauss, L.M., and Demarque, P. 1998, Astrophys. J. 498, 871-876: Testing the Constancy of the Gravitational Constant Using Helioseismology
- Guenther, E., and Mattig, W. 1991, Astron. Astrophys. 243, 244-250: High Resolution Line Profiles in Quiet and Plage Regions of the Sun
- Guhathakurta, M., and Altrock, R.C. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/ Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 395-403: The Solar Cycle Variation of Coronal Temperature During Cycle 22
- Guhathakurta, M., and Fisher, R. 1996, Astrophys. J. 471, L69-L71: Temperature Structure of the High-Latitude Corona
- Guhathakurta, M., and Fisher, R.R. 1994, Solar Phys. 152, 181-188: Latitudinal Variability of Large-Scale Coronal Temperature and its Association with the Density and the Global Magnetic Field
- Guhathakurta, M., Fisher, R.R., and Altrock, R.C. 1993, Astrophys. J. Lett. 414, L145-L148: Large-Scale Coronal Temperature and Density Distributions, 1984 - 1992
- Guhathakurta, M., Fisher, R.R., and Altrock, R.C. 1994, Adv. Space Res. 14, no. 4, 49-52: The Solar Cycle Variation of Coronal Temperature and Density During Cycle 21 - 22
- Guhathakurta, M., Rottman, G.J., Fisher, R.R., Orrall, F.Q., and Altrock, R.C. 1992, Astrophys. J. 388, 633-643: Coronal Density and Temperature Structure from Coordinated Observations Associated with the Total Solar Eclipse of 1988 March 18
- Gullixson, C.A. 1992, in Astronomical CCD Observing and Reduction Techniques: Workshop Proceedings, Tucson, Arizona 5-7 September, 1991. S. Howell, ed. (Astron. Soc. Pac.), 130-159: Two Dimensional Imagery
- Gullixson, C.A., Boeshaar, P.C., Tyson, J.A., and Seitzer, P. 1995, Astrophys. J. Suppl. Ser. 99, 281-293: The Bj RI Photometric System
- Gunkler, T.A. 1984, Observations and Analysis of Solar Flares Using H-Alpha Spectral Profiles. PhD Thesis (Univ. of California, San Diego)
- Gunkler, T.A., Canfield, R.C., Acton, L.W., and Kiplinger, A.L. 1984, Astrophys. J. 285, 835-842: A Consistent Picture of Coronal and Chromospheric Processes in a Well-Observed Solar Flare

- Gunson, M.R., Abbas, M.M., Abrams, M.C., Allen, M., Brown, L.R., Brown, T.L., Chang, A.Y., Goldman, A., Irion, F.W., Lowes, L.L., Mahieu, E., Manney, G.L., Michelsen, H.A., Newchurch, M.J., Rinsland, C.P. et al 1996, *Geophys. Res. Lett.* 23, 2333-2336: The Atmospheric Trace Molecule Spectroscopy (ATMOS) Experiment: Deployment on the Atlas Space-Shuttle Missions
- Gunson, M.R., Farmer, C.B., Norton, R.H., Zander, R., Rinsland, C.P., Shaw, J., and Gao, B.C. 1990, *J. Geophys. Res.* 95, 13867-13882: Measurements of CH<sub>4</sub>, N<sub>2</sub>, CO, H<sub>2</sub>O, and O<sub>3</sub> in the Middle Atmosphere by the ATMOS Experiment on Spacelab 3
- Guo, B., Dulick, M., Yost, S., and Bernath, P.F. 1997, *Mol. Phys.* 91, 459-469: High Resolution Fourier Transform Infrared Emission Spectra of Lithium Iodide
- Gupta, S.S., Sivaraman, K.R., and Howard, R.F. 1999, *Solar Phys.* 188, 225-236: Measurement of Kodaikanal White-Light Images: III. Rotation Rates and Activity Cycle Variations
- Gurman, J.B. 1993, *Astrophys. J.* 412, 865-869: The Sunspot Transition Region: Where are the Bright Plumes and the Downflows?
- Gurman, J.B., and Leibacher, J.W. 1984, *Astrophys. J.* 283, 859-869: Linear Models of Acoustic Waves in Sunspot Umbrae
- Habbal, S.R. 1994, *Space Science Reviews* 70, 37-46: Small-Scale Structures in the Solar Corona
- Habbal, S.R., and Gonzalez, R.D. 1991, *Astrophys. J. Lett.* 376, L25-L27: First Observations of Macrospicules at 4.8 GHz at the Solar Limb in Polar Coronal Holes
- Habbal, S.R., and Harvey, K.L. 1986, in *Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985, and 8-10 April, 1986*. A.I. Poland, ed. NASA CP- 2442, 343-347: Simultaneous Observations of Changes in Coronal Bright Points Emission at the 20 cm. Radio and He I 10830 Wavelengths
- Habbal, S.R., and Harvey, K.L. 1988, *Astrophys. J.* 326, 988-996: Simultaneous Observations of 20 Centimeter Bright Points and 10830 Å Dark Points in the Quiet Sun
- Habbal, S.R., and Harvey, K.L. 1988, in *Activity in Cool Star Envelopes: Conference Proceedings, Tromso, Norway, 2-8 July, 1987*: 215-218: Dynamic Nature of Coronal Heating as Inferred from Simultaneous Observations of the Quiet Sun at 20 Centimeter Radio and He I 10830
- Habbal, S.R., Mossman, A., Gonzalez, R., and Esser, R. 1996, *Geophys. Res.* 101, 19943-19955: Radio, Visible, and X-Ray Emission Preceding and Following a Coronal Mass Ejection
- Habbal, S.R., Ronan, R.S., Withbroe, G.L., Shevgaonkar, R.K., and Kundu, M.R. 1986, *Astrophys. J.* 306, 740-750: Solar Coronal Bright Points Observed with the VLA
- Haber, D., Toomre, J., Hill, F., and Gough, D. 1995, in *GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994*. R. Ulrich, ed. (Astronomical Society of the Pacific), 272-275: Solar Oscillation Ring Diagrams: Benefits of Great-Circle Remapping

- Haber, D.A. 1987, Seismic Probing of Solar Flows Using High-Degree Oscillations. PhD Thesis (Univ. of Colorado).
- Haber, D.A., and Hill, F. 1990, in Challenges to Theories of the Structure of Moderate Mass Stars. D. Gough and J. Toomre, eds., 253-258 (Springer-Verlag): Simulation of the Effect of Active Regions on Intermediate-Degree Solar Oscillations
- Haber, D.A., Hill, F., and Toomre, J. 1990, in Challenges to Theories of the Structure of Moderate Mass Stars. D. Gough and J. Toomre, eds. (Springer-Verlag), 259-264: The Role of f-Modes in the Inversions of High-Degree Rotational Splittings
- Haber, D.A., Hill, F., and Toomre, J. 1990, in Challenges to Theories of the Structure of Moderate Mass Stars. D. Gough and J. Toomre, eds. (Springer-Verlag), 87-92: Effects of Spatial Filtering on High-Degree Power Spectra and Rotational Splitting Inversions
- Haber, D.A., Hindman, B.W., Toomre, J., Bogart, R.S., Schou, J., and Hill, F. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 791-796: Subphotospheric Convective Flows Determined by Ring-Diagram Analyses of SOI-MDI Observations
- Haber, D.A., Toomre, J., and Hill, F. 1988, in IAU Symposium 123, Advances in Helio- and Asteroseismology. J. Christensen-Dalsgaard and S. Frandsen, eds., 59-62: Response of the Solar Five-Minute Oscillations to a Major Flare
- Haber, D.A., Toomre, J., and Hill, F. 1988, in Seismology of the Sun and Sun-Like Stars: Symposium Proceedings, Tenerife, Canary Islands, 26-30 September, 1988. E. Rolfe, ed. ESA SP-286, 301-304: Local Effects of a Major Flare on Solar Five-Minute Oscillations
- Haber, D.A., Toomre, J., Hill, F., and Gough, D.O. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 141-146: Local Area Analysis of High-Degree Solar Oscillations: New Ring Fitting Procedures
- Haber, D.A., Zweibel, E.G., Toomre, J., Bogart, R.S., Sa. L.A., Burnette, A., and Hill, F. 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmider, eds. (Kluwer), 175-: Possible Magnetic Field Effects Seen with Local Area Analysis of MDI Data
- Hackman, T., Piskunov, N., Poutanen, M., Strassmeier, K.G., and Tuominen, I. 1992, in IAU Colloquium 130, The Sun and Cool Stars: Activity, Magnetism, Dynamos. Workshop Proceedings, Helsinki, Finland, 17-21 July, 1990. I. Tuominen, G. Rudiger, and D. Moss, eds. (Springer-Verlag), 321-325: Surface Imaging and Photometric Light Curve Analysis of Late-Type Stars
- Hagenaar, H.J., Schrijver, C.J., and Title, A.M. 1997, *Astrophys. J.* 481, 988-995: The Distribution of Cell Sizes of the Solar Chromospheric Network
- Hagyard, M.J., and Rabin, D.M. 1986, *Adv. Space Res.* 6, no. 6, 7-16: Measurement and Interpretation of Magnetic Shear in Solar Active Regions

- Haisch, B.M., Butler, C.J., Foing, B., Rodono, M., and Giampapa, M.S. 1990, *Astron. Astrophys.* 232, 387-395: Rotational Modulation and Flares on RS Canum Venaticorum and BY Draconis-Type Stars. XV. Observations of Proxima Centauri and Solar Calibration Data
- Haisch, B.M., and Giampapa, M.S. 1985, *Publ. Astron. Soc. Pacific* 97, 340-344: Peculiar Emission Lines in the Spectrum of the Flare Star YZ Canis Minoris
- Hakamada, K. 1987, *J. Geophys. Res.* 92, 4339-4348: Three-Dimensional Structure of the Coronal Magnetic Field and the Solar Wind Distribution Projected on the Photosphere in 1974
- Hakamada, K. 1994, *Solar Phys.* 181, 73-85: Three-Dimensional Geometry of Planar Magnetic Structure in the Corona
- Hakamada, K. 1997, in *Solar-Terrestrial Predictions V: Workshop Proceedings*, Hitachi Japan, 23-27 January 1996. G. Heckman, K. Marubashi, M.A. Shea, D.F. Smart, and R. Thompson, eds. (RWC, Hiraso Solar-Terr. Res. Center), 651-: Planar Magnetic Structures in the Corona
- Hakamada, K., and Kojima, M. 1994, *Solar Phys.* 153, 419-435: Solar Wind Speed and its Acceleration Inferred Using the Interplanetary Scintillation Method in Carrington Rotation 1753
- Hakamada, K., Kojima, M., Kakinuma, T. 1991, *J. Geophys. Res.* 96, 5397-: Solar Wind Speed and He I (1083 nm) Absorption Line Intensity
- Halonen, L., and Duxbury, G. 1985, *Chem. Phys. Lett.* 118, 246-251: Fourier Transform Infrared Spectrum of CH<sub>2</sub>NH: the nu1 Band
- Halonen, L., and Duxbury, G. 1985, *J. Chem. Phys.* 83, 2078-2090: The Fourier Transform Infrared Spectrum of Methylenimine in the 10 Micron Region
- Halonen, L., and Duxbury, G. 1985, *J. Chem. Phys.* 83, 2091-2096: High Resolution Infrared Spectrum of Methylenimine, CH<sub>2</sub>NH, in the 3 Micron Region
- Hanaoka, Y. 1996, *Solar Phys.* 165, 275-301: Flares and Plasma Flow Caused by Interacting Coronal Loops
- Hanaoka, Y. 1997, *Solar Phys.* 173, 319-346: Double-Loop Configuration of Solar Flares
- Hanaoka, Y. 1997, in *Astron. Soc. Pacific Conf. Ser.* 111, Magnetic Reconnection in the Solar Atmosphere: Bath, England, 20-22 March, 1996. R.D. Bentley and J.T. Mariska, eds. (Astron. Soc. Pacific), 200-205: Double-Loop Configuration and its Related Activities
- Hanaoka, Y. 1997, in *Solar-Terrestrial Predictions V: Workshop Proceedings*, Hitachi Japan, 23-27 January 1996. G. Heckman, K. Marubashi, M.A. Shea, D.F. Smart, and R. Thompson, eds. (RWC, Hiraso Solar-Terr. Res. Center), 587-: Characteristics of Double-Loop Flares
- Hanaoka, Y. 1998, in *ESA SP-421, Solar Jets and Coronal Plumes: Proceedings of an International Meeting*, Guadeloupe France, 23-26 February 1998. S. Koutchmy, P. Martens, and K. Shibata, eds., 171-178: Flares and Jets Caused by Flux Emergence
- Hanaoka, Y., and Kurokawa, H. 1989, *Solar Phys.* 124, 227-250: Mass Motions in Active Region Filaments

- Hara, H. 1996, Structures and Heating Mechanisms of the Solar Corona. PhD Thesis (University of Tokyo).
- Harder, J.W., and Brault, J.W. 1997, in *J. Geophys. Res.* 102, no. D5, 6245-6252: Atmospheric Measurements of Water Vapor in the 442-nm Region
- Harder, J.W., Brault, J.W., Johnson, P.V., and Mount, G.H. 1997, *J. Geophys. Res.* 102, 3861-3879: Temperature Dependent NO<sub>2</sub> Cross Sections at High Spectral Resolution
- Hardy, J.W. 1987, in *Adaptive Optics in Solar Observations: Workshop Proceedings*, Freiburg, 8-9 September, 1987. F. Merkle, O. Engvold, and R. Falomo, eds. LEST Technical Report 28, 137-154: Adaptive Optics for Solar Telescopes
- Harmon, R., Rosner, R., Zirin, H., Spiller, E., and Golub, L., 1993, *Astrophys. J. Lett.* 417, L83-L86: The Coronal Structure Above Sunspots and Pores
- Harrison, R.A. 1990, *Solar Phys.* 126, 185-193: The Source Regions of Solar Coronal Mass Ejections
- Harrison, R.A., Carter, M.K., Clark, T.A., Lindsey, C., Jefferies, J.T., Sime, D.G., Watt, G., Roellig, T.L., Becklin, E.E., Naylor, D.A., Tompkins, G.J., and Braun, D.C. 1993, *Astron. Astrophys.* 274, L9-L12: An Active Solar Prominence in 1.3 mm Radiation
- Harvey, J., Hill, F., Kennedy, J., and Leibacher, J.W. 1993, in *GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings*, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 397-409: GONG Project Update
- Harvey, J.W. 1984, in *Solar Irradiance Variations on Active Region Time Scales: Workshop Proceedings*, Pasadena, California, June 20-21 1983. B.J. LaBonte et al, eds. NASA CP-2310, 197-212: Helium 10830 Å Irradiance: 1975-1983
- Harvey, J.W. 1985, in *Future Missions in Solar, Heliospheric, and Space Plasma Physics: ESA Workshop Proceedings*, Garmish-Partenkirchen, Germany, 30 April-3 Ma. 1985. ESA SP 235, 199-208: High-Resolution Helioseismology
- Harvey, J.W. 1985, in *Measurements of Solar Vector Magnetic Fields: Workshop Proceedings*, Marshall Space Flight Center, Alabama, 14-18 Ma. 1984. M.J. Haggard, ed. NASA CP-2374, 109-120: Trends in Measurement of Vector Magnetic Fields Using the Zeeman Effect
- Harvey, J.W. 1985, in *Transactions of the IAU 19A*, 51-56: Solar/Stellar Seismology Instruments
- Harvey, J.W. 1987, *Appl. Opt.* 26, 2057-2058: Temperature Variation of ADP Birefringence
- Harvey, J.W. 1987, in *Small Scale Magnetic Flux Concentrations in the Solar Photosphere: Proceedings of a Workshop held in Gottingen, 1-3 October, 1985*. W. Deinzer et al, eds., 25-38: Small-Scale Photospheric Magnetic Fields: Observational Methods and Limitations
- Harvey, J.W. 1988, in *IAU Symposium 123, Advances in Helio- and Asteroseismology*. J. Christensen-Dalsgaard and S. Frandsen, eds., 497-511: Techniques for Observing Stellar Oscillations

- Harvey, J.W. 1988, in Seismology of the Sun and Sun-Like Stars: Symposium Proceedings, Tenerife (Canary Islands), 26-30 September, 1988. E. Rolfe, ed. ESA SP-286, 55-66: Solar Internal Rotation from Helioseismology
- Harvey, J.W. 1988, in Transactions of the IAU 20A, 106-109: Instrumentation for the Study of Solar Radiation and Structure
- Harvey, J.W. 1989, in Astrophysics in Antarctica. D.J. Mullan, ed. (American Institute of Physics), 227-230: Solar Observing Conditions at the South Pole
- Harvey, J.W. 1989, in Astrophysics in Antarctica. D.J. Mullan, ed. (American Institute of Physics), 242-246: Solar-Stellar Astronomy Working Group Summary
- Harvey, J.W. 1990, in Progress of Seismology of the Sun and Stars: Proceedings of the Oji International Seminar Held at Hakone, Japan, 11-14 December 1989. Y. Osaki and H. Shibahashi, eds. (Springer-Verlag), 115-128: Trends in Helioseismology Observation and Data Reduction
- Harvey, J.W. 1992, in Highlights in Astronomy 9, 584-: Daytime Astronomical Observing Conditions at South Pole
- Harvey, J.W. 1995, Phys. Today 43, 32-38 : Helioseismology
- Harvey, J.W. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 1, 9-18: Helioseismology: the State of the Art
- Harvey, J.W., and Duvall, T.L. 1984, in Solar Seismology from Space: Conference Proceedings, Snowmass, Colorado, August, 17-19 1983. R.K. Ulrich, ed.: Observations of Intermediate Degree Solar Oscillations
- Harvey, J.W., and Duvall, T.L. 1984, in Theoretical Problems in Stellar Stability and Oscillations: Conference Proceedings, Liege, Belgium, July 1984. M. Gabriel and A. Noels, eds., 209-: Frequencies of Solar P-Mode Oscillations
- Harvey, J.W., Duvall, T.L., Jefferies, S.M., and Pomerantz, M.A. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 111-114: Chromospheric Oscillations and the Background Spectrum
- Harvey, J.W., and GONG Instrument Team 1995, in GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 432-435: The GONG Instrument Michelson Interferometer
- Harvey, J.W., Hill, F., Hubbard, R., Kennedy, J.R., Leibacher, J.W., Pintar, J.A. et al 1996, Science 272, 1284-1286: The Global Oscillation Network Group (GONG) Project
- Harvey, J.W., Hill, F., Kennedy, J.R., Leibacher, J.W., and Livingston, W.C. 1988, in Adv. Space Res. 8, no. 11, 117-120: The Global Oscillation Network Group (GONG)

- Harvey, J.W., Hill, F., Komm, R., Leibacher, J.W., Pohl, B., and the GONG Team 1998, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 49-50: GONG Spectra in Three Observables: What is a p-Mode Frequency?
- Harvey, J.W., Jefferies, S.M., Duvall, T.L., Osaki, Y., and Shibahashi, H. 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors: J. Provost and F.X. Schmieder, eds. (Kluwer), 77-: Studies of Solar Oscillation Background Spectra
- Harvey, J.W., Kennedy, J.R., and Leibacher, J.W. 1987, *Sky and Tel.* 74, 470-476: GONG: To See Inside Our Sun
- Harvey, J.W., and Livingston, W.C. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 59-64 : Variability of the Solar He I 10830 Å Triplet
- Harvey, J.W., Priest, E., Schmieder, B., and Stenflo, J. 1992, in Transactions of the IAU 21B, 163-172: Report of Commissions 10 and 12
- Harvey, J.W., Stenflo, J., Ai, G., Ando, H., Falciani, R., Gurtovenko, E., Kuperus, M., Muller, R., Roca Cortes, Schussler, M., Sivaraman, K., and Weiss, N. 1991, in Transactions of the IAU 21A, 85-103: Commission 12: Radiation and Structure of the Solar Atmosphere
- Harvey, J.W., Tucker, R., and Britanik, L. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 209-211: High Resolution Upgrade of the GONG Instruments
- Harvey, J.W., and Worden, J. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 155-160: New Types and Uses of Synoptic Maps
- Harvey, J.W., and the GONG Instrument Team 1988, in Seismology of the Sun and Sun-Like Stars: Symposium Proceedings, Tenerife (Canary Islands), 26-30 September, 1988. E. Rolfe, ed. ESA SP-286, 203-208: The GONG Instrument
- Harvey, J.W., and the GONG Team 1998, *Bull. Astron. Soc. India* 26, 135-142: GONG Instrument and Science
- Harvey, K.L. 1984, AFGL Technical Report 84-0335: Solar Cycle Variations of Ephemeral Regions
- Harvey, K.L. 1984, in Hydromagnetics of the Sun: Proceedings of the Fourth European Meeting on Solar Physics, Noordwijkerhout, The Netherlands. ESA SP-220, 235-236: Solar Cycle Variation of Ephemeral Active Regions
- Harvey, K.L. 1985, *Aust. J. Phys.* 38, 875-883: The Relationship Between Coronal Bright Points as Seen in He I 10830 Angstroms and the Evolution of the Photospheric Network Magnetic Fields
- Harvey, K.L. 1985, *Solar Phys.* 101, 1-521: Subject Index Volumes 1-100, January 1967-October 1985

- Harvey, K.L. 1986, NASA Technical Report, Grant NAS5-28728: Ephemeral Active Regions and Coronal Bright Points, a Solar Maximum Mission II Guest Investigator Study
- Harvey, K.L. 1986, National Science Foundation Technical Report, Grant ATM-8319589: Flares and Flare-Like Events in He I lambda 10830
- Harvey, K.L. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 623-661: Bibliography on Solar and Stellar Granulation
- Harvey, K.L. 1990, Solar Phys. : Subject and Author Indexes, Volumes 102-113
- Harvey, K.L. 1991, Solar Phys. : Subject and Author Indexes, Volumes 114-119
- Harvey, K.L. 1991, in Flare Physics in Solar Activity Maximum 22, Y. Uchida et al. , eds., 62-: Microflares Observed in He I 10830 and Their Relation to the Quiet Sun Magnetic Fields
- Harvey, K.L. 1992, in Solers22: Proceedings of the Workshop on the Solar Electromagnetic Radiation Study for Solar Cycle 22: Boulder, Colorado, June, 1991. R.F. Donnelly, ed. (NOAA), 113-129: The NSO Daily Observations of the Equivalent Width of the Solar He I Absorption Line at 10830 Å as a Measure of Upper Chromospheric Activity
- Harvey, K.L. 1992, in Solers22: Proceedings of the Workshop on the Solar Electromagnetic Radiation Study for Solar Cycle 22: Boulder, Colorado, June, 1991. R.F. Donnelly, ed. (NOAA), 113-: Measurements of Solar Magnetic Fields as an Indicator of Solar Activity Evolution
- Harvey, K.L. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/ Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 335-367: The Cyclic Behavior of Solar Activity
- Harvey, K.L. 1993, Magnetic Bipoles on the Sun. PhD Thesis (University of Utrecht).
- Harvey, K.L. 1993, in IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 488-491: Properties of Emerging Bipolar Active Regions
- Harvey, K.L. 1994, in IAU Colloquium 143, The Sun as a Variable Star: Solar and Stellar Irradiance Variations. Proceedings, Boulder, CO, 20-25 June 1993. J. M. Pap, C. Frohlich, H.S. Hudson and S. Solanki, eds. (Cambridge University Press), 217-225: Irradiance Models Based on Solar Magnetic Fields
- Harvey, K.L. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 71-76: Observations of Dynamic Events in He I lambda 10830
- Harvey, K.L. 1994, in Solar Surface Magnetism: NATO ASI Workshop Proceedings, Soesterberg The Netherlands, 1-5 November, 1993. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 347-363: The Magnetic Cycle

- Harvey, K.L. 1996, in Solar Wind Eight: Workshop Proceedings, Dana Point CA, 25-30 June 1995. D. Winterhalter, J.T. Gosling, S.R. Habbal et al, eds. (AIP), 9-13: Coronal Structures Deduced from Photospheric Magnetic Field and He I 1083 Observations
- Harvey, K.L. 1997, in Magnetic Reconnection in the Solar Atmosphere, ASP Conference Series 111. R. Bentley and J. Mariska, eds., 9-18: Observations of X-Ray Bright Points
- Harvey, K.L. 1998, in Solar Analogs: Characteristics and Optimum Candidates. J.C. Hall, ed. (Lowell Observatory), 7-: The Solar Activity Cycle and Sun-as-a-Star Variability in the Visible and Infrared
- Harvey, K.L., and Gaizauskas, V. 1998, in IAU Colloquium 167. New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997. D. Webb, D.M. Rust and B. Schmeider, eds. (Kluwer), 269-273: Filament Channels: Contrasting Their Structure in H-alpha and He I 1083 nm
- Harvey, K.L., and Hudson, H.S. 1997, in Observational Plasma Physics: Five Years of Yohkoh and Beyond: Workshop Proceedings, Tokyo Japan, 6-8 November, 1996. T. Watanabe, T. Kosugi, and A.C. Sterling, eds. (Kluwer), 315-318: The Formation and Evolution of the Coronal Holes Associated with NOAA Region 7978
- Harvey, K.L., Jones, H.P., Schrijver, C.J., and Penn, M.J. 1999, Solar Phys. 190, 35-44: Does Magnetic Flux Submerge at Flux Cancellation Sites?
- Harvey, K.L., McAllister, A., Hudson, H., Alexander, D., Lemen, J.R., and Jones, H.P. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific Conf. Ser. Vol. 95, 100-107.K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 100-107: Comparison and Relation of He I 1083 nm Two-Ribbon Flares and Large-Scale Coronal Arcades Observed by Yohkoh
- Harvey, K.L., and Recely, F. 1984, Solar Phys. 91, 127-139: He I 10830 Observations of the 3N/M4.0 Flare of 4 September, 1982
- Harvey, K.L., Recely, F., Hirman, J., and Cohen, N. 1997, in Solar-Terrestrial Predictions: Workshop Proceedings, Hitachi Japan, 23-27 January 1996. xxx, ed., 77-: The Current Status of Activity in Solar Cycle 22 and the Onset of Cycle 23
- Harvey, K.L., Sheeley, N.R., and Harvey, J.W. 1986, Solar-Terrestrial Predictions: Workshop Proceedings (2nd), Meudon, France, 18-22 June, 1984. P.A. Simon et al, eds., 198-203: He I 10830 A Observations of Two-Ribbon Flare-Like Events Associated with Filament Disappearances
- Harvey, K.L., Strong, K., Nitta, N., and Tsuneta, S. 1993, in Adv. Space Res. 13, no. 9, 27-30: Lifetimes and Distribution of Coronal Bright Points Observed with Yohkoh
- Harvey, K.L., Strong, K.S., Nitta, N., and Tsuneta, S. 1994, in Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 377-388: Are X-Ray Bright Points the Signature of Magnetic Field Reconnection?

- Harvey, K.L., Tang, F., and Gaizauskas, V. 1986, in *Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985 and 8-10 April, 1986*. A.I. Poland, ed. NASA CP- 2442, 359-363: The Association of Chromospheric and Coronal Phenomena with the Evolution of the Quiet Sun Magnetic Fields
- Harvey, K.L., and White, O.R. 1998, in *Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997*. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 247-259: Spectral Irradiance and Magnetic Structures
- Harvey, K.L., and White, O.R. 1999, *Astrophys. J.* 515, 812-831: Magnetic and Radiative Variability of Solar Surface Structures. I. Image Decomposition and Magnetic-Intensity Mapping
- Harvey, K.L., and White, O.R. 1999, *J. Geophys. Res.* 104, 19759-19764: What is Solar Cycle Minimum?
- Harvey, K.L., and Zwaan, C. 1993, *Solar Phys.* 148, 85-118: Properties and Emergence Patterns of Bipolar Active Regions. I. Size Distribution and Emergence Frequency
- Hasan, S.S. 1984, *Astrophys. J.* 285, 851-857: Convective Instability in a Solar Flux Tube. I. Nonlinear Calculations for an Adiabatic Inviscid Fluid
- Hasan, S.S., and Keil, S.L. 1984, *Astrophys. J. Lett.* 283, L75-L77: Time-Resolved Spectral Observations of Spicule Velocities at Several Heights
- Hassler, D.M., and Moran, T.G. 1994, *Space Science Reviews* 70, 373-377: Broadening of Fe X (6374 Å) Profiles Above the Limb in a Coronal Hole
- Hassler, D.M., Slater, D.C., Smartt, R.N., and Koutchmy, S. 1998, in *SPIE 3443, X-Ray and Ultraviolet Spectroscopy and Polarimetry II*. S. Fineschi, ed. (SPIE), 61-66: SOPHIE: a Solar EUV Multilayer Reflecting Coronagraph
- Hathaway, D., Gilman, P., Harvey, J.W., Hill, F., Howard, R.B., Jones, H.P., Kasher, J., Leibacher, J.B., Pintar, J., and Simon, G.W. 1996, *Science* 272, 1306-1309: GONG Observations of Solar Surface Flows
- Hathaway, D.H. 1984, *Astrophys. J.* 276, 316-324: A Convective Model for Turbulent Mixing in Rotating Convection Zones
- Hathaway, D.H. 1986, *Solar Phys.* 108, 1-20: Spherical Harmonic Analysis of Steady Photospheric Flows
- Hathaway, D.H. 1993, in *GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings*, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 265-268: Doppler Measurement of the Solar Meridional Circulation
- Hathaway, D.H. 1995, in *GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings*, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 204-207: Nearly Steady Flows in GONG Prototype Data
- Hathaway, D.H. 1996, *Astrophys. J.* 460, 1027-1033: Doppler Measurements of the Sun's Meridional Flow

- Hathaway, D.H. 1998, in *Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997*. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 47-55: Synoptic Datasets and Solar Activity Predictions
- Hathaway, D.H., and Somerville, R.C. 1984, in *Hurricanes and Tropical Meteorology: Conference Proceedings (15th)*, Miami, Florida, 9-13 Januar. 1984, 522-526: Effects of Rotation and Shear in a Three-Dimensional Model of Tropical Thermal Convection
- Hathaway, D.H., and Somerville, R.C. 1985, *Lectures in Applied Mathematics* 22, 309-319: Numerical Simulation in Three Space Dimensions of Time-Dependent Thermal Convection in a Rotating Fluid
- Hathaway, D.H., and Somerville, R.C. 1986, *J. Fluid Mech.* 164, 91-105: Nonlinear Interactions Between Convection, Rotation, and Flows with Vertical Shear
- Hathaway, D.H., and Somerville, R.C. 1987, *Geophys. Astrophys. Fluid Dynamics* 38, 43-68: Thermal Convection in a Rotating Shear Flow
- Hedderich, H.G., and Bernath, P.F. 1992, *J. Mol. Spectr.* 153, 73-80: The Infrared Emission Spectrum of Gaseous AlF
- Hedderich, H.G., Frum, C.I., Engleman, R., and Bernath, P.F. 1991, *Can. J. Chem.* 69, 1659-1671: The Infrared Emission Spectra of LiF and HF
- Hedderich, H.G., Walker, K., and Bernath, P.F. 1991, *J. Mol. Spectr.* 149, 314-316: An Improved Set of Rotational Constants for HF
- Heier, H., Engvold, O., and Dunn, R.B. 1988, LEST Foundation Technical Report 32, 1-11: Proposal for an Alignment System for the Primary and Secondary Mirror of LEST
- Heinzel, P., and Vial, J.C. 1992, in *Solar Physics and Astrophysics at Interferometric Resolution: an International Workshop to Present SIMURIS*. Paris France, 17-19 February, 1992. ESA SP-344. L. Dame and T.D. Guyenne, eds., 57-64: The Fine Structure of Prominences
- Henney, C.J., Ulrich, R.K., Bertello, L., Bogart, R.S., Bush, R.I., Scherrer, P.H., Roca Cortes, T., and Turck-Chieze, S. 1999, *Astron. Astrophys.* 348, 627-635: Power Spectra Comparison Between GOLF and Spatially Masked MDI Velocity Signals
- Herant, M., Golub, L., and Neidig, D.F. 1989, *Solar Phys.* 124, 145-155: The M8.1 Flare of 23 June 1988: I. Secondary Halpha Brightenings in Two-Ribbon Flares
- Herant, M.; Pardo, F.; Spiller, E.; and Golub, L. 1991, *Astrophys. J.* 376, 797-802: Flares Observed by the Normal Incidence X-Ray Telescope on September 11, 1989
- Heristchi, D., and Mouradian, Z. 1992, *Solar Phys.* 142, 21-34: On the Inclination and the Axial Velocity of Spicules
- Hewish, A. 1988, *Solar Phys.* 116, 195-198: The Solar Origin of Geomagnetic Storms
- Hewish, A., and Bravo, S. 1986, *Solar Phys.* 106, 185-200: The Sources of Large-Scale Heliospheric Disturbances

- Heyvaerts, J. 1985, in Future Missions in Solar, Heliospheric, and Space Plasma Physics: ESA Workshop Proceedings, Garmish-Partenkirchen, Germany, 30 April-3 May, 1985. ESA SP 235, 169-174: Solar Fine Structures-- Their Importance in the Sun's Physics and Their Observation
- Hick, P., Jackson, B.V., and Altrock, R.C. 1996, in Solar Wind Eight: Workshop Proceedings, Dana Point CA, 25-30 June 1995. D. Winterhalter, J.T. Gosling, S.R. Habbal et al, eds. (AIP), 169-172: Coronal Synoptic Temperature Maps Derived from the Fe XIV/Fe X Intensity Ratio
- Hick, P., Jackson, B.V., Altrock, R.C., Slater, G., and Henry, T. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific Conf. Ser. Vol. 95. K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 358-365: The Coronal Temperature Structure and the Current Sheet
- Hick, P., Jackson, B.V., Altrock, R.C., Woan, G., and Slater, G. 1995, Adv. Space Res. 17, no. 4/5, 311-314: IPS Observations of Heliospheric Density Structures Associated with Active Regions
- Hidalgo, I.R., Cobo, B., and Collados, M. 1997, Solar Phys. 172, 77-83: Stratification of the Five-Minute Oscillation Through the Solar Photosphere
- Hidalgo, I.R., Collados, M., and Vazquez, M. 1992, Astron. Astrophys. 264, 661-672: Centre-to-Limb Variation of Solar Granulation Along the Equator and the Central Meridian
- Hilico, J.C., Loete, M., and Brown, L.R. 1985, J. Mol. Spectr. 111, 119-137: The Line Strengths of the V3-V4 Band of Methane
- Hill, F. 1984, in GONG Report no. 1: A Proposal to Study the Solar Interior by Measuring Global Oscillations with a World-Wide Network of Instruments, II-1 through II-5: Appendix II: Site Selection
- Hill, F. 1984, in Solar Seismology from Space: Conference Proceedings, Snowmass, Colorado, August 17-19 1983. R.K. Ulrich, ed., 255-262: The Effects of Image Motion on the L-NU Diagram
- Hill, F. 1984, in Solar Seismology from Space: Conference Proceedings, Snowmass, Colorado, August 17-19 1983. R.K. Ulrich, ed., 271-277: The Effects of a Nearly 100% Duty Cycle on Observations of Solar Oscillations
- Hill, F. 1987, in GONG Report no. 4, The CfA Inversion Workshop, 82-92: Inversion Algorithms II and Computational Requirements (Invited Review)
- Hill, F. 1987, in GONG Report no. 5, The 1987 Artificial Data Workshop, 23-26: Numerical Simulation of the Effect of Seeing on the GONG Data
- Hill, F. 1987, in The Internal Solar Angular Velocity: Theory, Observations and Relationship to Solar Magnetic Fields: Workshop Proceedings, Sunspot, New Mexico, 11-14 August, 1986. B.R. Durney and S. Sofia, eds. (Kluwer), 45-50: The Equatorial Rotation Rate in the Solar Convection Zone
- Hill, F. 1988, Astrophys. J. 333, 996-1013: Rings and Trumpets: Three-Dimensional Power Spectra of Solar Oscillations

- Hill, F. 1988, in Seismology of the Sun and Sun-Like Stars: Symposium Proceedings, Tenerife (Canary Islands), 26-30 September, 1988. E. Rolfe, ed. ESA SP-286, 103-108: Oscillation Ring Diagrams and the Thermodynamics of the Outer Solar Convection Zone
- Hill, F. 1989, *Astrophys. J. Lett.* 343, L69-L71: Solar Oscillation Ring Diagrams and Large-Scale Flows
- Hill, F. 1989, GONG Report no. 6: a Selected Bibliography on Helio- and Asteroseismology
- Hill, F. 1990, *Solar Phys.* 128, 321-331: A Map of the Horizontal Flows in the Solar Convection Zone
- Hill, F. 1990, in IAU Colloquium 121, Inside the Sun: Workshop Proceedings, Versailles, France, 22-26 May, 1989. G. Berthomieu and M. Cribier, eds. (Kluwer), 265-278: Networks for Helioseismic Observations
- Hill, F. 1990, in Proceedings of the Third IRIS Workshop: Marrakesh, Morocco, 1-6 October, 1990. 47-48: The GONG Project
- Hill, F. 1990, in Proceedings of the Third IRIS Workshop: Marrakesh, Morocco, 1-6 October, 1990. 7-8: Low-l Solar Oscillation Observations and the IRIS Project
- Hill, F. 1990, in Progress of Seismology of the Sun and Stars: Proceedings of the Oji International Seminar Held at Hakone, Japan, 11-14 December 1989. Y. Osaki and H. Shibahashi, eds. (Springer-Verlag), 173-179: The Effect of Large-Scale Flows on Oscillation Ring Diagrams
- Hill, F. 1992, in Solar Cycle Workshop Proceedings, K.L. Harvey, ed. (Astronomical Society of the Pacific), 286-296: On the Interpretation of Inversions of Helioseismic Rotational Splitting Measurements
- Hill, F. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 1, 127-132: Resolution and Error Trade-Offs in Velocity Fields Inferred from Ring Diagrams
- Hill, F. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 1, 63-75: Local Probes of the Solar Interior
- Hill, F. 1995, in GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 484-491: Local Helioseismology via Ring Diagrams and Trumpet Surfaces
- Hill, F. 1998, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 13-20: Helioseismic Data Reduction
- Hill, F. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 33-45: Helioseismology and the Solar Cycle
- Hill, F., Anderson, E., Howe, R., Jefferies, S.M., Komm, R.W., and Toner, C.G. 1999, in SOHO 6/GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop

- Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 231-236: Estimated Mode Parameters from the Fitting of GONG Spectra
- Hill, F., Briggs, J. W., Hegwer, S. L., and Radick, R. R., in SPIE 4853, Astronomical Telescopes and Instrumentation: Innovative Telescopes and Instrumentation for Solar Astrophysics. O.H. Siegmund, S. Fineschi, and M.A. Gunmin, eds. (SPIE) ( submitted ): Environmental Factors Affecting Solar Seeing
- Hill, F., Deubner, F., and Isaak, G. 1991, in Solar Interior and Atmosphere: Conference Proceedings, Tucson, AZ, 15-18 November, 1988. A.N. Cox, W.C. Livingston, and M.S. Matthews, eds. (Univ. of Arizona Press), 329-400: Oscillation Observations
- Hill, F., Fischer, G., Forgach, S., Grier, J., Leibacher, J.W., Jones, H.P., Jones, P.B., Kupke, R., and Stebbins, R.T., (28 authors) et al 1994, Solar Phys. 152, 351-380: The Global Oscillation Network Group Site Survey. II. Results
- Hill, F., Fischer, G., Grier, J., Leibacher, J.W., Jones, H.P., Jones, P.B., Kupke, R., and Stebbins, R.T. 1994, Solar Phys. 152, 321-350: The Global Oscillation Network Group Site Survey. I. Data Collection and Analysis Methods
- Hill, F., Gough, D., Merryfield, W., and Toomre, J. 1991, Astrophys. J. 369, 237-246: Simulation of Effects of Atmospheric Seeing on the Observation of High-Degree Solar Oscillations
- Hill, F., Gough, D., and Toomre, J. 1984, Mem. Soc. Astron. Italiana 55, 153-161: Attempt to Measure the Solar Subsurface Velocity
- Hill, F., Gough, D., and Toomre, J. 1984, in Solar Seismology from Space: Conference Proceedings, Snowmass, Colorado, August 17-19, 1983. R.K. Ulrich, ed., 95-111: Sensitivity of Inferred Subphotospheric Velocity Field to Mode Selection, Analysis Technique, and Noise
- Hill, F., Gough, D., Toomre, J., and Haber, D.A. 1988, in IAU Symposium 123, Advances in Helio- and Asteroseismology. J. Christensen-Dalsgaard and S. Frandsen, eds., 45-48: Solar Equatorial Rotation Rate Inferred from Inversion of Frequency Splitting of High-Degree Modes
- Hill, F., Haber, D.A., Toomre, J., and November, L.J. 1986, in Seismology of the Sun and the Distant Stars: Proceedings of NATO ASI Workshop, Cambridge, England, June 1985. D.O. Gough, ed. (Reidel), 85-92: Influence of Spatial Filtering on Possible Anisotropies in Solar Oscillations
- Hill, F., Haber, D.A., and Zweibel, E.G. 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmider, eds. (Kluwer), 181-: Simulations of Magnetic Field Effects on Solar Oscillation Ring Diagrams
- Hill, F., and Howe, R. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 225-230: Calculating the GONG Leakage Matrix
- Hill, F., and Leibacher, J.W. 1991, Adv. Space Res. 11, no. 4, 149-158: Ground-Based Helioseismology Networks
- Hill, F., and Newkirk, G. 1985, Solar Phys. 95, 201-219: On the Expected Performance of a Solar Oscillation Network

- Hill, F., and Newkirk, G.A. 1984, in Probing the Depths of a Star: the Study of Solar Oscillations from Space. R.W. Noyes and E.J. Rhodes, eds. (NASA), 47-50: Appendix C: On the Nature and Expected Performance of a Solar Oscillations Network
- Hill, F., Rhodes, E.J., Korzennik, S.G., Cacciani, A., and Brown, T.M. 1990, in Challenges to Theories of the Structure of Moderate Mass Stars. D. Gough and J. Toomre, eds. (Springer-Verlag), 271-275: Solar Oscillation Ring Diagrams from Mt. Wilson Full-Disk Magneto-Optical Dopplergrams
- Hill, F., Rust, D.M., and Appourchaux, T. 1988, in IAU Symposium 123, Advances in Helio- and Asteroseismology. J. Christensen-Dalsgaard and S. Frandsen, eds., 49-52: Rotation in the Solar Convection Zone Inferred from Fabry-Perot Observations of the 5-Minute Oscillations
- Hill, F., Stark, P.B., Stebbins, R.T., Anderson, E.R., Antia, H.M., Brown, T.M., Duvall, T.L., Haber, D.A., Harvey, J.W., Hathaway, D.H., Howe, R., Hubbard, R., Jones, H.P., Kennedy, J.R., Korzennik, S.G., Kosovichev, A., Leibacher, J.W. et al 1996, Science 272, 1292-1295: The Solar Acoustic Spectrum and Eigenmode Parameters
- Hill, F., Toomre, J., and Merryfield, W. 1984, in Probing the Depths of a Star: the Study of Solar Oscillations from Space. R.W. Noyes and E.J. Rhodes, eds. (NASA), 37-42: Appendix A: Numerical Simulations of the Impact of Atmospheric Turbulence
- Hill, F., Toomre, J., November, L.J., and Gebbie, K.B. 1984, in Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings, Sunspot, New Mexico, 25-29 Jul. 1983. S.L. Keil, ed., 160-173: On the Determination of the Lifetime of Vertical Velocity Patterns in Mesogranulation and Supergranulation
- Hill, F., and the GONG Site Survey Team 1988, in Seismology of the Sun and Sun-Like Stars: Symposium Proceedings, Tenerife (Canary Islands), 26-30 September, 1988. E. Rolfe, ed. ESA SP-286, 209-215: The GONG Site Survey
- Hillman, J.J., Jennings, D.E., Olson, W.B., and Goldman, A. 1986, J. Mol. Spectr. 117, 46-: High Resolution Infrared Spectrum of Hydrogen Peroxide: the nu6 Fundamental Band
- Hinkle, K., Wallace, L., and Livingston, W.C. 1995. Infrared Atlas of the Arcturus Spectrum, 0.9-5.3 Microns. (Astron. Soc. Pacific). 378 pp.
- Hirayama, T., Tanaka, K., Watanabe, T., Akita, K., Sakurai, T., and Nishi, K. 1985, Solar Phys. 95, 281-296: Rocket Observation of the EUV Images of a Solar Flare and Active Regions
- Hoeksema, J. T. 1984, Structure and Evolution of the Large Scale Solar and Heliospheric Magnetic Fields. PhD Thesis (Stanford University)
- Hoeksema, J.T. 1994, in IAU Colloquium 143, The Sun as a Variable Star: Solar and Stellar Irradiance Variations. Proceedings, Boulder, CO, 20-25 June 1993. J. M. Pap, C. Frohlich, H.S. Hudson and S. Solanki, eds. (Cambridge University Press), 138-146: Observations of Global Solar Magnetic and Velocity Fields
- Hoeksema, J.T., Herant, M., Scherrer, P.H., and Title, A.M. 1988, in Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth

- Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 376-385: More Than a Solar Cycle of Synoptic Solar and Coronal Data: a Video Presentation
- Hoeksema, J.T., and Scherer, P.H. 1987, *Astrophys. J.* 318, 428-436: Rotation of the Coronal Magnetic Field
- Hoeksema, J.T., and Scherrer, P.H. 1988, *Adv. Space Res.* 8, no. 7, 177-183: Long-Term Variability of Solar Magnetic Fields
- Hoeksema, J.T., and Zhao, X. 1992, *J. Geophys. Res.* 97, 3151-3157: Prediction of Magnetic Orientation in Driver Gas-Associated -Bz Events
- Hofmann, A., Rendtel, J., Aurass, H., and Kalman, B. 1986, *Solar Phys.* 108, 151-167: Flare and Filament Activation in an Unusually Distorted Field Configuration
- Hofmann, J., and Deubner, F.L. 1995, *Astron. Astrophys. Suppl. Ser.* 113, 583-585: The Effect of Limited Spatial Resolution on the Observed Power of Solar Oscillations
- Hofmann, J., Deubner, F.L., Steffens, S., and Fleck, B. 1995, in *ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995*. J.T. Hoeksema, ed. (ESA), Volume 2, 493-498: Phase Analysis of the K-Grain Excitation Pattern
- Hofmann, J., Steffens, S., and Deubner, F.L. 1996, *Astron. Astrophys.* 308, 192-198: K-Grains as a Three-Dimensional Phenomenon. II. Phase Analysis of the Spatio-Temporal Pattern
- Holt, R.D., and Mullan, D.J. 1986, *Solar Phys.* 107, 63-72: Shifts of the Ca II K Line in He I 10830 Dark Points
- Holt, R.D., and Mullan, D.J. 1988, in *Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987*. R.C. Altrock, ed., 80-88: Chromospheric Velocities at the Location of Helium 10830 Angstrom Dark Points
- Holt, R.D., Park, A.H., and Mullan, D.M. 1986, in *Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985, and 8-10 April, 1986*. A.I. Poland, ed. NASA CP- 2442, 377-381: Observations of the Ca II K Line in He 10830 Dark Points on August 3, 1985
- Holweger, H. 1988, in *The Role of Fine-Scale Magnetic Fields in the Structure of the Solar Atmosphere: Workshop Proceedings, Tenerife (Canary Islands), 6-12 October, 1986* (Cambridge Univ. Press), 1-13: Atmospheric Structure and the Activity Cycle
- Hoover, R.B., Walker, A.B., DeForest, C.E., Allen, M.J., Lindblom, J.F. 1991, *Optical Engr.* 30, 1116-1124: EUV/FUV Response Characteristics of Photographic Films for the Multi-Spectral Solar Telescope Array
- Hoover, R.B., Walker, A.B., DeForest, C.E., Allen, M.J., Lindblom, J.F., Gilliam, L.B., November, L.J., Brown, T., and Dewan, C.A. 1992, in *SPIE 1546, Multi-Layer and Grazing Incidence X-Ray/EUV Optics, San Diego, CA 21-27 July, 1991*. R.B. Hoover, ed.: Photographic Films for the Multi-Spectral Solar Telescope Array

- Howard, R.F. 1985, Solar Phys. 100, 171-187: Eight Decades of Solar Research at Mount Wilson
- Howard, R.F. 1985, in Transactions of the IAU 19A, 100-103: Solar Rotation
- Howard, R.F. 1987, in The Internal Solar Angular Velocity: Theory, Observations and Relationship to Solar Magnetic Fields. Workshop Proceedings, Sunspot, New Mexico, 11-14 August, 1986. B.R. Durney and S. Sofia, eds. (Kluwer), 23-26: Observations of Surface Velocity Fields
- Howard, R.F. 1988, Nature 328, 667-668: Models of Motions in the Sun
- Howard, R.F. 1989, Solar Phys. 123, 271-284: The Magnetic Fields of Active Regions. I. Data and First Results
- Howard, R.F. 1990, Solar Phys. 126, 299-309: The Magnetic Fields of Active Regions. II. Rotation
- Howard, R.F. 1991, Solar Phys. 131, 239-257: The Magnetic Fields of Active Regions. III. Growth and Decay of Magnetic Flux
- Howard, R.F. 1991, Solar Phys. 131, 259-268: The Magnetic Fields of Active Regions. IV. Meridional Motions
- Howard, R.F. 1991, Solar Phys. 132, 257-270: The Magnetic Fields of Active Regions. VI. Magnetic Axis Tilt Changes
- Howard, R.F. 1991, Solar Phys. 132, 49-61: The Magnetic Fields of Active Regions. V. Magnetic Axis Orientations
- Howard, R.F. 1991, Solar Phys. 134, 233-246: The Magnetic Fields of Active Regions. VII. East-West Inclination of Magnetic Field Lines
- Howard, R.F. 1991, Solar Phys. 135, 327-337: Cycle Latitude Effects for Sunspot Groups
- Howard, R.F. 1991, Solar Phys. 135, 339-342: Sunspot Group Areas and the Latitude Distance from the Average Latitude of Activity
- Howard, R.F. 1991, Solar Phys. 135, 43-55: The Magnetic Fields of Active Regions. VIII. Cycle Latitude Variations
- Howard, R.F. 1991, Solar Phys. 136, 251-262: Axial Tilt Angles of Sunspot Groups
- Howard, R.F. 1992, Solar Phys. 137, 205-213: The East-West Inclination of Magnetic Field Lines in Sunspots
- Howard, R.F. 1992, Solar Phys. 137, 51-65: The Growth and Decay of Sunspot Groups
- Howard, R.F. 1992, Solar Phys. 142, 233-248: The Rotation of Active Regions with Differing Magnetic Polarity Separations
- Howard, R.F. 1992, Solar Phys. 142, 47-65: Some Characteristics of the Development and Decay of Active Region Magnetic Flux

- Howard, R.F. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pac.), 243-245: The East-West Inclinations of Magnetic Fields in the Solar Photosphere
- Howard, R.F. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/ Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 297-314: Rotation of Leading and Following Portions of Plages and Sunspot Groups
- Howard, R.F. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/ Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 44-47: On the Large-Scale Distribution of Solar Magnetic Fields
- Howard, R.F. 1993, *Solar Phys.* 145, 105-109: Axial Tilt Angles of Active Regions and Their Polarity Separations
- Howard, R.F. 1993, *Solar Phys.* 145, 95-103: How Growth and Decay of Sunspot Groups Depend on Axial Tilt Angles
- Howard, R.F. 1993, *Solar Phys.* 147, 1-11: Some Factors Affecting the Growth and Decay of Plages
- Howard, R.F. 1993, in IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 492-494: The Development of Sunspot Groups
- Howard, R.F. 1994, *Solar Phys.* 149, 23-29: A Possible Coriolis-Force Contribution to the Tilt-Angle Rotation of Sunspot Groups
- Howard, R.F. 1994, in Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 1-16: Active Regions on the Sun
- Howard, R.F. 1994, in Solar Magnetic Fields: Symposium Proceedings, Freiburg Germany, 29 June-- 2 July, 1993. M. Schuessler and W. Schmidt, eds. (Cambridge Univ. Press), 49-51: Polarity Separation in Active Regions
- Howard, R.F. 1994, in Solar Surface Magnetism: NATO ASI Workshop Proceedings, Soesterberg The Netherlands, 1-5 November, 1993. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 297-302: Average East-West Inclinations of Surface Magnetic Field Lines
- Howard, R.F. 1996, *Ann. Rev. Astron. Astrophys.* 34, 75-109: Solar Active Regions as Diagnostics of Subsurface Conditions
- Howard, R.F. 1996, *Solar Phys.* 167, 95-113: Tilt-Angle Variations of Active Regions
- Howard, R.F. 1996, *Solar Phys.* 169, 293-301: Axial Tilt Angles of Active Regions
- Howard, R.F. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 3-15: Synoptic Solar Physics

- Howard, R.F., and Gilman, P.A. 1986, *Astrophys. J.* 307, 389-394: Meridional Motions of Sunspots and Sunspot Groups
- Howard, R.F., Gupta, S.S., and Sivaraman, K.R. 1999, *Solar Phys.* 186, 25-41: Measurement of Kodaikanal White-Light Images: II. Rotation Comparison and Merging with Mount Wilson Data
- Howard, R.F., Harvey, J.W., and Forgach, S. 1990, *Solar Phys.* 130, 295-312: Solar Surface Velocity Fields Determined from Small Magnetic Features
- Howard, R.F., Kichatinov, L.L., Bogart, R.S., and Ribes, E. 1991, in *The Solar Interior and Atmosphere: LPL/NSO Conference Proceedings*, Tucson, AZ, 15-18 November, 1988. A.N. Cox, W.C. Livingston, and M. Matthews, eds. (Univ. of Arizona Press), 748-780: Large-Scale Velocity Fields
- Howard, R.F., Sivaraman, K.R., Gupta, S.S., and Gilman, P.I. 1990, in *IAU Symposium 142, Basic Plasma Processes on the Sun: Workshop Proceedings*, Bangalore, India, December 1-5, 1989. V. Krishan and E. Priest, eds. (Kluwer), 107-111: Sunspot Motions from a Study of Kodaikanal and Mount Wilson Observations
- Howard, R.F., and Stanchfield, D.C. 1995, *Solar Phys.* 156, 29-39: Latitude Dependence of Magnetic Field-Line Inclinations
- Howe, R. 1999, in *SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings*, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 669-678: Solar Dynamics: Internal Rotation Jets and the Tachocline; Implications for the Solar Dynamo
- Howe, R., Antia, H.M., Basu, S., Christensen-Dalsgaard, J., Korzennik, S.G., Schou, J., and Thompson, M.J. 1999, in *SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings*, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 803-808: The SOI-MDI High-Latitude Jet: the Evidence For and Against
- Howe, R., and Hill, F. 1999, in *SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings*, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 237-242: Estimating Low-Degree Mode Parameters from GONG Data Using the Leakage Matrix
- Howe, R., Komm, R., and Hill, F. 1999, *Astrophys. J.* 524, 1084-1095: Solar-Cycle Changes in GONG p-Mode Frequencies 1995-98
- Howe, R., and Thompson, M.J. 1998, *Astron. Astrophys. Suppl. Ser.* 131, 539-548: A Strategy for Fitting Partially Blended Ridges in GONG Solar p-Mode Spectra
- Huber, M.C., Sandeman, R.J., and Tozzi, G.P. 1984, *Phys. Scripta T8*, 95-99: Branching Ratios of the 2s23p 2P0 Term of Singly-Ionized Carbon
- Hudson, H., Haisch, B., and Strong, K.T. 1994, *J. Geophys. Res.* 100, 3473-3477: Comment on "The Solar Flare Myth"

- Hudson, H.S., Acton, L.W., Alexander, D., Freeland, S.L., Lemen, J.R., and Harvey, K.L. 1996, in Solar Wind Eight: Workshop Proceedings, Dana Point CA, 25-30 June 1995. D. Winterhalter, J.T. Gosling, S.R. Habbal et al, eds. (AIP), 88-91: Yohkoh/SXT Soft X-Ray Observations of Sudden Mass Loss from the Solar Corona
- Hudson, H.S., Acton, L.W., Alexander, D., Harvey, K.L., Kahler, S.W., Kurokawa, H., and Lemen, J.R. 1996, in Solar Wind Eight: Workshop Proceedings, Dana Point CA, 25-30 June 1995. D. Winterhalter, J.T. Gosling, S.R. Habbal et al, eds. (AIP), 84-87: The Solar Origins of Two High-Latitude Interplanetary Disturbances
- Hudson, H.S., Acton, L.W., Freeland, S.L. 1996, *Astrophys. J.* 470, 629-635: Long-Duration Solar Flare with Mass Ejection and Global Consequences
- Hudson, H.S., Acton, L.W., Harvey, K.L., and McKenzie, D.E. 1999, *Astrophys. J.* 513, L83-L86: A Stable Filament Cavity with a Hot Core
- Hudson, R.S., Skrumeda, L.L., and Whaling, W. 1987, *J. Quan. Spectr. Rad. Trans.* 38, 1-4: Fe II Level Populations in a Hollow Cathode Discharge
- Hull, W.C., Dunn, R.B., and Small, M.J. 1993, in SPIE 1920, Active and Adaptive Optical Components and Systems II: Albuquerque NM, 31 January-- 4 February 1993. M.A. Ealey, ed.: A 256-Channel Digital Wavefront Reconstructor
- Humphrey, J.N., Adams, D.L., and Whaling, W. 1984, *J. Quan. Spectr. Rad. Trans.* 31, 1-5: Atomic Level Populations in the Hollow Cathode Discharge
- Hunten, D.M., Morgan, T.H., and Shemansky, D.E. 1988, in Mercury. C. Chapman and F. Vilas, eds. (Univ. of Arizona Press), 562- : Atmosphere of Mercury
- Huovelin, J., and Saar, S.H. 1990, in IAU Symposium 138, Solar Photosphere: Structure, Convection, and Magnetic Fields, J.O. Stenflo, ed. (Kluwer), 443-446: Results of Coordinated Multiwavelength Observations of Solar-Type Stars
- Huovelin, J., and Saar, S.H. 1991, in IAU Colloquium 130, The Sun and Cool Stars: Activity, Magnetism, Dynamos. Workshop Proceedings, Helsinki, Finland, 17-21 July, 1990. I. Tuominen, G. Rudiger, and D. Moss, eds. (Springer-Verlag), 420-423: Linear Polarization and Magnetic Fields in Cool Stars
- Hurlburt, N., Title, A., Shine, R., Tarbell, T., and Simon, G.W. 1997, Score 96: Solar Convection and Oscillations and Their Relationship: Aarhus University, Aarhus, Denmark, 27-31 May 1996. F. Pijpers, J. Christensen-Dalsgaard, and C. Rosenthal, eds. (Kluwer), 285-288: Photospheric Flows as Measured by SOI/MDI
- Husson, N., Chedin, A., Scott, N.A., (19 authors), Rinsland, C.P., Smith, M.H., and Goldman, A. 1986, *Annales Geophysicae* 4A, 185-190: The GEISA Spectroscopic Line Parameters Databank in 1984
- Ichimoto, K., Hara, H., Takeda, A., Kumagai, K., Sakurai, T., Shimizu, T., and Hudson, H.S. 1995, *Astrophys. J.* 445, 978-981: Coordinated Observation of the Solar Corona Using the Norikura Coronagraph and the YOHKOH Soft X-Ray Telescope

- Ioshpa, B.A., Mogilevsky, E.I., and Obridko, V.N. 1998, in IAU Colloquium 167. New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997. D. Webb, D.M. Rust and B. Schmeider, eds. (Kluwer), 393-396: Evolution of a Filament/CH/Magnetic Field Complex
- Ishkov, V.N., and Kalman, B. 1986, in SMA Workshop Proceedings, Irkutsk, USSR, 17-21 June 1985: Flare Development and Magnetic Fields
- Ivanov, E.V., Obridko, V.N., and Ananyev, I.V. 1998, Solar Phys. 177, 217-228: Variations of Solar Irradiance, 10.7 cm. Radio Flux, He I 10830 Å Equivalent Width, and Global Magnetic Field Intensity and Their Relation to Large-Scale Solar Magnetic Field Structure
- Jackson, B., Gold, R., and Altrock, R.C. 1991, Adv. Space Res. 11, no. 1, 377-381: The Solar Mass Ejection Imager
- Jackson, B.V. 1997, The Physics of Remotely-Sensed Plasmas. Technical Report, AFRL-SRBL TR-980279.
- Jackson, B.V., Buffington, A., Hick, P.L., Kahler, S.W., Altrock, R.C., Gold, R.E., and Webb, D.F. 1996, in Solar Wind Eight: Workshop Proceedings, Dana Point CA, 25-30 June 1995. D. Winterhalter, J.T. Gosling, S.R. Habbal et al, eds. (AIP), 536-539: The Solar Mass Ejection Imager
- Jackson, B.V., Webb, D.F., Altrock, R.C., and Gold, R. 1992, in IAU Colloquium 133, Eruptive Solar Flares: Workshop Proceedings, Iguazu, Argentina, 2-7 August, 1991. B.V. Jackson, ed. (Kluwer), 322-328: Considerations of a Solar Mass Ejection Imager in a Low-Earth Orbit
- Jacquinet-Husson, N., Arie, E., Barbe, A. et al 1999, J. Quan. Spectr. Rad. Trans. 62, 205-: The 1997 Spectroscopic GEISA Databank
- Jacquinet-Husson, N., Scott, N.A., Chedin, A. et al 1998, J. Quan. Spectr. Rad. Trans. 59, 511-: The GEISA System in 1996: Towards an Operational Tool for the Second Generation Vertical Sounders Radiance Simulation
- Javaraiah, J., and Komm, R.W. 1999, Solar Phys. 184, 41-59: Short-Term Periodicities of the Sun's Mean and Differential Rotation
- Jefferies, J.T. 1991, Astrophys. J. 377, 337-342: The Solar Mg I Spectrum from ATMOS 1. Identification and Preliminary Discussion
- Jefferies, J.T. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 1-8: Overview of Infrared Solar Physics
- Jefferies, J.T., and Lindsey, C.A. 1988, Astrophys. J. 335, 372-382: Radiative Transfer in Inhomogeneous Atmospheres: a Statistical Approach
- Jefferies, J.T., Lites, B.W., and Skumanich, A. 1989, Astrophys. J. 343 , 920-935: Transfer of Line Radiation in a Magnetic Field
- Jefferies, J.T., and Mickey, D.L. 1991, Astrophys. J. 372, 694-702: On the Inference of Magnetic Field Vectors from Stokes Profiles

- Jefferies, J.T., and Mickey, D.L. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 373-375: Direct Inference of Magnetic Field Vectors from Stokes Profiles
- Jefferies, S.M. 1994, in Eighth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: Proceedings, Athens Georgia, 11-14 October, 1993. J.P. Caillault, ed. (Astron. Soc. Pacific), 619-627: Some Recent Advances in Iterative Blind Deconvolution
- Jefferies, S.M. 1998, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 415-422: High-Frequency Solar Oscillations
- Jefferies, S.M., and Christou, J.C. 1993, *Astrophys. J.* 415, 862-874: Restoration of Astronomical Images by Iterative Blind Deconvolution
- Jefferies, S.M., and Duvall, T.L. 1991, *Solar Phys.* 132, 215-222: A Simple Method for Correcting Spatially Resolved Solar Intensity Oscillation Observations for Variations in Scattered Light
- Jefferies, S.M., Duvall, T.L., and Harvey, J.W. 1994, *Antarctic Journal of the U.S.* 29, 331-: Helioseismology from South Pole: a Clear View of the Sun
- Jefferies, S.M., Duvall, T.L., Harvey, J.W., Osaki, Y., and Pomerantz, M.A. 1991, *Astrophys. J.* 377, 330-336: Characteristics of Intermediate-Degree Solar p-Mode Line Widths
- Jefferies, S.M., Duvall, T.L., Harvey, J.W., and Pomerantz, M.A. 1990, in Progress of Seismology of the Sun and Stars: Proceedings of the Oji International Seminar Held at Hakone, Japan, 11-14 December 1989. Y. Osaki and H. Shibahashi, eds. (Springer-Verlag), 135-143: Helioseismology from South Pole: Results from the 1987 Campaign
- Jefferies, S.M., and Harvey, J.W. 1995, *Antarctic Journal of the U.S.* 30, 341-: Helioseismology from South Pole: 1994-95 Campaign
- Jefferies, S.M., Osaki, Y., Shibahashi, H., Duvall, T.L., Harvey, J.W., and Pomerantz, M.A. 1994, *Astrophys. J.* 434, 795-800: Use of Acoustic Wave Travel Time Measurements to Probe the Near-Surface Layers of the Sun
- Jefferies, S.M., Osaki, Y., Shibahashi, H., Harvey, J.W., D'Silva, S., and Duvall, T.L. 1997, *Astrophys. J. Lett.* 485, L49-L52: Sounding the Sun's Chromosphere
- Jefferies, S.M., Pfeiffer, R., Pomerantz, M.A., Schulman, L., Ball, W. 1989, in *Astrophysics in Antarctica*, D.J. Mullan, ed. (American Institute of Physics): A Solar Tracking Platform for Use at the South Pole
- Jefferies, S.M., Pomerantz, M.A., Duvall, T.L., and Harvey, J.W. 1989, *Antarctic Journal of the U.S.* 24, 244-: Helioseismology from the South Pole: 1987 Results and 1988 Campaign
- Jefferies, S.M., Pomerantz, M.A., Duvall, T.L., and Harvey, J.W. 1990, *Antarctic Journal of the U.S.* 25, 271-272: Helioseismology from South Pole: Solar Cycle Connection

- Jefferies, S.M., Pomerantz, M.A., Duvall, T.L., and Harvey, J.W. 1991, Antarctic Journal of the U.S. 26, 285-: Helioseismology from South Pole: 1990 High Resolution Campaign
- Jefferies, S.M., Pomerantz, M.A., Duvall, T.L., and Harvey, J.W. 1992, Antarctic Journal of the U.S. 27, 322-323: Helioseismology from South Pole: Surprises from Near the Solar Surface
- Jefferies, S.M., Pomerantz, M.A., Duvall, T.L., and Harvey, J.W. 1993, Antarctic Journal of the U.S. 28, 328-: Helioseismology from South Pole: Closer Connections with Geoseismology
- Jefferies, S.M., Pomerantz, M.A., Duvall, T.L., Harvey, J.W., and Jaksha, D. 1988, Antarctic Journal of the U.S. 23, 191-: Helioseismology from the South Pole: 1987 Campaign
- Jefferies, S.M., Pomerantz, M.A., Duvall, T.L., Harvey, J.W., and Jaksha, D.B. 1988, in Seismology of the Sun and Sun-Like Stars: Symposium Proceedings, Tenerife (Canary Islands), 26-30 September, 1988. E. Rolfe, ed. ESA SP-286, 279-284: Helioseismology from the South Pole: Comparison of 1987 and 1981 Results
- Jennings, D.E. 1989, Opt. Soc. Am. Tech. Digest Ser. 6, 74-: High Resolution FTS in Astronomy at 7 to 15  $\mu\text{m}$
- Jennings, D.E., Bragg, S.L., and Brault, J.W. 1984, Astrophys. J. Lett. 282, L85-L88: The nu= 0-0 Spectrum of Hydrogen
- Jennings, D.E., Hubbard, R., and Brault, J.W. 1985, Appl. Opt. 24, 3438-3440: Double Passing the Kitt Peak 1-Meter Fourier Transform Spectrometer
- Jennings, D.E., Weber, A., and Brault, J.W. 1986, Appl. Opt. 25, 284-290: Raman Spectroscopy of Gases with a Fourier Transform Spectrometer: the Spectrum of D2
- Jennings, D.E., Weber, A., and Brault, J.W. 1987, J. Mol. Spectr. 126, 19-28: FTS-Raman Flame Spectroscopy of High-J Lines in H2 and D2
- Jensen, E. 1990, in IAU Colloquium 117, Dynamics of Quiescent Prominences: Workshop Proceedings, Hvar, Yugoslavia, 25-29 September, 1989. E. Tandberg-Hanssen and V. Ruzdjak, eds. (Springer-Verlag), 129-149: Support of Quiescent Prominences
- Jiao, L., McClymont, A.N., and Mikic, Z. 1997, Solar Phys. 174, 311-327: Reconstruction of the Three-Dimensional Coronal Magnetic Field
- Jimenez-Reyes, S.J., Regulo, C., Palle, P.L., and Roca Cortes, T. 1998, Astron. Astrophys. 329, 1119-1124: Solar Activity Cycle Frequency Shifts of Low-Degree p-Modes
- Johns, C.M., Basri, G.S., Giampapa, M.S., and DeFonso, E. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pac.), 441-444: Synoptic Studies of the T Tauri Star SU Aur
- Johns, J.W., Lu, Z., Weber, M., Sirota, J.M., and Reuter, D.C. 1996, J. Mol. Spectr. 177, 203-210: Absolute Intensities in the nu2 Fundamental of N2O at 17 Microns
- Jokipii, J.R., Sonett, C.P., and Giampapa, M.S., eds. 1997, Cosmic Winds and the Heliosphere. (Univ. of Arizona Press) 1,350 pp.

- Jones, H.P. 1985, *Aust. J. Phys.* 38, 919-928: Recent Studies of Magnetic Canopies
- Jones, H.P. 1985, in *Chromospheric Diagnostics and Modelling: Workshop Proceedings*, Sunspot, New Mexico, August 13-1. 1984. B.W. Lites, ed., 175-198: *Magnetic Canopies and Models of the Solar Chromosphere*
- Jones, H.P. 1987, in *Small Scale Magnetic Flux Concentrations in the Solar Photosphere: Proceedings of a Workshop Held in Gottingen, 1-3 October, 1985*. W. Deinzer et al, eds., 127-146: *The Interpretation of Spectrum Lines Formed in Small Solar Structures*
- Jones, H.P. 1989, *Solar Phys.* 120, 211-234: Formation of Fourier Phase Shifts in the Solar Ni I 6768 Angstrom Line
- Jones, H.P. 1992, in *The Solar Cycle: Workshop Proceedings*, National Solar Observatory/ Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 315-324: *New Solar Cycle Data from the NASA/NSO Spectromagnetograph*
- Jones, H.P. 1993, in *IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992*. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 156-165: *Spectrometer-Based Magnetographs*
- Jones, H.P. 1994, in *IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings*, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 49-58: *Interpreting Recent Observations of He I 10830 Å*
- Jones, H.P. 1994, in *Solar Active Region Evolution: Comparing Models with Observations*. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 286-293: *Flow Patterns in Active Regions*
- Jones, H.P. 1995, in *ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop*, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 227-232: *Tracking Magnetogram Proper Motions by Multiscale Regularization*
- Jones, H.P. 1997, in *1997, in SPIE 2804, Missions to the Sun: Workshop Proceedings*, Denver Colorado, 4-9 August 1996. D.M. Rust, ed., 110-117: *On-Line Analysis and Compression of Spectra-Spectroheliograms*
- Jones, H.P. 1998, in *Synoptic Solar Physics: 18th NSO/SP Summer Workshop*, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 145-153: *Histograms of Synoptic Spectromagnetograph Observations*
- Jones, H.P., Duvall, T.L., Harvey, J.W., Mahaffey, C.T., Schwitters, J.D., and Simmons, J.E. 1992, *Solar Phys.* 139, 211-232: *The NASA/NSO Spectromagnetograph*
- Jones, H.P., and Harvey, J.W. 1995, in *Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop*, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 97-102: *The NSO/NASA He I 1083.0 nm Video Filtergraph/Magnetograph*

- Jones, H.P., Harvey, J.W., and Andretta, V. 1994, in ESA SP-373, Third SOHO Workshop, Solar Dynamic Phenomena and Solar Wind Consequences: Proceedings, Estes Park Colorado, 26-29 September 1994. A. Poland, ed. (ESA), 345-354: Joint Observations of the Chromosphere, Transition Region, and Corona from SOHO and NSO/Kitt Peak
- Jones, H.P., and Neidig, D.F. 1988, in MAX '91: Flare Research at the Next Solar Maximum. Workshop no. 1: Scientific Objectives. Kansas City, Kansas, 9-10 June, 1988. R.C. Canfield and B.R. Dennis, eds. (NASA), 8-9: NSO Participation in MAX '91
- Joselyn, J., Anderson, J.B., Coffey, H., Harvey, K.L., Hathaway, D., Heckman, E., Hildner, E., Mende, W., Schatten, K., Thompson, R., Thomson, A., and White, O.R. 1997, Trans. Amer. Geophys. Union 78, 205-212: Panel Achieves Consensus Prediction of Solar Cycle 23
- Judge, P.G., Luttermoser, D.G., Neff, D.H., Cuntz, M., and Stencel, R.E. 1993, Astron. J. 105, 1973-1986: Line Profile Variations in Late-M Giants: Clues to Mass Loss and Chromospheric Heating Mechanisms
- Kaghashvili, E.K., and Smartt, R.N. 1998, in JOSO Annual Report 1997. A. Antalova and A. Kucera, eds., 110-112: Analysis of the Cross-Sectional Form of Coronal Loops, Properties and Temporal Behavior
- Kaghashvili, E.K., and Smartt, R.N. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 397-404: Fine-Scale Structure of Coronal Loops and Consequences for Coronal Loop Interactions
- Kaghavili, E.K. 1999, Astrophys. J. 512, 969-974: On the Acceleration of the Solar Wind: Role of the Inhomogeneous Flow
- Kahler, S. 1991, Astrophys. J. 378, 398-406: Coronal Mass Ejections and Streamers Associated with the New Cycle Active Regions at Solar Minimum
- Kahler, S.W., Webb, D.F., Davis, J.M., and Kundu, M.R. 1984, Solar Phys. 92, 271-281: The Spatial Distribution of 6-cm. Gyroresonance Emission
- Kalman, B. 1984, Adv. Space Res. 4, no. 7, 81-85: Magnetic Field Structure Changes in the Vicinity of Solar Flares
- Kalman, B. 1986, Contributions of the Astronomical Observatory Skalnate Pleso 15, 265-: Activity in Hale Region 18474 (July, 1982)
- Kalman, B. 1991, Solar Phys. 135, 299-317: Vector Magnetic Field Measurements and Penumbra Structure
- Kalman, B. 1997, Astron. Astrophys. 327, 779-785: Flow Patterns Around Old Sunspots and Flare Activity
- Kalman, B., and Nagy, I. 1986, in SMA Workshop Proceedings, Irkutsk, USSR, 17-21 June 1985: Activity and Proper Motions in HR 18474 (July 1982)

- Kane, S.R., Love, J. J., Neidig, D.F., and Cliver, E.W. 1985, *Astrophys. J. Letters* 290, L45-L48: Characteristics of the White Light Source in the 24 April 1981 Solar Flare
- Kankelborg, C.C., Walker, A.B., and Hoover, R.B. 1997, *Astrophys. J.* 491, 952-966: Observation and Modeling of Soft X-Ray Bright Points. II. Determination of Temperature and Energy Balance
- Kankelborg, C.C., Walker, A.B., Hoover, R.B., and Barbee, T.W. 1996, *Astrophys. J.* 466, 529-536: Observation and Modeling of Soft X-Ray Bright Points. I. Initial Results
- Kariyappa, R. 1994, *Solar Phys.* 154, 19-27: Intensity Oscillations in Chromospheric Bright Points and Network Elements
- Kariyappa, R. 1995, in ESA SP 376, *Helioseismology: Proceedings, Fourth SOHO Workshop*, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 525-527: The Relation Between the Period of Oscillations and Brightness in Chromospheric Bright Points
- Kariyappa, R. 1996, *Solar Phys.* 165, 211-222: Solar Oscillations in Strong and Weak Fraunhofer Lines Over a Quiet Region
- Kariyappa, R. 1999, in *Astronomical Society of the Pacific Conference Series* vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 420-425: Oscillations and Heating in Chromospheric Fine Scale Structures
- Kariyappa, R. 1999, in *Astronomical Society of the Pacific Conference Series* vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 501-506: Quiet-Sun Variability with the Solar Cycle
- Kariyappa, R., and Pap, J.M. 1995, in ESA SP 376, *Helioseismology: Proceedings, Fourth SOHO Workshop*, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 521-524: Intensity Oscillations in NaI D1 and D2 Lines
- Kariyappa, R., and Pap, J.M. 1996, *Solar Phys.* 167, 115-123: Contribution of Chromospheric Features to UV Irradiance Variability from Spatially-Resolved Ca II K Spectroheliograms. I. A New Method of Analysis and Preliminary Results
- Kariyappa, R., Pap, J.M., Balasubramaniam, K.S., and Kuhn, J.R. 1995, in ESA SP 376, *Helioseismology: Proceedings, Fourth SOHO Workshop*, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 429-435: Preliminary Results of the Analysis of Ca II K Spectroheliograms
- Kariyappa, R., Sivaraman, K.R., and Anadaram, M.N. 1994, *Solar Phys.* 151, 243-264: Heating of the Quiet Solar Chromosphere I. Role of the Inner Network Bright Points
- Karlicky, M., Demoulin, P., Aulanier, G., Van Driel-Gestelyi, L., Henoux, J.C., and Jiricka, K. 1999, in *JOSO Annual Report 1998*, 97-98: The NOAA AR 6718 Magnetic Field Extrapolation with Localized Current Filaments

Karovska, M., Nisenson, P., Noyes, R., and Roddier, F. 1986, *Astrophys. J.* 308, 260-269: On the alpha Orionis Triple System

Kavetsky, A., and O'Mara, B.J. 1984, *Solar Phys.* 92, 47-51: The Solar OI lambda 7773 Triplet: I. Spatially Resolved Profiles

Keil, S. L., Rimmele, T., Keller, C., Hill, F., Radick, R., Oschmann, J., Warner, M., Dalrymple, N., Briggs, J., Hegwer, S., Ren, D., and the ATST Team, in SPIE 4853, Astronomical Telescopes and Instrumentation: Innovative Telescopes and Instrumentation for Solar Astrophysics. O.H. Siegmund, S. Fineschi, and M.A. Gunmin, eds. (SPIE) ( submitted ): Design and Development of the Advanced Technology Solar Telescope

Keil, S.L. 1984, ed., Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings, Sunspot, New Mexico, 25-29 Jul. 1983 (NSO/Sacramento Peak) 469 pp.

Keil, S.L. 1984, in Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings, Sunspot, New Mexico, 25-29 Jul. 1983. S.L. Keil, ed., 148-156: Line Asymmetries of Partially Resolved Granular Profiles

Keil, S.L. 1987, in Theoretical Problems in High-Resolution Solar Physics: Workshop Proceedings (2nd), Boulder CO, 15-17 September, 1986. G. Athay, ed., 30-34: Position Paper: How Should Observers Prepare for the SOT Hydrodynamic Experiments

Keil, S.L. 1992, in Encyclopedia of Science and Technology. 7th Edition, Vol. 13, (McGraw-Hill), 454: The Solar Photosphere (Invited Note)

Keil, S.L. 1993, in Encyclopedia of Astronomy. 2nd Edition, S.P. Parker and J.M. Pasachoff, eds. (McGraw-Hill), 316-317: Photosphere

Keil, S.L., Altrock, R.C., Kahler, S.W., Jackson, B.V., Buffington, A., Hick, P.L., Simnett, G., Eyles, C., Webb, D.F., and Anderson, P. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific. Conf. Ser. Vol. 95.K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 158-166: The Solar Mass Ejection Imager (SMEI): Development and Use in Space Weather Forecasting

Keil, S.L., Altrock, R.C., Kahler, S.W., Jackson, B.V., Buffington, A., Hick, P.L., Simnett, G., Eyles, C., Webb, D.F., and Anderson, P. 1997, in SPIE 2804, Missions to the Sun: Workshop Proceedings, Denver Colorado, 4-9 August 1996. D.M. Rust, ed., 78-89: The Solar Mass Ejection Imager (SMEI)

Keil, S.L., Balasubramaniam, K.S., Barnesconi, P., Smaldone, L.A., and Cauzzi, G. 1994, in Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 265-282: Observations of Active Region Dynamics: Preflare Flows and Field Observations

Keil, S.L., Balasubramaniam, K.S., Milano, L.J., Bayliss, A., Jones, J., and Clark, J. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer

Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 540-550: Dynamical Motions as Precursors to Activity

Keil, S.L., Balasubramaniam, K.S., Smaldone, L.A., and Reger, B. 1999, *Astrophys. J.* 510, 422-443: Velocities in Solar Pores

Keil, S.L., Bonaccini, D.M., Tamblyn, P., and November, L.J. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 272-284: Line Asymmetries and Vertical Velocities Observed with a Narrow-Band Filter

Keil, S.L., Henry, T.W., and Fleck, B. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 301-309: NSO/AFRL/Sac Peak K-Line Monitoring Program

Keil, S.L., Kuhn, J., Lin, H., and Reardon, K. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March 1992. D.M. Rabin, J.T. Jeffries, and C. Lindsey, eds. (Kluwer), 251-257: Simultaneous IR and Visible Light Measurements of the Solar Granulation

Keil, S.L., and Marmolino, C. 1986, *Astrophys. J.* 310, 912-926: Diagnostics for Propagating Waves in the Solar Photosphere

Keil, S.L., and Mossman, A. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 333-346: Observations of High Frequency Waves in the Solar Atmosphere

Keil, S.L., and Neidig, D.F. 1990, in Atmospheric Density and Aerodynamic Drag Models for Air Force Operations: Workshop Proceedings, Hanscom AFB, Massachusetts, 22-24 October, 1987. F. Marcos, ed., Chapter 8: 17-19: Solar Activity Measurements Experiments (SAMEX) on the High Resolution Solar Observatory (HRSO)

Keil, S.L., and Neidig, D.F. 1990, in Atmospheric Density and Aerodynamic Drag Models for Air Force Operations: Workshop Proceedings, Hanscom AFB, Massachusetts, 22-24 October, 1987. F. Marcos, ed., Chapter 8: 7-10: Solar Flares and the Solar EUV Flux

Keil, S.L., Roudier, T., Cambell, E., Koo, B.C., and Marmolino, C. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 273-282: Observation and Interpretation of Photospheric Line Asymmetry Changes Near Active Regions

Keil, S.L., and Worden, S.P. 1984, *Astrophys. J.* 276, 766-781: Variations in the Solar Calcium K Line 1976-1982

Keller, C.U. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 208-215: Restoration of Distorted Images as a Variational Problem: a Dynamic Programming Approach

- Keller, C.U. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 124-132: High Spatial Resolution Polarimetry Using Filtergrams
- Keller, C.U. 1994, in SPIE 2302, 293-299: Diffraction Limited Slit-Spectrography
- Keller, C.U. 1994, in Solar Surface Magnetism: NATO ASI Workshop Proceedings, Soesterberg The Netherlands, 1-5 November, 1993. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 37-42: Speckle Techniques for Spectroscopic Observations
- Keller, C.U. 1994, in Solar Surface Magnetism: NATO ASI Workshop Proceedings, Soesterberg The Netherlands, 1-5 November, 1994. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 43-48: Some Aspects of Polarimetry with LEST
- Keller, C.U. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 215-219: Infrared Capabilities of the Large Earth-Based Solar Telescope (LEST)
- Keller, C.U. 1995, in Rev. Mod. Astron. 8, 27-59: Properties of Solar Magnetic Fields from Speckle Polarimetry
- Keller, C.U. 1996, Solar Phys. 164, 243-252: Recent Progress in Imaging Polarimetry
- Keller, C.U. 1997, in Reports in Astronomy: Transactions of the IAU 23A, 149-151: Advances in High-Resolution Solar Observing Techniques
- Keller, C.U. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 169-176: The Advanced Solar Telescope. I. Science Goals
- Keller, C.U. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 342-348: Optimum Apodization for Speckle Imaging of Extended Sources
- Keller, C.U. et al 1998, in SPIE 3352, Advanced Technology Optical/IR Telescopes VI: Conference Proceedings, Kona Hawaii, 23-25 March, 1998. L. M. Stepp, ed., 732-: SOLIS- A Modern Facility for Synoptic Solar Observations
- Keller, C.U., Bernasconi, P., Egger, U., Povel, H.P., Steiner, P., Stenflo, J.O. 1995, LEST Technical Report 59, Visible and Near-Infrared Polarimetry with LEST
- Keller, C.U., Deubner, F.L., Egger, U., Fleck, B., and Povel, H.P. 1994, Astron. Astrophys. 286, 626-634: On the Strength of Solar Intra-Network Fields
- Keller, C.U., Graff, W., Rosselet, A., Gschwind, R., and Wild, U.P. 1994, Astron. Astrophys. Lett. 289, L41-L42: First Light for an Astronomical 3-D Photon Detector

- Keller, C.U., Gschwind, R., Renn, A., Rosselet, A., and Wild, U.P. 1995, *Astron. Astrophys. Suppl. Ser.* 109, 383-387: The Spectral Hole-Burning Device: a 3-Dimensional Photon Detector
- Keller, C.U., and Harvey, J.W. 1997, in SPIE 2804: Workshop Proceedings, Denver Colorado, 4-9 August 1996. D.M. Rust, ed., 14-17: Concept for a Miniature Solar Magnetograph
- Keller, C.U., Harvey, J.W., Barden, S.C., Giampapa, M.S., Hill, F., and Pilachowski, C.A. 1998, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 375-378: Asteroseismology from Equivalent Widths: a Test of the Sun
- Keller, C.U., and Johannesson, A. 1995, *Astron. Astrophys. Suppl. Ser.* 110, 565-571: Speckle Spectrography of Extended Objects
- Keller, C.U., and Koutchmy, S. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 443-454: High Resolution Photographic Stokes Polarimetry of Small Scale Magnetic Flux
- Keller, C.U., and Koutchmy, S. 1991, *Astrophys. J.* 379, 751-757: Multicolor Continuum Analysis of the Solar Granulation in Quiet and Active Regions
- Keller, C.U., and NSO Staff 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 539-551: SOLIS Instrumentation Aspects
- Keller, C.U., Povel, H.P., and Stenflo, J.O. 1994, in SPIE 2265, Polarization Analysis and Measurement: Workshop Proceedings, San Diego California, 25-27 July, 1994. D. H. Goldstein and D.B. Chenault, eds., 222-230: Zurich Imaging Stokes Polarimeters I and II
- Keller, C.U., and Sheeley, N.R. 1999, in International Workshop on Solar Polarization: Proceedings, Bangalore India, 12-16 October, 1998. K. Nagendra and J.O. Stenflo, eds., 17-30: Scattering Polarization in the Chromosphere
- Keller, C.U., and Smartt, R.N. 1996, *Solar Phys* 166, 311-315: Imaging Coronal Emission Lines Under High Sky-Background Conditions
- Keller, C.U., Solanki, S.K., Steiner, O., and Stenflo, J.O. 1990, *Astron. Astrophys.* 233, 583-597: Structure of Solar Magnetic Fluxtubes from the Inversion of Stokes Spectra at Disk Center
- Keller, C.U., Solanki, S.K., Stenflo, J.O., Zayer, I. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 387-392: Inversion of Stokes V Profiles: the Structure of Solar Magnetic Fluxtubes and its Dependence on the Filling Factor
- Keller, C.U., Solanki, S.K., Tarbell, T.D., Title, A.M., and Stenflo, J.O. 1990, *Astron. Astrophys.* 236, 250-255: Solar Magnetic Field Strength Determinations from High Spatial Resolution Filtergrams
- Keller, C.U., Stenflo, J.O., and Von der Luhe, O. 1992, *Astron. Astrophys.* 254, 355-361: High Spatial Resolution Magnetograms of Solar Active Regions

- Keller, C.U., and Von der Luhe, O. 1992, *Astron. Astrophys.* 261, 321-328: Solar Speckle Polarimetry
- Kelley, J.D., and Bragg, S.L. 1984, *Phys. Rev. A* 29, 1168-1173: Asymmetry of the Intercollisional Interference Dips in the Collision-Induced Absorption Spectrum of Molecular Hydrogen
- Kennedy, J.R. 1996, *Sky and Telescope* 92, no. 4, 20-25: GONG: Probing the Sun's Hidden Heart
- Kennedy, J.R. 1997, *Solar Phys.* 175, 15-26: Effects of Polar-Angle Errors in Imaged Helioseismology
- Kennedy, J.R. 1998, *Solar Phys.* 181, 265-273: Uncertainties in p-Mode Power and Linewidth
- Kennedy, J.R., Jefferies, S.M., and Hill, F. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 273-276: Solar g-Mode Signatures in p-Mode Signals
- Kennedy, J.R., and Pintar, J.A. 1988, in Astronomy from Large Databases: Scientific Objectives and Methodological Approaches. Workshop Proceedings, Garching, West Germany, 12-14 October, 1987. F. Murtagh and A Heck, eds., 367-372: The Global Oscillation Network Group (GONG) Helioseismic Data Reduction and Analysis System
- Kennedy, J.R., and Williams, W.E. 1998, *Solar Phys.* 181, 275-286: Measuring Polar-Angle Errors in Imaged Helioseismology
- Kennedy, J.R., and the GONG Team 1994, in ASP Conference Series 55, Optical Astronomy from the Earth and Moon: Astronomical Society of the Pacific Conference Proceedings, July 1993. D.M. Pyper and R.J. Angione, eds. (ASP), 188-196: GONG, a Global Network of Automated Solar Telescopes
- Keppens, R., and Martinez Pillet, V. 1996, *Astron. Astrophys.* 316, 229-242: The Magnetic Structure of Pores and Sunspots Derived from Advanced Stokes Polarimeter Data
- Khan, J.I., Uchida, Y., McAllister, A.H., Mouradian, Z., Soru-Escaut, I., and Hiei, E. 1998, *Astron. Astrophys.* 336, 753-768: A Flare-Associated Filament Eruption Observed in Soft X-Rays by Yohkoh on 1992 May 7
- Kil, H.S., and Yun, H.S. 1993, *J. Korean Astron. Soc.* 26, 103-114: Dynamical Characteristics of Sunspot Chromospheres I. Analysis of Circular Polarization Measured from a Sunspot
- Killen, R., Potter, A.E., and Morgan, T.H. 1991, *Science* 252, 474-475: Determination of Potassium on Mercury
- Kim, I.S., Alexeeva, I.V., and Smartt, R.N. 1994, in ESA SP-373, Third SOHO Workshop, Solar Dynamic Phenomena and Solar Wind Consequences: Proceedings, Estes Park Colorado, 26-29 September 1994. A. Poland, ed. (ESA), 71-73: Comments on Doppler Shifts Deduced by the Fabry-Perot Technique
- Kim, I.S., Bougaenko, O.I., Broevitch, V.V., Koutchmy, S., Neidig, D.F., Smartt, R.N., and Evseev, O.A. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19-23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 239-242: Mirror Coronagraphic Device and its Application

- Kim, I.S., Klepikov, V.Y., Yu, V., Koutchmy, S., Stepanov, A.I., and Stellmacher, G. 1990, Astron. Zhurnal 16, 545-549: Magnetic Fields of Solar Prominences: Strength and Latitude Distribution
- Kim, I.S., Koutchmy, S., Stellmacher, G., and Stepanov, A.I. 1988, The Role of Fine-Scale Magnetic Fields on the Structure of the Solar Atmosphere: Workshop Proceedings, Tenerife (Canary Islands), 6-12 October, 1986 (Cambridge Univ. Press), 289-291: Some Statistical Properties of the Magnetic Field in Prominences
- Kim, I.S., Krouissanova, N.L., Alexeeva, I.V., and Smartt, R.N. 1998, Radiofizika 41, no. 2, 145-151: On Recurrent Solar Wind Streams
- Kim, I.S., and Smartt, R.N. 1994, in IAU Colloquium 144, Solar Coronal Structures. V. Rusin, P. Heinzel, and J.C. Vial, eds. (Kluwer), 549-557: On the Eclipse E-Corona Observations by the Fabry-Perot Technique
- Kiplinger, A.L., Dennis, B.R., Frost, K.J., and Orwig, L.E. 1984, Astrophys. J. 287, L105-L108: Fast Variations in High-Energy X-Rays from Solar Flares and Their Constraints on Nonthermal Models
- Kitai, R., and Muller, R. 1996, Solar Phys 165, 155-167: White-Light Enhancements and Small-Scale Chromospheric Activites in an Active Region
- Klein, K.L., Chupp, E.L., Trottet, G., Magun, A., Dunphy, P.P., Rieger, E., and Urpo, S. 1999, Astron. Astrophys. 348, 271-285: Flare-Associated Energetic Particles in the Corona and at 1 AU
- Kleiner, I., Brown, L.R., Tarrago, G., Kou, Q.L., Picque, N., Guelachvili, G., Dana, V., and Mandin, J.Y. 1999, J. Mol. Spectr. 196, 46-: Line Positions and Intensities in the Vibrational System n1, n3, and 2n4 of 14 NH<sub>3</sub> near 3 Microns
- Kleiner, I., Tarrago, G., and Brown, L.R. 1995, J. Mol. Spectr. 173, 120-145: Positions and Intensities in the 3nu2/nu2 + nu4 Vibrational system of 14NH<sub>3</sub> Near 4  $\mu$ m(96V-36 95/03)
- Klimchuk, J.A. 1986, Large-Scale Structure and Dynamics of Solar Active Regions. PhD Thesis (University of Colorado)
- Klimchuk, J.A. 1986, in Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985, and 8-10 April, 1986. A.I. Poland, ed., 183-190. NASA CP- 2442: C IV Doppler Shifts Observed in Active Region Filaments
- Klimchuk, J.A. 1987, Astrophys. J. 323, 368-379: On the Large-Scale Dynamics and Magnetic Structure of Solar Active Regions
- Klimchuk, J.A. 1989, Solar Phys. 119, 19-34: Magnetic Properties of C IV Doppler Shift Patterns
- Klimchuk, J.A. 1996, in Magnetic Reconnection in the Solar Atmosphere, ASP Conference Series 111. R. Bentley and J. Mariska, eds., 319-330: Post-Eruption Arcades and 3-D Magnetic Reconnection
- Kock, M., Kroll, S., and Schnehage, S.E. 1984, Phys. Scripta T8, 84-87: Fe I Oscillator Strengths
- Komm, R., Gu, Y., Hill, F., Stark, P., and Fodor, I. 1998, in Tenth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: Proceedings, Boston, MA, 15-19 July, 1997. B. Donahue and J.

- Bookbinder, eds. (Astron. Soc. Pacific), 783- : Multitaper Spectral Analysis and Wavelet Denoising Applied to Helioseismic Data
- Komm, R., Mattig, W., and Nesis, A. 1990, Astron. Astrophys. 239, 340-346: The Height Dependence of Intensity Structures in the Solar Photosphere
- Komm, R., Mattig, W., and Nesis, A. 1991, Astron. Astrophys. 243, 251-262: The Small-Scale Velocity Field in the Solar Photosphere
- Komm, R., Mattig, W., and Nesis, A. 1991, Astron. Astrophys. 252, 812-820: The Height Dependence of Velocity-Intensity Fluctuations and Several Non-Dimensional Parameters in the Solar Photosphere
- Komm, R., Mattig, W., and Nesis, A. 1991, Astron. Astrophys. 252, 827-834: The Decay of Granular Motions and the Generation of Gravity Waves in the Solar Photosphere
- Komm, R., Mattig, W., and Nesis, A. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pac.), 175-177: Velocity Fluctuations and Energy Dissipation in the Solar Photosphere
- Komm, R.W. 1994, Solar Phys. 149, 417-420: Meridional Flow and Rotation of Active Regions
- Komm, R.W. 1994, in Eighth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: Proceedings, Athens Georgia, 11-14 October, 1993. J.P. Caillault, ed., 432-434: Wavelet Analysis of Solar Magnetic Structures
- Komm, R.W. 1994, in Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 24-29:Wavelet Analysis of Active Regions
- Komm, R.W. 1995, Solar Phys. 156, 17-28: Hurst Analysis of Mt. Wilson Rotation Measurements
- Komm, R.W. 1995, Solar Phys. 157, 45-50: Wavelet Analysis of a Magnetogram
- Komm, R.W. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 431-436: Multitaper Spectral Analysis and Wavelet Analysis of Daily and Monthly Sunspot Numbers
- Komm, R.W., Anderson, E., Hill, F., Howe, R., Fodor, I., and Stark, P.I999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 257-260: Multitaper Analysis Applied to a 3-Month Time Series
- Komm, R.W., Anderson, E., Hill, F., Howe, R., Kosovichev, A.G., Scherrer, P.H., Schou, J., Fodor, I., and Stark, P. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 253-256: Comparison of SOHO-SOI/MDI and GONG Spectra

- Komm, R.W., Gu, Y., Hill, F., Stark, P.B., and Fodor, I.K. 1999, *Astrophys. J.* 519, 407-421: Multitaper Spectral Analysis and Wavelet Denoising Applied to Helioseismic Data
- Komm, R.W., Harvey, J.W., and Howard, R.F. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars, Boulder CO, August 11-14, 1992. T. Brown, ed. (Astron. Soc. Pac.), 269-272: Torsional Oscillations and Internal Rotation
- Komm, R.W., Howard, R.F., and Harvey, J.W. 1993, *Solar Phys.* 143, 19-39: Torsional Oscillation Patterns in Photospheric Magnetic Features
- Komm, R.W., Howard, R.F., and Harvey, J.W. 1993, *Solar Phys.* 145, 1-10: Rotation Rates of Small Magnetic Features from 2- and 1-Dimensional Crosscorrelation Analyses
- Komm, R.W., Howard, R.F., and Harvey, J.W. 1993, *Solar Phys.* 147, 207-223: Meridional Flow of Small Photospheric Magnetic Features
- Komm, R.W., Howard, R.F., and Harvey, J.W. 1994, *Solar Phys.* 151, 15-28: The Covariance of Latitudinal and Longitudinal Motions of Small Magnetic Features
- Komm, R.W., Howard, R.F., and Harvey, J.W. 1994, in Solar Magnetic Fields: Symposium Proceedings, Freiburg Germany, 29 June-- 2 July, 1993. M. Schuessler and W. Schmidt, eds. (Cambridge Univ. Press), 68-70: Solar Non-Rotational Motions
- Komm, R.W., Howard, R.F., and Harvey, J.W. 1995, *Solar Phys.* 158, 213-225 : Characteristic Size and Diffusion of Quiet Sun Magnetic Patterns
- Komm, R.W., Howard, R.F., Harvey, J.W., and Forgach, S. 1992, in Solar Cycle Workshop Proceedings, K.L. Harvey, ed. (Astronomical Society of the Pacific), 325-332: Rotation Rate Determined from Small Photospheric Magnetic Features
- Komm, R.W., Hurford, G.J., and Gary, D.E. 1997, *Astronomy and Astrophysics*, 181-192: A Spatial and Spectral Maximum Entropy Method as Applied to OVRO Solar Data
- Komm, R.W., and Mattig, W. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 330-337: Results on the Height Dependence of Granular Velocity Fluctuations
- Kononovich, E.V., Gorshkov, A.B., Smirnova, O.B., Kotrc, P., and Vial, J.C. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific. Conf. Ser. Vol. 95. K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 251-257: Two-Dimensional Model of a Rotating Solar Prominence. I. Observations and Preliminary Approach
- Kopp, G. 1992, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 473-476: Helioseismic Prospects in the Mid-Infrared
- Kopp, G., Lindsey, C.A., Roellig, T.L., Werner, M.W., Becklin, E.E., Orrall, F.Q., and Jefferies, J.T. 1992, *Astrophys. J.* 388, 203-210: Chromospheric Dynamics Based on Infrared Solar Brightness Variations

- Kopp, G., and Rabin, D.M. 1992, Solar Phys. 141, 253-265: A Relation Between Magnetic Field Strength and Temperature in Sunspots
- Kopp, G., and Rabin, D.M. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pac.), 246-248: Magnetic Field Strength and Continuum Intensity Measurements of Sunspots at 1.56 Microns
- Kopp, G., and Rabin, D.M. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 477-482: A Magnetic Field Strength vs. Temperature Relation in Sunspots
- Kopp, R.A., and Poletto, G. 1986, in Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985, and 8-10 April, 1986. A.I. Poland, ed. NASA CP- 2442, 235-239: Magnetic Field Re-Arrangement After Prominence Eruption
- Kopp, R.A., and Poletto, G. 1986, in Solar Maximum Analysis: Proceedings of an International Workshop, Irkutsk, USSR, 17-24 June, 1985. V.E. Stepanov and V.N. Obridko, eds., 103-108: Topology of Reconnected Magnetic Fields after Two-Ribbon Flares
- Kopp, R.A., and Poletto, G. 1988, Adv. Space Res. 8no. 11, 203-207: Magnetic Modelling of Giant HXIS Arches
- Kopp, R.A., and Poletto, G. 1990, Solar Phys. 127, 267-280: Formation and Cooling of the Giant HXIS Arches of November 6-7, 1980
- Korzennik, S.G., and Sabbe, C.N. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 115-118: Measurement of the Phase Relation Between Velocity and Intensity Fluctuations
- Korzennik, S.G., Thompson, M.J., Toomre, J., and the GONG Internal Rotation Team 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmider, eds. (Kluwer), 211-218: Internal Rotation and Dynamics of the Sun from GONG Data
- Kostiuk, T., Espenak, F., Mumma, M.J., Deming, D., and Zipoy, D. 1987, Icarus 72, 394-410: Variability of Ethane on Jupiter
- Kotov, V.A., and Koutchmy, S. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 265-270: On Sunspot and Facular Contrast Variations Near 2 and 4 Microns
- Kotov, V.A., Scherrer, P.H., Howard, R.F., and Haneychuk, V.I. 1998, Astrophys. J. 116, 103-117: Magnetic Field of the Sun as a Star: the Mount Wilson Observatory Catalog
- Koutchmy, O., Koutchmy, S. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 217-231: Data Reduction Techniques. Optimum Filter and Frame Integration: Application to Granulation Pictures

- Koutchmy, O., Koutchmy, S., Nitschelm, C., Sykora, J., and Smartt, R.N. 1988, in Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 256-266: Image Processing of Coronal Pictures
- Koutchmy, S. 1987, in Revue du Palais de la Decouverte 15, no. 146, 6-17: l'Observation des Eclipses Totales Solaires
- Koutchmy, S. 1987, in l'Astronomie. Le Guide de l'Observateur. P. Martinez, ed., 93-117: Les Eclipses de Soleil
- Koutchmy, S. 1988, Space Sci. Rev. 47, 95-143: Space-Borne Coronagraphy
- Koutchmy, S. 1988, in Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 208-235: Small-Scale Coronal Structures
- Koutchmy, S. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 253-272: Granulation In and Out of Magnetic Region
- Koutchmy, S. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 347-348: Photoelectric Analysis of the Solar Granulation in IR
- Koutchmy, S. 1990, l'Astronomie 104, 395-405: L'Observatoire Solaire de Sacramento Peak
- Koutchmy, S. 1990, in IAU Symposium 138, Solar Photosphere: Structure, Convection, and Magnetic Fields. Workshop Proceedings, Kiev, USSR, 15-20 May, 1989. E.A. Gurtovenko and J.O. Stenflo, eds. (Kluwer), 81-84: Analysis of the Solar Granulation in the Opacity Minimum Region
- Koutchmy, S. 1991, in Flares 22 Workshop: Dynamics of Solar Flares. Chantilly France, October 16-19, 1990. B. Schmieder and E. Priest, eds., 103-104: The Magnetic Field Configuration and Motions Over Regions with Impulsive Events and Prominence-Thread-Feet
- Koutchmy, S. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 237-250: High Spatial Resolution Observations of Magnetic Flux Elements
- Koutchmy, S. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 239-250: The Infrared Granulation-- Observations
- Koutchmy, S., Altrock, R.C., Darvann, T.A., Dzubenko, N.I., Henry, T.W., Kim, I., Koutchmy, O., Martinez, P., Nitschelm, C., Rubo, G.A., and Vial, J. 1992, Astron. Astrophys. Suppl. Ser. 96, 169-182: Coronal Photometry and Analysis of the Eclipse Corona of July 22, 1990
- Koutchmy, S., and Belmahdi, M. 1987, J. of Optics 18, 265-269: Improved Measurements of Scattered Light Level Behind Occulting Systems

- Koutchmy, S., Belmahdi, M., Coulter, R.L., Demoulin, P., Gaizauskas, V., MacQueen, R.M., Monnet, G., Mouette, J., Noens, J.C., November, L.J., Noyes, R.W., Sime, D.G., Smartt, R.N., Sovka, J., Vial, J.C., Zimmermann, J.P., and Zirker, J.B. 1994, *Astron. Astrophys.* 281, 249-257: CFHT Eclipse Observation of the Very Fine-Scale Solar Corona
- Koutchmy, S., Bouchard, O., Grib, S., November, L.J., Vial, J.C., Gouttebroze, P., Koutvitsky, V., Molodensky, M., Soloviev, L., and Veselovsky, I. 1994, in *ESA SP-373, Third SOHO Workshop, Solar Dynamic Phenomena and Solar Wind Consequences: Proceedings, Estes Park Colorado, 26-29 September 1994*. A. Poland, ed. (ESA), 139-142: About Small Plasmoids Propagating in the Solar Corona
- Koutchmy, S., Colley, S., Smartt, R.N., Nitschelm, C., and Zimmermann, J.P. 1990, in *SPIE 1235, Instrumentation in Astronomy VII, Astronomical Telescopes and Instrumentation for the 21st Century: Tucson, Arizona, 11-16 February, 1990*, 849-857: Real-Time Image Processing and Data Handling for Ground-Based and Spaceborne Coronal Observations
- Koutchmy, S., and Lebecq, C. 1986, *Astron. Astrophys.* 169, 323-328: The Solar Granulation. II. Photographic and Photoelectric Analysis of Photospheric Intensity Fluctuations at the Meso-Granulation Scale
- Koutchmy, S., and Loucif, M.L. 1991, in *Mechanisms of Chromospheric and Coronal Heating: Conference Proceedings, Heidelberg, Germany, 5-8 June, 1990*. P. Ulmschneider, ed. (Springer-Verlag), 152-158: Properties of Impulsive Events in a Polar Coronal Hole
- Koutchmy, S., and Nitschelm, C. 1988, *Astrophys. Space Sci.* 143, 45-49: Optical Detection of Space Debris Using a Large Achromatic Coronagraph
- Koutchmy, S., and Restaino, S.R. 1992, *Solar Phys.* 142, 359-363: Toward High-Spatial Resolution IR Solar Observations
- Koutchmy, S., and Restaino, S.R. 1994, in *Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992*. R.R. Radick, ed., 171-172: Toward High-Spatial Resolution IR Solar Observations
- Koutchmy, S., and Smartt, R.N. 1989, in *High Spatial Resolution Solar Observations : Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988*. O. Von der Luhe, ed., 560-571: High Resolution Observations of the Solar Corona: Why and How?
- Koutchmy, S., and Stellmacher, G. 1988, *The Role of Fine-Scale Magnetic Fields on the Structure of the Solar Atmosphere: Workshop Proceedings, Tenerife (Canary Islands), 6-12 October, 1986* (Cambridge Univ. Press), 103-109: Properties of a Concentrated Magnetic Field Region
- Koutchmy, S., and Vial, J. 1990, *La Recherche* no. 217, 10-19: Le Soleil 24 Heures Sur 24
- Koutchmy, S., Zirker, J.B., Darvann, T., Koutchmy, O., Stauffer, F.R., Mann, R., Coulter, R., and Hegwer, S. 1991, in *Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990*. L.J. November, ed., 263-271: High Spatial Resolution V: Stokes Polarimetry to Measure the Zeeman Effect in Flux Tubes and Prominence Filament Threads

- Koutchmy, S., Zirker, J.B., and Darvann, T.A. 1990, in IAU Colloquium 117, Dynamics of Quiescent Prominences: Workshop Proceedings, Hvar, Yugoslavia, 25-29 September, 1989. E. Tandberg-Hanssen and V. Ruzdjak, eds. (Springer-Verlag): Distribution of Velocities in the Pre-Eruptive Phase of a Quiescent Prominence
- Koutchmy, S., Zirker, J.B., Steinolfson, R.S., and Zhugzda, J.D. 1991, in The Solar Interior and Atmosphere: LPL/NSO Conference Proceedings, Tucson, AZ, 15-18 November, 1988. A.N. Cox, W.C. Livingston, and M. Matthews, eds. (Univ. of Arizona Press), 1044-1086: Coronal Activity
- Kovacs, A., and Dezso, L. 1986, in SMA Workshop Proceedings, Irkutsk, USSR, 17-21 June 1985: A Period of Low Activity in a Solar Active Region
- Kozuka, Y., and Kojima, S.T. 1997, in Solar-Terrestrial Predictions V: Workshop Proceedings, Hitachi Japan, 23-27 January 1996. G. Heckman, K. Marubashi, M.A. Shea, D.F. Smart, and R. Thompson, eds. (RWC, Hiraso Solar-Terr. Res. Center), 658-: Origin of Long-Term Variation of Recurrance Period of the Interplanetary Magnetic Field Polarity
- Kress, J.M., and Wilson, P.R. 1999, *Solar Phys.* 189, 147-161: The Evolution of Isolated Active Regions
- Kroll, S., and Kock, M. 1987, *Astron. Astrophys. Suppl. Ser.* 67, 225-235: Fe II Oscillator Strengths
- Krucker, S., Benz, A.O., Aschwanden, M.J., and Bastian, T.S. 1995, *Solar Phys.* 160, 151-169: Location of Type I Radio Continuum and Bursts on Yohkoh Soft X-Ray Maps
- Krucker, S., Benz, A.O., and M.J. Aschwanden 1997, *Astron. Astrophys.* 317, 569-: Yohkoh Observations of the Source Regions of Solar Narrowband, Millisecond Spike Events
- Kshirsagar, R.J., Giver, L.P., Chackerian, C., and Brown, L.R. 1999, *J. Quan. Spectr. Rad. Trans.* 61, 695-: The Rovibrational Intensities of the 2n3 Band of 12C16O18O at 4639 cm<sup>-1</sup>
- Kuhn, J.R. 1993, *Astrophys. J. Lett.* 409, L13-L16: Unbound Dwarf Spheroidal Galaxies and the Mass of the Milky Way
- Kuhn, J.R. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 27-40: What Causes Cycle-Related Global Solar Changes?
- Kuhn, J.R. 1994, in IAU Colloquium 143, The Sun as a Variable Star: Solar and Stellar Irradiance Variations. Proceedings, Boulder, CO, 20-25 June 1993. J. M. Pap, C. Frohlich, H.S. Hudson and S. Solanki, eds. (Cambridge University Press), 130-137: Brightness Observations of the Sun
- Kuhn, J.R. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 1, 145-149: Solar Variability in Irradiance and Oscillations
- Kuhn, J.R. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 89-93: Infrared Coronal Magnetic Field Measurements

- Kuhn, J.R. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 871-878: On the Origin of the Helioseismic Solar Cycle Variations
- Kuhn, J.R., Balasubramaniam, K., Kopp, G., Penn, M.J., Dombard, A.J., and Lin, H. 1994, Solar Phys. 153, 143-155: Removing Instrumental Polarization from Infrared Solar Polarimetric Observations
- Kuhn, J.R., Bogart, R., Bush, R., Sa, L., Scherer, P., and Scheick, X. 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors: J. Provost and F.X. Schmider, eds. (Kluwer): Precision Solar Astrometry from SOHO/MDI
- Kuhn, J.R., Bush, R., Coulter, R., Frohlich, C., Gwo, J., Jones, A., Pap, J., Scherrer, P., Sofia, S., and Ulrich, R. 1998, in SPIE 3442, Missions to the Sun II: San Diego, CA, 19-24 July, 1998. C.M. Korendyke, ed., 203-209: APT: an Astrometric and Photometric Telescope
- Kuhn, J.R., Bush, R., Scherer, P., and Scheick, X. 1998, in Nature 392, 155-: The Sun's Shape and Brightness
- Kuhn, J.R., Lamy, P., Lin, H., Koutchmy, S., and Smartt, R.N. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 185-197: IR Observations of the K and F Corona During the 1991 Eclipse
- Kuhn, J.R., Lin, H., and Coulter, R. 1999, in Adv. Space Res. 24, no. 2, 185-194: What Can Irradiance Measurements Tell Us About the Solar Magnetic Cycle?
- Kuhn, J.R., MacQueen, R.M., Streete, J., Tansey, G., Mann, I., Hillebrand, P., Coulter, R., Lin, H., Edmunds, D., and Judge, P. 1999, Astrophys. J. 521, 478-482: Probable Detection of a Bright Infrared Coronal Emission Line of Si IX Near 2.93 Microns
- Kuhn, J.R., O'Neill, C.M., and Gilliam, L.B. 1988, in IAU Symposium 123, Advances in Helio- and Asteroseismology. J. Christensen-Dalsgaard and S. Frandsen, eds., 63-65: Solar 5-Minute Oscillation Amplitude Anisotropy and Doppler Velocity Systematics
- Kuhn, J.R., Penn, M.J., and Mann, I. 1996, Astrophys. J. Lett. 456, L67-L70: The Near Infrared Coronal Spectrum
- Kuhn, J.R., and Penn, M.J., eds. 1995, Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. 500 pp.
- Kuhn, J.R., Smith, M.A., and Hawley, S.L. 1996, Astrophys. J. Lett. 469, L93-L96: Tidal Disruption and Tails from the Carina Dwarf Spheroidal Galaxy
- Kuhn, J.R., and Stein, R.F. 1996, Astrophys. J. Lett. 463, L117-L119: Accounting for the Solar Acoustic and Luminosity Variations from the Deep Convection Zone
- Kulagin, E.S. 1999, Solar Phys. 188, 81-87: A Narrow-Band Tunable Solar Filter for the Near-Infrared Spectral Region
- Kumar, P. 1993, Astrophys. J. 428, 827-836: Properties of Acoustic Sources in the Sun

- Kumar, P., and Basu, S. 2000, *Astrophys. J.* 545, L65-L68: Source Depth for Solar p-Modes
- Kumar, P., Duvall, T.L., Harvey, J.W., Jefferies, S.M., Pomerantz, M.A., and Thompson, M.J. 1990, in *Progress of Seismology of the Sun and Stars: Proceedings of the Oji International Seminar Held at Hakone, Japan, 11-14 December 1989*. Y. Osaki and H. Shibahashi, eds. (Springer-Verlag), 87-92: What are the Observed High-Frequency Solar Acoustic Modes?
- Kumar, P., Fardal, M.A., Jefferies, S.M., Duvall, T.L., Harvey, J.W., and Pomerantz, M.A. 1994, *Astrophys. J. Lett.* 422, L29-L32: Limits on Coronal Reflection Using High-Frequency Solar Oscillations
- Kumar, P., and Lu, E. 1991, *Astrophys. J. Lett.* 375, L35-L39: The Location of the Source of High-Frequency Solar Acoustic Oscillations
- Kunches, J.M., and Zwickl, R.D. 1997, in *Solar-Terrestrial Predictions V: Workshop Proceedings*, Hitachi Japan, 23-27 January 1996. G. Heckman, K. Marubashi, M.A. Shea, D.F. Smart, and R. Thompson, eds. (RWC, Hiraso Solar-Terr. Res. Center), 681-: Delayed-Onset of Solar Energetic Particle Events
- Kundu, M.R. 1985, *Solar Phys.* 100, 491-: High Spatial Resolution Microwave Observations of the Sun
- Kundu, M.R. 1986, in *Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985, and 8-10 April, 1986*. A.I. Poland, ed. NASA CP- 2442, 349-351: VLA Observations of Coronal Bright Points at 6 and 20 Centimeter Wavelengths
- Kundu, M.R. 1986, in *Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985, and 8-10 April, 1986*. A.I. Poland, ed., 117-120, 1986. NASA CP- 2442: VLA Observations of Solar Filaments at 6 and 20 Centimeter Wavelengths
- Kundu, M.R. 1987, in *Solar Maximum Analysis: Proceedings of the International Workshop Held in Irkutsk, USSR, 17-24 June, 1985*. V. E. Stepanov and V.N. Obridko, eds.: Multiwavelength Microwave Observations of Solar Active Regions and Flares
- Kundu, M.R., and Alissandrakis, C.E. 1984, *Solar Phys.* 94, 249-283: Structure and Polarization of Active Region Microwave Emission
- Kundu, M.R., Gaizauskas, V., Woodgate, B.E., Schmahl, E.J., Shine, R., and Jones, H.P. 1985, *Astrophys. J. Suppl. Ser.* 57, 621-630: A Study of Flare Buildup from Simultaneous Observations in Microwave, H-alpha, and UV Wavelengths
- Kundu, M.R., and Gopalswamy, N. 1990, *Solar Phys.* 129, 133-152: Filament Eruption and Storm Radiation at Meter-Decameter Wavelengths
- Kundu, M.R., Melozzi, M., and Shevgaonkar, R.K. 1986, *Astron. Astrophys.* 167, 166-172: A Study of Solar Filaments from High Resolution Microwave Observations
- Kundu, M.R., and Nitta, N. 1988, in *Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans*. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 89-95: Coronal Bright Points in Microwaves

- Kundu, M.R., Raulin, J.P., Nitta, N., Hudson, H.S., Shimojo, M., Shibata, K., and Raoult, A. 1995, *Astrophys. J. Lett.* 447, L135-L137: Detection of Nonthermal Radio Emission from Coronal X-Ray Jets
- Kundu, M.R., Schmahl, E.J., and Fu, Q.J. 1988, *Astrophys. J.* 325, 905-911: Coronal Bright Points at 6 and 20 Centimeter Wavelength
- Kundu, M.R., Schmahl, E.J., Wang, Z., Burkpile, J., Hundhausen, A., and Sime, D. 1990, A Collection of Images of the Solar Corona at Meter Wavelengths, in White Light, the 10830 He Line, and Extrapolated Magnetic Fields. NSF ATM88-16008. (National Science Foundation)
- Kundu, M.R., Strong, K.T., Pick, M., Harvey, K.L., Kane, S.R., White, S.M., and Hudson, H.S. 1994, in Proceedings of Kofu Symposium, New Look at the Sun with Emphasis on Advanced Observations of Coronal Dynamics and Flares: Kofu Japan, 6-10 September 1993. S. Enome and T. Hirayama, eds. (Nobeyama Radio Observatory), 343-346: Metric Type III Bursts from Flaring X-Ray Bright Points
- Kundu, M.R., Strong, K.T., Pick, M., White, S.M., Hudson, H.S., Harvey, K.L., and Kane, S.R. 1994, *Astrophys. J.* 427, L59-L62 : Nonthermal Processes in Flaring X-Ray Bright Points
- Kundu, M.R., Velusamy, T., and White, S.M. 1987, *Astrophys. J.* 321, 593-605: Simultaneous 2 and 6 Centimeter Wavelength Observations of a Solar Flare Using the VLA
- Kundu, M.R., White, S.M., and McConnell, D.M. 1991, *Solar Phys.* 134, 315-327: VLA Observations of Interacting Flaring Loops
- Kundu, M.R., White, S.M., and Schmahl, E.J. 1989, *Solar Phys.* 121, 153-161: Simultaneous Multi-Frequency Imaging Observations of Solar Microwave Bursts
- Kurokawa, H. 1989, *Space Sci. Rev.* 51, 49-: High-Resolution Observations of H-alpha Flare Regions
- Kurucz, R.L. 1990, in Infrared Extinction and Standardization. E.F. Milone, ed. (Springer-Verlag), 55-60: Reducing Photometry by Computing Atmospheric Transmission
- Kurucz, R.L. 1991, in Solar Interior and Atmosphere: Conference Proceedings, Tucson, AZ, 15-18 November, 1988. A.N. Cox, W.C. Livingston, and M.S. Matthews, eds. (Univ. of Arizona Press), 663-669: The Solar Spectrum
- Kurucz, R.L., Furenlid, I., Brault, J.W., and Testerman, L. 1984, National Solar Observatory Atlas no. 1: Solar Flux Atlas from 296 to 1300 Nanometers.
- LaBonte, J.L., Mickey, D.L., and Leka, K.D. 1999, *Solar Phys.* 189, 1-24: The Imaging Vector Magnetograph at Haleakala
- Labonte, B., Livingston, W.C., and Zirker, J.B. 1997, in Theoretical and Observational Problems Related to Solar Eclipses: NATO ASI Workshop Proceedings, Sinaia Romania, 1-5 June, 1996. Z. Mouradian and M. Stavinschi, eds., 35-37: High Resolution Imaging
- Lamy, P., Kuhn, J.R., Lin, H., Koutchmy, S., and Smartt, R.N. 1992, *Science* 257, 1377-1380: No Evidence of a Circumsolar Dust Ring from Infrared Observations of the 1991 Solar Eclipse

- Lang, K.R. 1991, *Adv. Space Res.* 11, no. 1, 59-63: VLA Observations of the Inner Corona
- Lang, K.R. 1991, in *Flare Physics in Solar Activity Maximum 22*, Y. Uchida et al. , eds., 264-: VLA Supporting Observations for Solar A
- Lang, K.R. 1994, *Astrophys. J. Suppl.* 90, 753-764: Radio Evidence for Nonthermal Particle Acceleration on Stars of Late Spectral Type
- Lang, K.R., and Willson, R.F. 1987, *Astrophys. J.* 319, 514-519: VLA Observations of a Solar Noise Storm
- Lang, K.R., and Willson, R.F. 1989, *Astrophys. J. Lett.* 344, L77-L80: Time-Correlated Bursts from Widely Separated Solar Active Regions at 91.6 Centimeter Wavelength
- Lang, K.R., Willson, R.F., Kile, J.N. et al 1993, *Astrophys. J.* 419, 398-417: Magnetospheres of Solar Active Regions Inferred from Spectral-Polarization Observations with High Spatial Resolution
- Lang, K.R., Willson, R.F., Smith, K.L., and Strong, K.T. 1987, *Astrophys. J.* 322, 1035-1043: Simultaneous SMM Flat Crystal Spectrometer and Very Large Array Observations of Solar Active Regions
- Lang, K.R., Willson, R.F., Smith, K.L., and Strong, K.T. 1987, *Astrophys. J.* 322, 1044-1051: Solar Active Region Physical Parameters Inferred from a Thermal Cyclotron Line and Soft X-Ray Spectral Lines
- Lantos, P., and Alissandrakis, C.E. 1996, *Solar Physics* 165, 83-98: Coronal Sources at Meter and Optical Wavelengths During the Declining Phase of the Solar Cycle
- Lantos, P., Alissandrakis, C.E., Gergely, T., and Kundu, M.R. 1987, *Solar Phys.* 112, 325-: Quiet Sun and Slowly Varying Component at Meter and Decameter Wavelengths
- Lantos, P., Alissandrakis, C.E., and Rigaud, D. 1992, *Solar Phys.* 137, 225-256: Quiet-Sun Emission and Local Sources at Meter and Decimeter Wavelengths and Their Relationship with the Coronal Neutral Sheet
- Lantos, P., Hildner, E., McIntosh, P.S., Neidig, D.F., Schwenn, R., Shea, M., and Webb, D. 1990, in *Solar-Terrestrial Predictions: Workshop Proceedings*, Leura, Australia, 16-20 October, 1989. R. J. Thompson el al, eds. (NOAA), Vol. 1, 1-6: Solar Working Group Report
- Lara, A., Gopalswamy, N., Kundu, M.R., Perez-Enriquez, R., Koshiishi, H., and Enome, S. 1998, *Solar Phys.* 178, 353-378: Microwave and Soft X-Ray Study of Solar Active Region Evolution
- Larsen, R.M., Christensen-Dalsgaard, J., Kosovichev, A.G., and Schou, J. 1999, in *SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings*, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 813-818: Improved SOLA Inversions of MDI and GONG Data
- Larson, D.E., Lin, R.P., McTiernan, J.M. et al 1997, *Geophys. Res. Lett.* 24, 1911-: Tracing the Topology of the October 18-20, 1995 Magnetic Cloud with ~0.1-102 keV Electrons

- Lasker, B.M., Sturch, C.R., Lopez, C., and (13 authors) 1988, *Astrophys. J. Suppl. Ser.* 68, 1-90: The Guide Star Photometric Catalog. I.
- Latushko, S. 1993, *Solar Phys.* 146, 401-404: The Relationship Between Meridional Drift and Rotation of the Large-Scale Solar Magnetic Field
- Latushko, S. 1994, *Solar Phys.* 149, 231-241: Meridional Drift in the Large-Scale Solar Magnetic Field Pattern
- Latushko, S. 1996, *Solar Phys.* 163, 241-247: Meridional Drift of the Large-Scale Solar Magnetic Fields in Different Phases of Solar Activity
- Latushko, S. 1996, *Solar Phys.* 166, 261-266: Rotation of the Large-Scale Solar Magnetic Fields in the Equatorial Region
- Lawler, J.E. 1987, in *Lasers, Spectroscopy, and New Ideas*. W.M. Yen and M.D. Levenson, eds. (Springer-Verlag), 125-140: Laser and Fourier Transform Techniques for the Measurement of Atomic Transition Probabilities
- Lawler, J.E., Whaling, W., and Grevesse, N. 1990, *Nature* 346, 635-637: Contamination of the Th II Line and the Age of the Galaxy
- Lawrence, J.K., Cadavid, A.C., and Ruzmaikin, A.A. 1998, *Astrophys. J.* 513, 506-515: Characteristic Scales of Photospheric Flows and Their Magnetic and Temperature Markers
- Lawrence, J.K., Topka, K.P., and Jones, H.P. 1993, *J. Geophys. Res.* 98, 18911-18918: Contrast of Faculae Near the Disk Center and Solar Variability
- Lazrek, M., Baudin, F., Bertello, L., Boumier, P., Charra, J., Fierry-Fraillon, D., Fossat, E., Gabriel, A.H., Garcia, R.A., Gelly, B., Gouiffes, C., Grec, G., Palle, P.L., Perez Hernandez, F., Regulo, C., Renaud, C., Robillot, J.M., Roca Cortes, T., Turck-Chieze, S., and Ulrich, R.K. 1997, *Solar Phys.* 175, 227-246: First Results on P-Modes from GOLF Experiment
- Lazrek, M., and Hill, F. 1993, *Astron. Astrophys.* 280, 704-714: Temporal Window Effects and Their Deconvolution from Solar Oscillation Spectra
- Lazrek, M., and Hill, F. 1993, in *GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings*, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 449-452: The Deconvolution of Temporal Window Effects from Solar Oscillation Spectra
- Lean, J. 1987, *J. Geophys. Res.* 92, 839-868: Solar Ultraviolet Irradiance Variations: a Review
- Lean, J. 1988, in *Solar Radiative Output Variation: Workshop Proceedings*, Boulder, CO, 9-11 November, 1987. P. Foukal, ed., 113-124: Empirical Modeling of UV and EUV Flux Variations
- Lean, J., Livingston, W.C., Skumanich, A., and White, O. 1992, *Geophys. Res. Lett.* 19, 1595-1598: Estimating the Sun's Radiative Output During the Maunder Minimum
- Lean, J., Skumanich, A., White, O.R., and Rind, D. 1994, in *IAU Colloquium 143, The Sun as a Variable Star: Solar and Stellar Irradiance Variations. Proceedings*, Boulder, CO, 20-25 June 1993. J. M.

Pap, C. Frohlich, H.S. Hudson and S. Solanki, eds. (Cambridge University Press), 236-243: Estimating Solar Forcing of Climate Change During the Maunder Minimum

Lean, J.L., Livingston, W.C., White, O.R., and Skumanich, A. 1984, in Solar Irradiance Variations on Active-Region Time Scales: Conference Proceedings, Pasadena, California, June 20-2. 1983. B.J. LaBonte et al, eds. NASA CP-2310, 253-264: Modeling Solar Spectral Irradiance Variations at Ultraviolet Wavelengths

Learner, R.C., Thorne, A.P., Wynne-Jones, I., Brault, J.W., and Abrams, M.C. 1995, *J. Opt. Soc. Am. A* 12, 2165-2171: Phase Correction of Emission Line Fourier Transform Spectra

Leblanc, R.B., White, J.B., and Bernath, P.F. 1994, *J. Mol. Spectr.* 164, 574-579: High-Resolution Infrared Emission Spectra of HCl and HF

Lee, J.W., Hurford, G.J., and Gary, D.E. 1993, *Solar Phys.* 144, 45-57: Microwave Emission from a Sunspot. I. Implications for the Sunspot Magnetic Structure

Leibacher, J.W. 1984, GONG Report no. 2: A Selected Bibliography on Helioseismology

Leibacher, J.W. 1984, ed., GONG Report no. 1: A Proposal to Study the Solar Interior by Measuring Global Oscillations with a World-Wide Network of Instruments. 95 pp.

Leibacher, J.W. 1984, in Theoretical Problems in Stellar Stability and Oscillations: Conference Proceedings, Leige Belgium, July 1984. M. Gabriel and A. Noels, eds.: Helioseismological Determination of Solar Internal Rotation

Leibacher, J.W. 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors: J. Provost and F.X. Schmider, eds. (Kluwer), 1-12: Sounding Solar and Stellar Interiors: General Introduction

Leibacher, J.W. 1999, *Adv. Space Res.* 24, no. 2, 173-176: The Global Oscillation Network Group (GONG) Project

Leibacher, J.W. and the GONG Project Team 1995, in GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 381-386: The Global Oscillation Network Group Project

Leibacher, J.W. and the GONG Project Team 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 3-6: The Global Oscillation Network Group (GONG) Project

Leibacher, J.W., and Leibacher-Ouvrard, L. 1987, *La Recherche* 18, 274-276: l'Heliosismologie, Devoile l'Interieur du Soleil

Leibacher, J.W., Noyes, R.W., Neidig, D.F., Rabin, D.M., Simon, G.W. et al 1992, The Mechanisms of Solar Variability (MSV) Program: Report of a Workshop Convened by the OSSA Space Physics Subcommittee, 7-9 January, 1992. 25 pp.

Leibacher, J.W., Noyes, R.W., Toomre, J., and Ulrich, R.K. 1985, *Scientific American* 253, no. 9, 48-57: Helioseismology

- Leifsen, T. 1991, in Diagnostics of Solar Oscillation Observations: Miniworkshop Proceedings, Oslo Norway, 31 Jan.--1 Feb., 1991. P Maltby and E. Leer, eds., 25-36: Status of the Infrared Solar Oscillation Study
- Leifsen, T. 1994, in Chromospheric Dynamics: Proceedings of a Mini-Workshop Held at the Institute of Theoretical Astrophysics, University of Oslo, Norway, 6-8 June 1994. M. Carlsson, ed. (University of Oslo), 139-156: Observations and Simulations of Time-Resolved CO Spectra
- Leifsen, T. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 271-276: Solar 5-Minute Oscillations at 2.23  $\mu\text{m}$
- Leka, K.D. 1997, *Astrophys. J.* 484, 900-919: The Vector Magnetic Fields and Thermodynamics of Sunspot Light Bridges: the Case for Field-Free Disruptions in Sunspots
- Leka, K.D., and Skumanich, A. 1998, *Astrophys. J.* 507, 454-469: The Evolution of Pores and the Development of Penumbrae
- Leka, K.D., Van Driel-Gesztelyi, L., Nitta, N., Canfield, R.C., and Mickey, D.L. 1994, *Solar Phys.* 155, 301-337: The Magnetic Evolution of AR 7260: a Roadmap
- Lemen, J.R., Acton, L.W., Alexander, D., Galvin, A.B., Harvey, K.L., Hoeksema, J.T., Zhao, X., and Hudson, H.S. 1996, in Solar Wind Eight: Workshop Proceedings, Dana Point CA, 25-30 June 1995. D. Winterhalter, J.T. Gosling, S.R. Habbal et al, eds. (AIP), 96-99: Solar Identification of Solar-Wind Disturbances Observed at Ulysses
- Li, X., Zhang, Z., and Smartt, R.N. 1994, *Astron. Astrophys.* 290, 963-971: Magnetic Reconnection Theory for Coronal Loop Interaction
- Li, Y., and Wilson, P.R. 1999, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 181-182: The Internal Rotation Rate Inferred from LOWL and GONG Data
- Li, Z., Li, Z., Wu, M., Luan, D. 1991, *Pub. Yunnan Obs.* (1), 1- : Evolution Characteristics of the Fine Structure of AR 4811 and the Associated Flare Activity
- Liebert, J., Boroson, T.A., and Giampapa, M.S. 1984, *Astrophys. J.* 282, 758-762: New Spectrophotometry of the Extremely Cool Proper Motion Star LHS 2924
- Lin, H. 1995, *Astrophys. J.* 446, 421-430: On the Distribution of the Solar Magnetic Fields
- Lin, H. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 397-405: On the Distribution of the Solar Magnetic Fields
- Lin, H., and Kuhn, J.R. 1992, *Solar Phys.* 141, 1-26: Precision IR and Visible Solar Photometry
- Lin, H., Penn, M.J., and Kuhn, J.R. 1998, *Astrophys. J.* 493, 978-995: He I 10830 Å Line Polarimetry: a New Tool to Probe the Filament Magnetic Fields

- Lin, H., and Rimmele, T. 1999, *Astrophys. J.* 514, 448-455: The Granular Magnetic Fields of the Quiet Sun
- Lin, J., Zhang, Z., Wang, Z., and Smartt, R.N. 1989, *Acta Astronomica Sinica* 30, 52-60: The Plasma Property of Cool Flare Loops of April 28, 1980
- Lin, J., Zhang, Z., Wang, Z., and Smartt, R.N. 1990, *Acta Astronomica Sinica* 31, 313-317: The Morphology Evolution of the Cool Post-Flare Loop System of April 28, 1980
- Lin, J., Zhang, Z., Wang, Z., and Smartt, R.N. 1992, *Astron. Astrophys.* 253, 557-560: The Morphological Characteristics and Cooling Mechanisms of the Post-Flare Loop System of April 28, 1980
- Lin, R.P., Curtis, D.W., Harvey, P., Hurley, K., Primsch, J.H., Smith, D.M., Pelling, R.M., and Duttweiler, F. 1988, in MAX '91: Flare Research at the Next Solar Maximum. Workshop no. 1: Scientific Objectives. Kansas City, Kansas, 9-10 June, 1988. R.C. Canfield and B.R. Dennis, eds. (NASA), 262-278: A High-Resolution Gamma-Ray and Hard X-Ray Spectrometer for Solar Flare Observations in Max-91
- Lindsey, C., Gu, Y., and Jefferies, J.T. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 313-324: Infrared Applications for Radiative Transport in Stochastic Media
- Lindsey, C.A. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 85-92: The Sun in Submillimeter Radiation
- Lindsey, C.A., Becklin, E.E., Orrall, F.Q., Werner, M.W., Jefferies, J.T., and Gatley, I. 1986, *Astrophys. J.* 308, 448-458: Extreme Limb Profiles of the Sun at Far-Infrared and Submillimeter Wavelengths
- Lindsey, C.A., and Braun, D.C. 1990, *Solar Phys.* 126, 101-115: Helioseismic Imaging of Sunspots at Their Antipodes
- Lindsey, C.A., and Braun, D.C. 1997, *Astrophys. J.* 485, 895-903: Helioseismic Holography
- Lindsey, C.A., and Braun, D.C. 1998, *Astrophys. J. Lett.* 499, L99-L102: The Acoustic Moat and Thermal Transport in the Neighborhoods of Sunspots
- Lindsey, C.A., and Braun, D.C. 1998, *Astrophys. J. Lett.* 509, L129-L132: Acoustic Signatures of Subphotospheric Structure Underlying Sunspots
- Lindsey, C.A., and Braun, D.C. 1999, *Astrophys. J.* 510, 494-504: Chromatic Holography of the Sunspot Acoustic Environment
- Lindsey, C.A., Braun, D.C., and Jefferies, S.M. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 81-84: Local Helioseismology of Subsurface Structure

- Lindsey, C.A., Braun, D.C., Jefferies, S.M., Woodard, M.J., Fan, Y., Gu, Y., and Redfield, S. 1996, *Astrophys. J.* 470, 636-646: Doppler Acoustic Diagnostics of Subsurface Solar Magnetic Structure
- Lindsey, C.A., and Jefferies, J.T. 1990, *Astrophys. J.* 349, 286-295: Statistical Concepts in Radiative Transfer Through Inhomogeneous Media
- Lindsey, C.A., and Jefferies, J.T. 1991, *Astrophys. J.* 383, 443-449: The Solar Chromospheric Supergranular Network in 850  $\mu\text{m}$  Radiation
- Lindsey, C.A., Jefferies, J.T., (eight other authors) 1992, *Nature* 358, 308-: Extreme-Infrared Brightness Profile of the Solar Corona Obtained During the Total Solar Eclipse of 1991
- Lindsey, C.A., Kopp, G., Becklin, E.E., Roellig, T., Werner, M.W., Jefferies, J.T., Orrall, F.Q., Braun, D., and Mickey, D.L. 1990, *Astrophys. J.* 350, 475-479: Far Infrared Intensity Variations Caused by Five-Minute Oscillations
- Lindsey, C.A., Yee, S., Roellig, T.L., Hills, R., Brock, D., Duncan, W., Watt, G., Webster, A., and Jeffries, J.T. 1990, *Astrophys. J. Lett.* 353, L53-L55: Submillimeter Observations of the Sun from the James Clerk Maxwell Telescope90-14
- Linford, G.A., and Wolfson, C.J. 1988, *Astrophys. J.* 331, 1036-1046: Properties of an Impulsive Compact Solar Flare Determined from Solar Maximum Mission X-Ray Measurements
- Linsky, J., Wood, B., Brown, A., Giampapa, M.S., and Ambruster, C. 1995, *Astrophys. J.* 455, 670-676: Stellar Activity at the End of the Main Sequence: GHRS Observations of the M8 Ve Star VB 10
- Linsky, J.L., Andrulis, C., Saar, S.H., Ayres, T.R., and Giampapa, M.S. 1994, in Eighth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: Proceedings, Athens Georgia, 11-14 October, 1993. J.P. Caillault, ed., 438-440: The Relationship Between Radiative and Magnetic Fluxes for Three Active Solar-Type Dwarfs
- Linsky, J.L., and Saar, S.H. 1987, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (5th), Boulder, Colorado, 8-11 July, 1987. J.L. Linsky and R.E. Stencel, eds., 44-46: Measurements of Stellar Magnetic Fields: Empirical Constraints on Stellar Dynamo and Rotational Evolution Theories
- Lites, B.W. 1984, *Astrophys. J.* 277, 874-888: Photoelectric Observations of Chromospheric Sunspot Oscillations. II. Propagation Characteristics
- Lites, B.W. 1984, *Solar Phys.* 90, 1-12: The Color Temperature of a Sunspot Penumbra
- Lites, B.W. 1984, in Hydromagnetics of the Sun: Proceedings of the Fourth European Meeting on Solar Physics, Noordwijkerhout, The Netherlands, 1-3 October, 1984 ESA SP-220, 207-209: Observational Aspects of Sunspot Oscillations
- Lites, B.W. 1985, ed., Chromospheric Diagnostics and Modelling: Workshop Proceedings, Sunspot, New Mexico, August 13-1. 1984. (NSO/Sacramento Peak) 314 pp.

- Lites, B.W. 1985, in *Theoretical Problems in High-Resolution Solar Physics: Proceedings of the MPA/LPARL Workshop in Munchen, 16-18 September 1985*. H.U. Schmidt, ed., 273-302: Future Directions for the Theory of Radiative Transfer in Chromospheric Structures
- Lites, B.W. 1986, *Astrophys. J.* 301, 1005-1017: Photoelectric Observations of Chromospheric Sunspot Oscillations IV. The Ca II H Line and He I 10830 Angstroms
- Lites, B.W. 1986, *Astrophys. J.* 301, 992-1004: Photoelectric Observations of Chromospheric Sunspot Oscillations. III. Spatial Distribution of Power and Frequency in Umbrae
- Lites, B.W. 1987, *Appl. Opt.* 26, 3838-3845: Rotating Waveplates as Polarization Modulators for Status Polarimetry on the Sun: Evaluation of Seeing-Induced Crosstalk Errors
- Lites, B.W. 1988, *Astrophys. J.* 334, 1054-1065: Photoelectric Observations of Chromospheric Sunspot Oscillations. V. Penumbral Oscillations
- Lites, B.W. 1989, in *High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988*. O. Von der Luhe, ed., 389-399: The Advanced Stokes Polarimeter
- Lites, B.W. 1992, in *Sunspots: Theory and Observations*. J.H. Thomas and N.O. Weiss, eds. (Kluwer), 261-302: Sunspot Oscillations: Observations and Implications
- Lites, B.W. 1996, *Solar Phys.* 163, 223-230: Performance Characteristics of the Advanced Stokes Polarimeter
- Lites, B.W., Elmore, D., Murphy, G., Skumanich, A., Tomczyk, S., and Dunn, R.B. 1991, in *Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990*. L.J. November, ed., 3-15: Preliminary Results from the HAO/NSO Advanced Stokes Polarimeter Prototype Observing Run
- Lites, B.W., Elmore, D.F., Seagraves, P., and Skumanich, A.P. 1993, *Astrophys. J.* 418, 928-942: Stokes Profile Analysis and Vector Magnetic Fields. VI. Fine Scale Structure of a Sunspot
- Lites, B.W., Elmore, D.F., Tomczyk, S., Seagraves, P., Skumanich, A., and Streander, K.V. 1993, in *IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992*. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 173-176: Early Results from the HAO/NSO Advanced Stokes Polarimeter
- Lites, B.W., Keil, S.L., Scharmer, G.B., and Wyller, A.A. 1985, *Solar Phys.* 97, 35-49: Steady Flows in Active Regions Observed with the HeI 10830 Å Line
- Lites, B.W., Leka, K.D., Skumanich, A., Martinez Pillet, V., and Shimizu, T. 1996, *Astrophys. J.* 460, 1019-1026: Small-Scale Horizontal Magnetic Fields in the Solar Photosphere
- Lites, B.W., and Low, B.C. 1997, *Solar Phys.* 174, 91-98: Flux Emergence and Prominences: a New Scenario for 3-Dimensional Field Geometry Based on Observations with the Advanced Stokes Polarimeter
- Lites, B.W., Low, B.C., Martinez Pillet, V., Seagraves, P., and Skumanich, A. 1995, *Astrophys. J.* 446, 877-894: The Possible Ascent of a Closed Magnetic System Through the Photosphere

- Lites, B.W., Martinez Pillet, V., and Skumanich, A. 1994, Solar Phys. 155, 1-27: A Quantitative Comparison of Vector Magnetic Field Measurement and Analysis Technique
- Lites, B.W., and Mihalas, D.M. 1984, Solar Phys. 93, 23-35: The H- Equilibrium Using Coupled Rate Equations for H-, H, H+, H<sub>2</sub>, and H<sub>2</sub><sup>+</sup>
- Lites, B.W., Neidig, D.F., and Trujillo-Bueno, J. 1986, in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium, Sunspot, NM, 20-24 August, 1985. D.F. Neidig, ed., 101-116: The Visible Helium Spectrum of a White-Light Flare
- Lites, B.W., Nordlund, A., and Scharmer, G.B. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 349-357: Constraints Imposed by Very High Resolution Spectra and Images on Theoretical Simulations of Granular Convection
- Lites, B.W., Rutten, R.J., and Berger, T.E. 1999, Astrophys. J. 517, 1013-1033: Dynamics of the Solar Chromosphere. II. Ca II H<sub>2</sub>gamma and K<sub>2</sub>gamma Grains vs Internetwork Fields
- Lites, B.W., Rutten, R.J., and Kalkofen, W. 1993, in IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 530-533: Oscillations of the Magnetic Network
- Lites, B.W., Rutten, R.J., and Thomas, J.H. 1994, in Solar Surface Magnetism: NATO ASI Workshop Proceedings, Soesterberg The Netherlands, 1-5 November, 1993. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 159-168: Chromospheric Oscillations
- Lites, B.W., and Skumanich, A. 1985, in Measurements of Solar Vector Magnetic Fields: Workshop Proceedings, Marshall Space Flight Center, Alabama, 14-18 Ma. 1984. NASA CP-2374, 342-367: The Inference of Vector Magnetic Fields from Polarization Measurements with Limited Spectral Resolution
- Lites, B.W., and Skumanich, A. 1990, Astrophys. J. 348, 747-760: Stokes Profile Analysis and Vector Magnetic Fields. V. The Magnetic Field Structure of Large Sunspots Observed with Stokes II
- Lites, B.W., Skumanich, A., and Martinez Pillet, V. 1998, Astron. Astrophys. 333, 1053-1068: Vector Magnetic Fields of Emerging Solar Flux I. Properties at the Site of Emergence
- Lites, B.W., Skumanich, A., Rees, D.E., and Murphy, G.A. 1988, Astrophys. J. 330, 493-512: Stokes Profile Analysis and Vector Magnetic Fields. IV. Synthesis and Inversion of the Chromospheric Mg I beta Lines
- Lites, B.W., Skumanich, A., Rees, D.E., Murphy, G.A., and Carlsson, M. 1987, Astrophys. J. 318, 930-939: Stokes Profile Analysis and Vector Magnetic Fields. III. Extended Temperature Minima of Sunspot Umbralae as Inferred from Stokes Profiles of Mg I lambda 4571
- Lites, B.W., and Thomas, J.H. 1985, Astrophys. J. 294, 682-688: Sunspot Umbral Oscillations in the Photosphere and Low Chromosphere

- Lites, B.W., Thomas, J.H., Bogdan, T.J., and Cally, P.S. 1998, *Astrophys. J.* 497, 464-482: Velocity and Magnetic Field Fluctuations in the Photosphere of a Sunspot
- Littleton, J.E., and Davis, S.P. 1985, *Astrophys. J.* 296, 152-159: Transition Rates for the Zirconium Oxide Gamma (0-0), B-X (0-0), and B-X (0-1) Bands
- Littleton, J.E., and Davis, S.P. 1988, *Astrophys. J.* 333, 1026-1034: Transition Strength Data for the Orange and Red Bands of CaCl
- Litvinenko, Y.E., and Martin, S.F. 1999, *Solar Physics* 190, 45-58: Magnetic Reconnection as the Cause of a Photospheric Cancelling Feature and Mass Flows in a Filament
- Litzen, U.; Brault, J.W., and Thorne, A.P. 1993, *Physica Scripta* 47, 628-673: Spectrum and Term System of Neutral Nickel, NiI
- Livingston, W.C. 1984, *Kodaikanal Observatory Bulletin* 4, 7-9: Line Asymmetry and Magnetic Fields
- Livingston, W.C. 1984, *Weather* 39, 240-241: Strobing Cumulus Growth by Means of Lightning
- Livingston, W.C. 1984, in *Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings*, Sunspot, New Mexico, 25-29 Jul. 1983. S.L. Keil, ed., 330-333: Secular Change of Full Disk Line Asymmetry
- Livingston, W.C. 1985, *Aust. J. Phys.* 28, 775-780: Contributions by R.G. Giovanelli to the Study of Magnetic Field Structures
- Livingston, W.C. 1985, *Science Age* 3, 49-51: The Spacelab 2 Experience: A Personal View from the Ground
- Livingston, W.C. 1985, *Science Age* 3, 64-65: Can We See the Earth's Shadow?
- Livingston, W.C. 1986, *Pinhole Journal* 2, 2-3: Time Standards and the Medieval Church
- Livingston, W.C. 1986, in *Transactions of the IAU* 19B, 123-130: Commission 9: Instruments and Techniques
- Livingston, W.C. 1987, *J. Optics* 18, 187-192: Astronomical Detectors for .001 to 300,000 Angstroms: an Overview
- Livingston, W.C. 1988, in *The Role of Fine-Scale Magnetic Fields in the Structure of the Solar Atmosphere: Workshop Proceedings*, Tenerife (Canary Islands), 6-12 October, 1986 (Cambridge Univ. Press), 14-20: Line Asymmetry and the Activity Cycle
- Livingston, W.C. 1990, in *Climate Impact of Solar Variability: Conference Proceedings*, Goddard Space Flight Center, Greenbelt Maryland, 24-27 April, 1990. NASA CP 3086. K. Schatten, and A. Arking, eds., 336-340: Secular Change in Equivalent Width of C5380 1978-90
- Livingston, W.C. 1991, *Journal of Climate Change* 18, 121-129: Energy Input to the Earth
- Livingston, W.C. 1991, *Nature* 350, 45-46: Radial Filamentary Structure in a Sunspot Umbra

- Livingston, W.C. 1991, in IAU Colloquium 130, The Sun and Cool Stars: Activity, Magnetism, and Dynamos. Workshop Proceedings, Helsinki, Finland, 17-21 July, 1990. Ilkka Tuominen, ed. (Springer-Verlag), 246-251: Convective Signature of the Solar Cycle from FTS Sun-as-a-Star Line Assymetry Changes
- Livingston, W.C. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 356-360: Sampling V-Stokes on the Solar Disk with Fe I 15648 Å and H Paschen Beta
- Livingston, W.C. 1991, in The Astronomy and Astrophysics Encyclopedia. S.P. Maran, ed. (Van Nostrand), 642-643: Solar Magnetographs
- Livingston, W.C. 1992, Sky and Telescope 83, 159-160: What's Wrong with a Gibbous Moon
- Livingston, W.C. 1992, in Solers22: Proceedings of the Workshop on the Solar Electromagnetic Radiation Study for Solar Cycle 22: Boulder, Colorado, June, 1991. R.F. Donnelly, ed. (NOAA), 11-19: Observations of Solar Spectral Irradiance Variations at Visible Wavelengths
- Livingston, W.C. 1992, in Space Astronomical Telescopes and Instruments: Workshop Proceedings, Orlando, Florida, 4 April, 1991, 498-502: Proposed Conversion of the McMath Telescope to Four Meter Aperture for Solar Observations in the IR
- Livingston, W.C. 1994, Astronomy 22, 68-73: Glorious Visions
- Livingston, W.C. 1994, Selected Papers on Instrumentation in Astronomy, SPIE MS87. 552 pp.
- Livingston, W.C. 1994, Sky and Telescope 87, no. 3, 32: Images- Photograph of McMath-Pierce as Reddened by the Twilight Glow
- Livingston, W.C. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 589-594: A 4-Meter McMath Telescope for the Infrared
- Livingston, W.C. 1994, in The Solar Engine and Its Influence on Terrestrial Atmosphere and Climate: Proceedings, NATO Advanced Research Series, Paris France, 25-29 October, 1993. E. Ribes, ed. (Springer-Verlag), 145-162: Surrogates for Total Solar Irradiance
- Livingston, W.C. 1995, Sistema Terra 3, 18-21: Energy Input to the Earth II
- Livingston, W.C. 1995, in Proceedings of the International Conference on Plasma Physics, Iguazu Brazil, November 1994. P.H. Sakanaka, ed., 27-34 : Solar Eclipses
- Livingston, W.C., and Barr, L. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pac.), 604-612: Proposed Upgrade of the McMath Solar/Stellar Telescope to a Four Meter Aperture
- Livingston, W.C., and Barr, L. 1996, in Mirror Substrate Alternatives: Workshop Proceedings, Grasse France, 9-12 October 1995. J.P. Rozelot and W.C. Livingston, eds., 121-126: McMath-Pierce Upgrade: Achieving Stealth Optics to Yield a Thermally Invisible Telescope.

- Livingston, W.C., Bin-Xun, Y., Chuan-Jin, W., Doe, M., Mahaffey, C., and Seigel, M. 1984, *Acta Astronomica Sinica* 25, 98-106: A Reticon Array System for Solar Spectrometric Use
- Livingston, W.C., Donnelly, R.F., Grigoryev, V., Demidov, M.L., Lean, J., Steffen, M., White, O.R., and Willson, R.L. 1991, in *Solar Interior and Atmosphere: Conference Proceedings*, Tucson, AZ, 15-18 November, 1988. A.N. Cox, W.C. Livingston, and M. Matthews, eds. (Univ. of Arizona Press), 1109-1160: Sun-as-a-Star Spectrum Variability
- Livingston, W.C., Engvold, O., and Jensen, E. 1987, *Astronomy* 15, no. 7, 18-22: Old and New Views of Solar Prominences
- Livingston, W.C., Holweger, H., and White, O.R. 1986, in *Solar-Terrestrial Physics: Proceedings of Second Indo-US Workshop*, New Delhi, 1984 (New Delhi: National Physical Laboratory), 427-442: Fraunhofer Line Variability, 1975-1983
- Livingston, W.C., and Huang, Y.R. 1987, in *The SHIRSOG Workshop: Proceedings of a Workshop on Prospects for a New Synoptic High Resolution Spectroscopic Facility*, Tucson, Arizona, 3 September, 1986. M.S. Giampapa, ed., 1-4: Convection, Magnetic Fields, and Line Asymmetry in the Sun and Stars
- Livingston, W.C., Kopp, G., Gezari, D., and Varosi, F. 1994, in *IAU Symposium 158: Very High Angular Resolution Imaging: Workshop Proceedings*, Sydney Australia, 11-15 January, 1993. J. Davis and R. Ekers, eds. (Kluwer), 299-231: Observations of Seeing at 0.5 and 12.4 Microns
- Livingston, W.C., and Lynch, D.K. 1995, in *Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop*, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 175-179: 4-Meter Upgrade of the McMath-Pierce Telescope and the Detection of Space Debris
- Livingston, W.C., Poveda, A., and Wang, Y. 1997, in *Advances in the Physics of Sunspots: First Advances in Solar Physics Euroconference*, Tenerife Spain, 2-6 October, 1996. B. Schmieder, J.C. del Toro Iniesta, and M. Vazquez, eds., 86-90: Did the 4B Flare of 9 March 1989 Dump Lithium into a Spot Umbra?
- Livingston, W.C., Solanki, S., Muglach, K., and Wallace, L. 1998, in *Astron. Soc. Pacific Conference Series 135, A Half Century of Stellar Pulsation Interpretation: a Tribute to Arthur N. Cox. Proceedings*, Los Alamos New Mexico, 16-20 June, 1997. P.A. Bradley and J.A. Guzik, eds. (A.S.P.), 186-187: Solar Oscillations in CO at 4.6 Microns
- Livingston, W.C., and Steffen, M. 1988, *Adv. Space Res.* 8, no. 7, 133-139: Variability of the Spectroscopic Temperature of the Sun
- Livingston, W.C., and Talent, D. 1990, *Sky and Telescope* 80, 319: Stalking Geosats with a Camera
- Livingston, W.C., and Wallace, L. 1985, *Solar Phys.* 95, 251-252: Water Vapor and Fe 5250.2
- Livingston, W.C., and Wallace, L. 1987, *Astrophys. J.* 314, 808-816: Solar Luminosity Variation V. The Photospheric Lines 1976-1985
- Livingston, W.C., and Wallace, L. 1991, *An Atlas of the Solar Spectrum in the Infrared from 1850 to 9000 cm<sup>-1</sup> (1.1 to 5.4 microm)*. NSO Technical Report 1991-001.

- Livingston, W.C., and Wallace, L. 1991, in SPIE 1491, Remote Sensing of Atmospheric Chemistry: Workshop Proceedings, Orlando, Florida, 1-3 April, 1991. J.L. McElroy and R.J. McNeal, eds., 43-47: Spectroscopic Observations of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O and CO from Kitt Peak 1979-1990
- Livingston, W.C., Wallace, L., Huang, Y.R., and Moise, E. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 494-500: High-Resolution Information on Granulation from Full Disk Fe Line Asymmetry
- Livingston, W.C., Wallace, L., and White, O.R. 1988, Science 240, 1765-1767: Spectrum Line Intensity as a Surrogate for Solar Irradiance Variations
- Livingston, W.C., Wallace, L., and White, O.R. 1998, in Solar Analogs: Characteristics and Optimum Candidates. J.C. Hall, ed. (Lowell Observatory), 65-: Spectrum Line Strength Variability: Sun-as-a Star
- LoPresto, J.C. 1986, Astronomy 14, no. 12, 106-111: The Rotation of the Sun
- LoPresto, J.C. 1989, Astronomy 17, no. 3, 20-31: Looking Inside the Sun
- LoPresto, J.C. 1989, Magill's Survey of Science: Space Exploration Series. (Salem Press): Solar Spectral Research
- LoPresto, J.C., Kraus, P.M., and Pierce, A.K. 1994, Solar Phys. 149, 243-247: Observations of the Limb Effect in Potassium lambda7699
- LoPresto, J.C., and Pierce, A.K. 1985, Solar Phys. 102, 21-27: The Center to Limb Wavelength Shift of a Number of Fraunhofer Lines
- LoPresto, J.C., Schrader, C., and Pierce, A.K. 1991, Astrophys. J. 376, 757-760: Solar Gravitational Redshift from the Infrared Oxygen Triplet
- Lockwood, G.W. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 261-269: Luminosity and Chromospheric Variations of Solar Analog Stars
- Lockwood, G.W., Skiff, B.A., Baliunas, S.L., and Radick, R.R. 1992, Nature 360, 653-654: Long-Term Solar Brightness Changes Estimated from a Survey of Sun-Like Stars
- Lockwood, G.W., Skiff, B.A., and Radick, R.R. 1997, Astrophys. J. 485, 789-811: The Photometric Variability of Sunlike Stars. Observations and Results, 1984-1995.
- Lockwood, G.W., and Thompson, D.T. 1986, Science 234, 1543- : Long-Term Brightness Variations of Neptune: the Solar Cycle Modulation of Albedo
- Lockwood, G.W., Thompson, D.T., Radick, R.R., Osborn, W.H., Baggett, W.E., Duncan, D.K., and Hartmann, L.W. 1984, Publ. Astron. Soc. Pacific 96, 714-722: The Photometric Variability of Solar-Type Stars. IV. Detection of Rotational Modulation among Hyades Stars

- Logan, J. D. 1984, Non-Local and Nonlinear Effects on Solar Oscillations. PhD Thesis (University of Arizona) 84V-xx
- Longcope, D.W., and Silva, A.V. 1998, *Solar Phys.* 179, 349-377: A Current Ribbon Model for Energy Storage and Release with Application to the Flare of 7 January 1992
- Loos, G.C., and Gamiz, V.L. 1994, in Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992. R.R. Radick, ed., 173-183: Solar Imaging with Array Interferometers
- Lorrain, P., and Koutchmy, S. 1993, *Astron. Astrophys.* 269, 518-526: Photospheric Electric Currents in Solar Magnetic Elements
- Lorrain, P., and Koutchmy, S. 1996, *Solar Physics* 165, 115-137: Two Dynamical Models for Solar Spicules
- Loucif, M.L. 1988, *Compte Rendus de l'Acad. Sciences (CRAS)* 307, Series II, 1203-1210: Statistical Analysis of the Chromospheric Network Cells
- Loucif, M.L. 1991, Contribution a l'Etude des Sources du Vent Solaire Rapide. PhD Thesis (Universite de Paris). 250 pp.
- Loucif, M.L. 1994, *Astron. Astrophys.* 281, 95-107: Giant Macrospicules as Possible Sources of the Fast Solar Wind
- Loucif, M.L. 1997, in Physics of the Sun and Heliosphere in the Era of Space Probes: Scientific Highlights of SOHO, Ulysses, and Yokoh, Kyoto, Japan, 26-27 August 1997, 32-: Giant Macrospicules as Possible Sources of the Fast Solar Wind
- Loucif, M.L., Koutchmy, S. 1989, *Astron. Astrophys. Suppl. Ser.* 77, 45-66: Solar Cycle Variations of Coronal Structures
- Loucif, M.L., Koutchmy, S., Stellmacher, G., Georgakilas, A., Bocchialini, K., and Delaboudinie, J.P. 1998, in ESA SP-421, Solar Jets and Coronal Plumes: Proceedings of an International Meeting, Guadeloupe France, 23-26 February 1998. S. Koutchmy, P. Martens, and K. Shibata, eds., 299-302: About Polar Ejection Events and Surges
- Louistisserand, S., Bucher, A., Koutchmy, S., and Lamy, P. 1987, *Astron. Astrophys. Suppl. Ser.* 68, 539-543: Night Sky Optical Spectrum from a High Altitude Observatory
- Luhmann, J.G., Gosling, J.T., Hoeksema, J.T., and Zhao, X. 1998, *Geophys. Res.* 103, 6585-: The Relationship Between Large-Scale Solar Magnetic Field Evolution and Coronal Mass Ejections
- Luttermoser, D.G., Bowen, G.H., and Willson, L.A. 1993, in IAU Colloquium 139, New Perspectives on Stellar Pulsations and Pulsating Variable Stars. J.M. Nemec and J.M. Matthews, eds. (Cambridge Univ. Press): NLTE Synthetic Spectra of the Mira-Type Variable Stars
- Luttermoser, D.G., Johnson, H.R., and Eaton, J.A. 1994, *Astrophys. J.* 422, 351-365: The Chromospheric Structure of the Cool Giant Star, g Herculis

Lynch, D.K., and Livingston, W.C. 1995, Color and Light in Nature (Cambridge Univ. Press). 254 pp.

MacNeice, P., Pallavicini, R., Mason, H.E., Simnett, G.M., Antonucci, E., Shine, R.A., Rust, D.M., Jordan, C., and Dennis, B.R. 1985, Solar Phys. 99, 167-188: Multiwavelength Analysis of a Well-Observed Flare from SMM

Machado, M.E., Avrett, E.H., Falciani, R., Fang, C., Gesztesy, L., Henoux, J.C., Hiei, E., Neidig, D.F., Rust, D.M., Sotirovski, P., Svestka, Z., and Zirin, H. 1986, in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium, 20-24 August, 1985. D.F. Neidig, ed., 483-488: White Light Flares and Atmospheric Modeling (Working Group Report)

Mackay, D.H. 1997, Basic Magnetic Field Configurations for Solar Filament Channels and Filaments. PhD Thesis (St. Andrews University, United Kingdom).

Mackay, D.H., Gaizauskas, V., Rickard, G.J., and Priest, E.R. 1997, Astrophys. J. 486, 534-549: Force-Free and Potential Models of a Filament Channel in Which a Filament Forms

Magara, T., and Kitai, R. 1999, Astrophys. J. 524, 469-482: Photospheric and Chromospheric Gas Motions Around a Dark Filament

Magee-Sauer, K., Roesler, F.L., Scherb, F., Harlander, J., and Oliversen, R.J. 1988, Icarus 76, 89-99: Spatial Distribution of O(1D) from Comet Halley

Magee-Sauer, K., Scherb, F., Roesler, F.L., and Harlander, J. 1989, Icarus 82, 50-60: Observations of NH<sub>2</sub> Emission from Comet Halley

Magee-Sauer, K., Scherb, F., Roesler, F.L., and Harlander, J. 1990, Icarus 84, 154-: Comet Halley O (1D) and H<sub>2</sub>O Production Rates

Mahajan, K.K., Upadhyay, H.O., Sethi, N.K., Hoegy, W.R., Pesnell, W.D., and Brace, L.H. 1998, Solar Phys. 177, 203-216: Pioneer Venus Orbiter Measurements of Solar EUV Flux During SolarCycles 21 and 22

Mahon, C., and Chackerian, C. 1998, J. Mol. Spectr. 189, 276-: Zeeman Tuning Rates for Q-Branch Transitions in the n3 Band of NO<sub>2</sub>

Makarov, V.I., and Makarova, V.V. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 347-352: Polar Activity of the Coming Global Solar Cycle 23

Makarov, V.I., Makarova, V.V., Koutchmy, S., and Sivaraman, K.R. 1988, in Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 362-375: Solar Cycle Variations of Coronal Neutral Lines and Polar Regions Activity

Makhmutov, V.S., Costa, J.E., Raulin, J.P., Kaufmann, P., LaGrotta, P.R., Gimenez de Castro, C.G., Magun, A., and Arzner, K. 1998, Solar Phys. 178, 393-403: Pulsations at the Onset of the Great Solar Burst of 22 October 1989

- Malathy Devi, V., Benner, D.C., Rinsland, C.P., and Smith, M.A. 1998, *J. Quan. Spectr. Rad. Trans.* 68, 137-149: Air- and N2 Broadening Coefficients and Pressure-Shift Coefficients in the C212C216O2 Laser Bands
- Malathy Devi, V., Benner, D.C., Rinsland, C.P., and Smith, M.A. 1998, *J. Quan. Spectr. Rad. Trans.* 60, 741-751: Absolute Rovibrational Intensities of 12C16O2 Absorption Bands in the 3000-3850 cm<sup>-1</sup> Spectral Region
- Malathy Devi, V., Benner, D.C., Rinsland, C.P., and Smith, M.A. 1998, *J. Quan. Spectr. Rad. Trans.* 60, 771-781: Pressure Broadening and Pressure-Shift Coefficients in the 2n2 and n2 Bands of 16O13C18O
- Malathy Devi, V., Benner, D.C., Rinsland, C.P., and Smith, M.A. 1998, *J. Quan. Spectr. Rad. Trans.* 60, 815-825: Self-Broadening and Self-Shift Coefficients in the Fundamental Band of 12C16O
- Maltby, P., Brynildsen, N., Brekke, P., Haugan, S.V., Kjeldseth-Moe, O., Wikstol, O., and Rimmele, T. 1998, *Astrophys. J. Lett.* 496, L117-L119: Extreme-Ultraviolet Sunspot Plumes Observed with SOHO
- Maltby, P., Brynildsen, N., Fredvik, T., Kjeldseth-Moe, O., and Wilhelm, K. 1998, *Solar Phys.* 190, 437-458: On the Sunspot Transition Region
- Mandin, J., Chevillard, J., Camy-Peyret, C., and Flaud, J. 1986, *J. Mol. Spectr.* 118, 96-102: Line Intensities in the nu1+2nu2, 2nu2+ nu3, 2nu1, nu1+ nu3, 2nu3 and nu1+ nu3- nu2 Bands of H2 16O Between 6300 and 7900
- Mandin, J., Chevillard, J., Camy-Peyret, C., Flaud, J., and Brault, J.W. 1986, *J. Mol. Spectr.* 116, 167-190: The High-Resolution Spectrum of Water Vapor Between 13,200 and 16,500 cm<sup>-1</sup>
- Mann, I., and Kuhn, J.R. 1998, *Adv. Space Res.* 21, no. 1/2, 315-317: Space-Based Near Infrared Coronal Observations
- Mann, I., Kuhn, J.R., and Penn, M.J. 1996, in IAU Colloquium no. 150, Physics, Chemistry, and Dynamics of Interplanetary Dust: Workshop Proceedings, Gainesville Florida, 14-18 August 1995. M. Hanner, S.F. Dermott, and B. Gustafson, eds., 345-355: Spectroscopic Observations of Neutral Helium During the 1994 Eclipse
- Manoharan, P.K., Van Driel-Gestelyi, L., Pick, M., and Demoulin, P. 1996, *Astrophys. J. Lett.* 468, L73-L76: Evidence for Large-Scale Solar Magnetic Reconnection from Radio and X-Ray Measurements
- Manoharan, P.K., Van Driel-Gestelyi, L., Pick, M., and Demoulin, P. 1997, in Magnetic Reconnection in the Solar Atmosphere, ASP Conference Series 111. R. Bentley and J. Mariska, eds., 398-401: Magnetic Reconnection in the Solar Atmosphere
- Marchenkov, K.I., Roxburgh, I.W., and Vorontsov, S.V. 1998, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 117-118: Nonlinear Inversion for the Hydrostatic Structure of the Solar Interior

Marchenkov, K.I., Roxburgh, I.W., and Vorontsov, S.V. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 491-494: Nonlinear Iterative Inversion for the Hydrostatic Structure of the Solar Interior

Marco, E., and Mattig, W. 1994, in Solar Magnetic Fields: Symposium Proceedings, Freiburg Germany, 29 June-- 2 July, 1993. M. Schuessler and W. Schmidt, eds. (Cambridge Univ. Press), 257-259: Spatial and Height Changes of Oscillations in a Sunspot Penumbra

Margolis, J.S. 1990, Appl. Opt. 29, 2295-2302: Empirical Values of the Ground State Energies for Methane Transitions Between 5500 to 6150 cm<sup>-1</sup>

Margolis, J.S. 1996, J. Quan. Spectr. Rad. Trans. 55, 823-836: Hydrogen and Helium Broadening and Pressure Induced Line Shifts of 13CH<sub>4</sub> in the nu4 Band

Margolis, J.S., and Poynter, R.L. 1991, Appl. Opt. 30, 3023-3028: Low Temperature Hydrogen Broadened Linewidths of Ammonia in the (0,1,0,0) - (0,0,0,0) Band

Marmolino, C. 1987, Solar Phys. 112, 211-226: Effects of Acoustic and Gravity Waves on the Curve of Growth

Marmolino, C., Roberti, G., and Severino, G. 1986, Solar Phys. 108, 21-34: Line Asymmetries and Shifts in the Presence of Granulation and Oscillations: the CLV of the K I 7699 Resonance Line

Marmolino, C., Roberti, G., and Severino, G. 1988, in IAU Colloquium 94, Physics of Formation of Fe II Lines Outside LTE: Workshop Proceedings, Capri, Italy, 4-8 July, 1986. R. Viotti et al, eds., 217-221(Kluwer): Fe II in the Presence of Photospheric Motions

Marmolino, C., Roberti, G., and Severino, G. 1988, in The Role of Fine-Scale Magnetic Fields in the Structure of the Solar Atmosphere: Workshop Proceedings, Tenerife (Canary Islands), 6-12 October, 1986. E.H. Schroter et al, eds. (Cambridge Univ. Press), 30-31: On the Differences Between Line Bisectors in Quiet and Active Sun

Marmolino, C., and Stebbins, R.T. 1989, Memoirs of the Italian Astronomical Society 60, 71-78: The 5-Minute Oscillation in the Solar Photosphere: Theoretical Behaviour Versus Observations

Marmolino, C., and Stebbins, R.T. 1989, Solar Phys. 124, 23-36 : Wave Behavior in the Solar Photosphere: a Comparison of Theory and Observation

Marquette, W.H., and Martin, S.F. 1988, Solar Phys. 117, 227- : Long-Term Evolution of a High-Latitude Active Region

Marquez, I., Bonet, J.A., and Vazquez, M. 1996, Astron. Astrophys. 306, 305-: Numerical Modelling of Spectral Line Asymmetries in Photospheric Structures. II. Plage Regions

Marquez, I., Bonet, J.A., Vazquez, M., and Wohl, H. 1996, Astron. Astrophys. 305, 316-324: Numerical Modelling of Spectral Line Asymmetries in Photospheric Structures. I. Quiet Sun

Martens, P.C. 1998, in IAU Colloquium 167. New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997. D. Webb, D.M.

Rust and B. Schmeider, eds. (Kluwer), 294-301: MHD and Plasma Interpretation of a Prominence Eruption Observed by SOHO

Martin, S.F. 1998, Solar Phys. 182, 107-137: Conditions for the Formation and Maintenance of Filaments

Martin, S.F., Bentley, R.D., Schadée, A., Antalova, A., Kucera, A., Dezso, L., Gestelyi, L., Harvey, K.L., Jones, H.P., Liyi, S.H.B., and Wang, J. 1984, Adv. Space Res. 4, no. 7, 61-70: Relationships of a Growing Magnetic Flux Region to Flares

Martinez Pillet, V. M., Lites, B.W., and Skumanich, A. 1997, Astrophys. J. 474, 810-842: Active Region Magnetic Fields. I. Plage Fields

Martinez Pillet, V., Lites, B.W., Skumanich, A., and Degenhardt, D. 1994, Astrophys. J. Lett. 425, L113-L115: Evidence for Supersonic Downflows in the Photosphere of a Delta Sunspot

Martinez Pillet, V., Lites, B.W., Skumanich, A., and Degenhardt, D. 1994, Astrophys. J. Lett. 425, L113-L115: Evidence for Supersonic Downflows in the Photosphere of a Delta Sunspot

Martinez Pillet, V., Lites, B.W., Skumanich, A.P., and Seagraves, P. 1994, in Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 244-250: Magnetic Configuration of a Short-Lived Delta Spot

Mathieu, E., Rinsland, C.P., Zander, R., Demoulin, P., Delbouille, L., and Roland, G. 1995, J. Atmos. Chem. 20, 299-310: Vertical Column Abundances of HCN Deduced from Ground-Based Infrared Solar Spectra: Long-Term Trend and Variability

Matsumoto, R., Tajima, T., Chou, W., Okubo, A., and Shibata, K. 1998, Astrophys. J. Lett. 493, L43-L46: Formation of a Kinked Alignment of Solar Active Regions

Matthews, S.A., Brown, J.C., and Van Driel Gestelyi, L. 1998, Astron. Astrophys. 340, 277-286: On the Role of Beam Driven Return Current Instabilities in White-Light Flares

Mauas, P.J. 1990, Astrophys. J. Suppl. Ser. 74, 609-646: The White-Light Flare of 1982 June 15: Observations

Mauas, P.J., Avrett, E.H., and Loeser, R. 1988, Astrophys. J. 330, 1008-1021: Mg I as a Probe of the Solar Chromosphere: the Atomic Model

McAllister, A.H., Dryer, M., McIntosh, P., and Singer, H. 1996, Geophys. Res. 101, 13497-13515: Crown Coronal Mass Ejection and a "Problem" Geomagnetic Storm: April 14-23, 1994

McAllister, A.H., Kurokawa, H., Shibata, K., and Nitta, N. 1996, Solar Phys 169, 123-149: A Filament Eruption and Accompanying Coronal Field Changes

McCarthy, M.C., Field, R.W., Engleman, R., and Bernath, P.F. 1993, J. Mol. Spectr. 158, 208-236: Laser and Fourier Transform Spectroscopy of PtH and PtD

McConnell, D., and Kundu, M.R. 1984, Astrophys. J. 279, 421-426: VLA Observations of Fine Structures in a Solar Active Region at 6 Centimeter Wavelength

- McCurnin, T.W. 1986, in Automatic Photo-Electric Telescopes: Seventh Fairborne IAPPP Symposium. D.S. Hall et al, eds., 131-: Global Oscillation Network Group Requirements
- McIntosh, P.S. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 14-34: Solar Interior Processes Suggested by Large-Scale Surface Patterns.
- McIntosh, P.S., and Wilson, P.R. 1985, Solar Phys. 97, 59-79 : A New Model for Flux Emergence and the Evolution of Sunspots and the Large-Scale Fields
- McPherson, M.R., Lin, H., and Kuhn, J.R. 1992, Solar Phys. 139, 255-266: Infrared Array Measurements of Sunspot Magnetic Fields
- McRae, G.A., and Cohen, E.A. 1990, J. Mol. Spectr. 136, 369-376: The nu2 Band of HOBr
- Mecherikunnel, A.T. 1996, Geophys. Res. 101, 17073-17079: Solar Total Irradiance Observations from Spacecraft
- Mein, P. , Schmieder, B., Malherbe, J.M., Wiik, J.E., Engvold, O., Brekke, P., Zirker, J.B., Poland, A.I., Delaboudiniere, J.P., and Staiger, J. 1998, in IAU Colloquium 167. New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997. D. Webb, D.M. Rust and B. Schmeider, eds. (Kluwer), 135-138: Velocity Fields of a Filament Region Observed with Ground-Based Telescopes and from SOHO
- Melozzi, M., Kundu, M.R., and Shevgaonkar, R.K. 1985, Solar Phys. 97, 345-361: Simultaneous Microwave Observations of Solar Flares at 6 and 20 cm. Wavelengths Using the VLA
- Melroy, P.A., and Keil, S.L. 1984, in Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings, Sunspot, New Mexico, 25-29 Jul. 1983. S.L. Keil, ed. 19-29: Observations of High Frequency Waves Using a CCD Array
- Mendoza, B., Lara, A., Maravilla, D., and Valdes-Galicia, J.F. 1999, Solar Phys. 185, 405-416: Magnetic Flux Emergence and Geomagnetic Activity, a Close Correlation
- Metcalf, T.R., Canfield, R.C., Avrett, E.H., and Metcalf, F.T. 1990, Astrophys. J. 350, 463-474: Flare Heating and Ionization of the Low Solar Chromosphere. I. Inversion Methods for Mg I 4571 and 5173 Angstroms
- Metcalf, T.R., Canfield, R.C., and Saba, J.L. 1990, Astrophys. J. 365, 391-406: Flare Heating and Ionization of the Low Solar Chromosphere: II. Observations of Five Solar Flares
- Meunier, N., Solanki, S.K., and Livingston, W.C. 1998, Astron. Astrophys. 331, 771-781: Infrared Lines as Probes of Solar Features. XIII. The Relative Flux in Weak and Strong Quiet-Sun Magnetic Fields
- Meylan, T., Furenlid, I., Wiggs, M.S., and Kurucz, R.L. 1993, Astrophys. J. Suppl. Ser. 85, 163-180: A Critical List of Voigt-Fitted Equivalent Width Measurements Based on the Solar Flux Spectrum
- Michels, D.J., Schwenn, R., Howard, R.A., (19 authors), Koutchmy, S., Smartt, R.N. et al 1989, in The SOHO Mission: Scientific and Technical Aspects of the Instruments. ESA SP-1104, 55-61: LASCO-- A Wide-Field White Light and Spectrometric Coronagraph for SOHO

- Mikhailutsa, V.P., and Gnevyshev, M.N. 1985, Solar Phys. 98, 387-393: The Solar Causes of Geomagnetic Disturbances
- Mikic, Z. 1997, Determination of Coronal Magnetic Fields from Vector Magnetograms. Technical Report (Science Applications International Corporation, San Diego CA).
- Milford, P.N., Hill, F., and Tarbell, T.D. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 85-88: Subsurface Transverse Flows Near an Active Region
- Miller, P., Foukal, P., and Keil, S.L. 1984, Solar Phys. 92, 33-46: On the Interpretation of Fraunhofer Line Doppler Shifts at Supergranule Boundaries
- Mitchell, W.E., and Livingston, W.C. 1991, Astrophys. J. 372, 336-348: Line-Blanketing Variations in the Irradiance Spectrum of the Sun from Maximum to Minimum of the Solar Cycle
- Molowny-Horas, R. 1994, Astron. Astrophys. 107, 121-127: Modelling of Geometric Transformations of Solar Images
- Molowny-Horas, R., Oliver, R., Ballester, J.L., and Baudin, F. 1998, in IAU Colloquium 167. New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997. D. Webb, D.M. Rust and B. Schmeider, eds. (Kluwer), 139:- Infrared Doppler Oscillations in a Solar Filament
- Montague, M., Muller, R., and Vigneau, J. 1996, Astron. Astrophys. 311, 304-310: The Photosphere of the Sun: Statistical Correlations Between Magnetic Field, Intensity and Velocity
- Moore, R.L. 1990, in Memorie della Societa Astronomica Italiana 317, 317-336: Hallmarks of the Magnetic Field in the Solar Atmosphere: Structure, Evolution, Heating, and Flaring
- Moore, R.L., Falconer, D.A., Porter, J.G., and Suess, S.T. 1999, Astrophys. J. 526, 505-522: On Heating the Sun's Corona by Magnetic Explosions: Feasibility in Active Regions and Prospects for Quiet Regions and Coronal Holes
- Moore, R.L., Hurford, G.J., Jones, H.P., and Kane, S.R. 1984, Astrophys. J. 276, 379- : Magnetic Changes Observed in a Flare
- Moore, R.L., Schmieder, B., Hathaway, D.H., and Tarbell, T.D. 1997, Solar Phys. 176, 153-169: 3-D Magnetic Field Configuration Late in a Large Two-Ribbon Flare
- Moran, T., and Foukal, P. 1991, AFGL Technical Report 90-0192: an Electrograph for the Measurement of Solar Plasma Electric Fields. 41 pp.
- Moran, T., and Foukal, P. 1991, Solar Phys. 135, 179-191: An Electrograph for Measurement of Macroscopic Electric Fields in Prominences and Flares
- Moran, T., and Foukal, P. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 393-402:

Measurement of Polarization-Dependent Stark Broadening as a Diagnostic of Electric Fields in the Solar Atmosphere

Moran, T., Foukal, P., and Rabin, D.M. 1992, *Solar Phys.* 142, 35-46: A Photometric Study of Faculae and Sunspots Between 1.2  $\mu\text{m}$  and 1.6 $\mu\text{m}$

Moretto, G., and Kuhn, J.R. 1998, *Appl. Opt.* 37, 3539-3546: Off-Axis Systems for 4-M Class Telescopes

Moretto, G., and Kuhn, J.R. 1998, in SPIE 3352, Advanced Technology Optical/IR Telescopes VI: Conference Proceedings, Kona Hawaii, 23-25 March, 1998. L. M. Stepp, ed., 643-652: 4-Meter Off-Axis Telescope

Morgan, T.H., and Shemansky, D. 1991, *Geophys. Res. Lett.* 18, 1659-1662: Source Processes of Alkali Metals in the Atmosphere of Mercury

Morgan, T.H., Slater, D.C., and Smartt, R.N. 1997, in SPIE 3116, Small Spacecraft, Space Environments, and Instrumentation Technologies, 27-36: New Missions for Space-Based Observations of the Moon, Planets, and Planetary Systems with New All-Reflecting Coronagraph Optics

Morgan, T.H., Slater, D.C., Stern, S.A., and Smartt, R.N. 1997, in Proceedings of the Second IAA International Conference on Low-Cost Planetary Missions: Laurel, Maryland USA, 16-19 April 1996, pp-pp: New Opportunities for Space-Borne Observations of Planets and Planetary Systems Using Efficient New All-Reflecting Coronagraph Designs

Morrow, C.A. 1988, A New Picture for the Internal Rotation of the Sun. PhD Thesis (University of Colorado). NCAR Cooperative Thesis no. 116. 295 pp.

Moses, D., Cook, J.W., Bartoe, J.D., Brueckner, G.E., Dere, K.P., Webb, D.F., Davis, J.M., Harvey, J.W., Recely, F., Martin, S.F., and Zirin, H. 1994, *Astrophys. J.* 430, 913-924: Solar Fine-Scale Structures in the Corona, Transition Region, and Lower Atmosphere

Mount, G.H., Sanders, R.W., and Brault, J.W. 1992, *Appl. Opt.* 31, 851-858: Interference Effects in Reticon Photodiode Array Detectors

Mouradian, Z., and Soru-Escaut, I. 1991, *Astron. Astrophys.* 251, 649-654: On the Dynamics of the Large-Scale Magnetic Fields

Muglach, K., and Solanki, S.K. 1992, *Astron. Astrophys.* 263, 301-311: Infrared Lines as Probes of Solar Magnetic Features. I. A Many-Line Analysis of a Network Region

Muglach, K., Solanki, S.K., and Livingston, W.C. 1994, in Solar Surface Magnetism: NATO Advanced Research Workshop, Soesterberg The Netherlands, 1-5 November, 1993. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 127-132: Preliminary Properties of Pores Derived from 1.56 Micron Lines

Muglach, K., Solanki, S.K., and Livingston, W.C. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 387-392: Oscillations in Active Plage Regions as Observed in 1.56 Micron Lines

- Mullan, D.J., and Waldron, W.L. 1987, *Astrophys. J.* 317, 487-501: Velocity Fields in a Low-Latitude Coronal Hole: Results from the Solar Maximum Mission
- Muller, R., Auffret, H., Roudier, T., Vigneau, J., Simon, G.W., Frank, Z., Shine, R.A., and Title, A.M. 1992, *Nature* 356, 322-325: Evolution and Advection of Solar Mesogranulation
- Muller, R., Roudier, T., Vigneau, J., Frank, Z., Shine, R., Tarbell, T., Title, A., and Simon, G.W. 1990, in *Publications of Debrecen Heliophysical Observatory* 7, 150-151: Formation of Network Bright Points by Granule Compression
- Muller, R., Roudier, T., Vigneau, J., Frank, Z., Shine, R., Tarbell, T., Title, A., and Simon, G.W. 1990, in *Publications of Debrecen Heliophysical Observatory* 7, 44-47: Structure and Evolution of the Large Scale Granulation Flow Pattern
- Murphy, G.A. 1991, The Synthesis and Inversion of Stokes Spectral Profiles. NCAR CT-124. PhD Thesis (University of Sydney/NCAR). 326 pp.
- Murphy, G.A., Rust, D.M., Strohbehn, K., Eaton, H.A., Keil, S.L., Keller, C.U., and Wiborg, P. 1997, in SPIE 2804, Missions to the Sun: Workshop Proceedings, Denver Colorado, 4-9 August 1996. D.M. Rust, ed., 141-152: Flare Genesis Experiment
- Murray, N. 1992, *Astrophys. J.* 401, 386-397: On the Inclination of Photospheric Solar Magnetic Fields
- Murray, N. 1992, *Solar Phys.* 138, 419-422: High Latitude Solar Magnetic Fields
- Murray, N., and Wilson, P.R. 1992, *Solar Phys.* 142, 221-232 : The Reversal of the Solar Polar Magnetic Fields. IV. The Polar Fields Near Sunspot Maximum
- Murset, U., Solanki, S.K., and Stenflo, J.O. 1988, *Astron. Astrophys.* 204, 279-285: Interpretation of Broad Band Circular Polarization Measurements Using Stokes V Spectra
- Nadler, S., and Jennings, D.E. 1989, *J. Quan. Spectr. Rad. Trans.* 42, 399-: Foreign-Gas Pressure-Broadening Parameters of Propane Near 748 cm<sup>-1</sup>
- Nakagawa, Y., Watanabe, T., Hudson, H., and Kojima, M. 1996, in IAU Colloquium 153, Magnetodynamic Phenomena in the Solar Atmosphere: Prototypes of Stellar Magnetic Activity. T. Kosugi and Y. Uchida, eds., 489-490: Large-Scale Arcade Formation on May 15, 1992 and its Interplanetary Consequences
- Nash, A.G. 1991, *Adv. Space Res.* 11, no. 1, 47-50: Coronal Rotation at 3.5 Solar Radii Determined from Solwind Data
- Nash, A.G. 1991, *Astrophys. J.* 366, 592-598: Rotation of the Sun's Outer White-Light Corona Determined from Solwind Data
- Nave, G., and Johansson, S. 1993, *Astron. Astrophys.* 274, 961-967: Highly-Excited Levels of Fe I Obtained from Laboratory and Solar Fourier Transform and Grating Spectra
- Nave, G., Johansson, S., Learner, R.C., Thorne, A.P., and Brault, J.W. 1994, *Astrophys. J. Suppl. Ser.* 94, 221-459: A New Multiplet Table for Fe I

- Nave, G., Learner, R.C., Murray, J.E., Thorne, A.P., and Brault, J.W. 1992, *J. de Physique 2*, 913-929: Precision Fe I and Fe II Wavelengths in the Red and Infra-Red Spectrum of the Iron-Neon Hollow Cathode Lamp
- Neckel, H. 1994, in IAU Colloquium 143, *The Sun as a Variable Star: Solar and Stellar Irradiance Variations*. Proceedings, Boulder, CO, 20-25 June 1993. J. M. Pap, C. Frohlich, H.S. Hudson and S. Solanki, eds. (Cambridge University Press), 37-44: Solar Absolute Reference Spectrum
- Neckel, H., and Labs, D. 1987, *Solar Phys.* 110, 139-170: Asymmetry and Variations of Solar Limb Darkening Along the Diameter Defined by Diurnal Motion in April 1983
- Neckel, H., and Labs, D. 1989, *Solar Phys.* 120, 205-207: Multiplier Hysteresis and Image Motion Errors in Limb Darkening Scans Obtained in April 1981 (and Later)
- Neckel, H., and Labs, D. 1990, *Solar Phys.* 126, 207-266: Variations of "Wavelengths" and "Bisector Indices" of 70 Solar Spectral Lines Between 3300 and 3960 Å in Kitt Peak FTS Spectra
- Neckel, H., and Labs, D. 1994, *Solar Phys.* 153, 91-114: Solar Limb Darkening 1986-1990 ( $\lambda\lambda 303$  to 1099 nm)
- Neff, J.E. 1991, in Proceedings of the Second MUSICOS Workshop, Meudon, France, 1990, 35-: Surface Structures and Flares on RS CVn-Type Stars
- Neff, J.E., O'Neal, D., and Saar, S.H. 1993, in IAU Colloquium 137, *Inside the Stars*. W.W. Weiss and A. Baglin, eds.: Absolute Measurements of Starspot Areas and Temperatures
- Neff, J.E., Pagano, I., Rodono, M., Brown, A., Dempsey, R.C., Fox, D.C., and Linsky, J.L. 1996, in *Astron. Astrophys.* 310, 173-180: Rotational Modulation and Flares in RS CVn and BY Dra Stars. Simultaneous IUE, ROSAT, VLA, and Visual Observations of Ty Pyxidis
- Neidig, D. F., 2001, in Space Quest 2001, AFRL/VIS, 10-11,: New Optical System Automatically Monitors Solar Activity [INVITED]
- Neidig, D.F. 1986, Solar-Terrestrial Predictions: Workshop Proceedings ( 2nd), Meudon, France, 18-22 June, 1984. P.A. Simon et al, eds., 187-192: Limitations in the Use of H alpha Filament and Fibril Activity as a Short-Term (30-Minute) Predictor of Flares and Flare-Like Events
- Neidig, D.F. 1986, ed., in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium, Sunspot, NM, 20-24 August, 1985. 503 pp.
- Neidig, D.F. 1986, in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium Sunspot, NM, 20-24 August, 1985. D.F. Neidig, ed., 142-151: On the Possibility of a Purely Chromospheric Origin for the Bright Kernels in White Light Flares
- Neidig, D.F. 1986, in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium Sunspot, NM, 20-24 August, 1985. D.F. Neidig, ed., 152-162: Direct Measurements of the Optical Thickness and Radiative Source Function in the Optical Continuum of Solar Flares

- Neidig, D.F. 1988, in MAX '91: Flare Research at the Next Solar Maximum. Workshop no. 1: Scientific Objectives. Kansas City, Kansas, 9-10 June, 1988. R.C. Canfield and B.R. Dennis, eds. (NASA), 24-28: Energy Transport
- Neidig, D.F. 1989, *Solar Phys.* 121, 261-269: The Importance of Solar White Light Flares
- Neidig, D.F. 1990, in Solar-Terrestrial Predictions: Workshop Proceedings, Leura, Australia, 16-20 October, 1989. R. Thompson et al, eds. (NOAA), 154-172: Solar Flare Forecasting: Progress and Future
- Neidig, D.F. 1993, in *Adv. Space Res.* 13, no. 9, 317-320: Consequences of Chromospheric Irradiation in White-Light Flares: an Observer's Point of View
- Neidig, D.F. 2001, *AFRL Technology Horizons* 2, 29-30: New Optical System Automatically Monitors Solar Activity [INVITED]
- Neidig, D.F., De Luca, E.E., Kim, I.S., Koutchmy, S., and Smartt, R.N. 1994, in Proceedings of the 1994 Space Surveillance Workshop: Lexington MA, 5-7 April, 1994. K.P. Schwan, ed. (Lincoln Laboratory, M.I.T.), 147: Prospects for Observing Space Debris with Solar Coronagraphs
- Neidig, D.F., Grosser, H., and Hrovat, M. 1994, *Solar Phys. Lett.* 155, 199-202: Optical Output of the 24 April 1984 White-Light Flare
- Neidig, D.F., and Hudson, H.S. 1988, eds., Solar Physics in the 1990's: Proceedings of Workshop XV and of the COSPAR Interdisciplinary Scientific Commission E of the COSPAR Twenty-seventh Plenary Meeting held in Espoo, Finland, 18-29 July 1988. *Adv. Space Res.* 8, no. 11. 288 pp.
- Neidig, D.F., and Kane, S.R. 1993, *Solar Phys. Lett.* 143, 201-204: Energetics and Timing of the Hard and Soft X-Ray Emissions in White Light Flares
- Neidig, D.F., Kane, S.R., Love, J.J., and Cliver, E.W. 1986, in Solar Flares and Coronal Physics Using P/OF as a Research Tool: Workshop Proceedings, Marshall Space Flight Center, Alabama, 8-10 May, 1985. E. Tandberg-Hanssen et al, eds. NASA CP- 2421, 142-145: Why P/OF Should Look for Evidences of Over-Dense Structures in Solar Flare Hard X-Ray Sources
- Neidig, D.F., Kim, I.S., Koutchmy, S., and Smartt, R.N. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 253-265: Near-Infrared Coronagraphic Detection of Space Debris
- Neidig, D.F., Kiplinger, A.L., Cohl, H.S., and Wiborg, P.H. 1993, *Astrophys. J.* 406, 306-318: The Solar White Light Flare of 1989 March 7: Simultaneous Multiwavelength Observations at High Time Resolution
- Neidig, D.F., Smith, J.B., Hagyard, M.J., and Machado, M.E. 1986, *Adv. Space Res.* 6, no. 6, 25-28: Flare Activity, Sunspot Motions and the Evolution of Vector Magnetic Fields in Hale Region 17244
- Neidig, D.F., Svestka, Z., Cliver, E.W., Airapetian, V., and Henry, T.W. 1997, *Solar Phys.* 170, 321-339: Observations of Faint, Outlying Loop Systems in Large Flares

- Neidig, D.F., Wiborg, P., and Confer, M. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 519-528: The USAF Improved Solar Observing Optical Network (ISOON) and its Impact on Solar Synoptic Data Bases
- Neidig, D.F., and Wiborg, P.H. 1984, *Solar Phys.* 92, 217-225: The Hydrogen Emission Spectrum in Three White-Light Flares
- Neidig, D.F., Wiborg, P.H., and Gilliam, L.B. 1989, The Center-to-Limb Distribution of Solar White-Light Flares. NSO Technical Report 89-001. 51 pp.
- Neidig, D.F., Wiborg, P.H., and Gilliam, L.B. 1993, *Solar Phys.* 144, 169-194: Physical Properties of White-Light Flares Derived from Their Center-to-Limb Distribution
- Neidig, D.F., Wiborg, P.H., and Seagraves, P.H. 1990, in Solar-Terrestrial Predictions: Workshop Proceedings, Leura, Australia, 16-20 October, 1989. R. Thompson et al, eds. (NOAA), 541-545: The Role of Persistence in the 24-Hour Flare Forecast
- Neidig, D.F., Wiborg, P.H., Seagraves, P.H., Hirman, J.W., and Flowers, W.E. 1986, Solar-Terrestrial Predictions: Workshop Proceedings (2nd), Meudon, France, 18-22 June, 1984. P.A. Simon et al, eds., 300-305: Objective Forecasts for Solar Flares Using Multivariate Discriminant Analysis
- Nelander, B. et al 1998, *Molecular Physics* 93, 137-: High Resolution Far Infrared Spectroscopy of IBr Using a Synchrotron Source
- Nemes, L., Ram, R.S., Bernath, P.F., Tinker, F.H., Zumwalt, M.C., Lamb, L.D., and Huffman, D.R. 1994, *Chem. Phys. Lett.* 218, 295-303: Gas-Phase Infrared Emission Spectra of C<sub>6</sub>- and C<sub>7</sub>O: Temperature Dependent Studies
- Nesis, A., Fleig, K.H., and Mattig, W. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 289-294: RMS Velocities in Solar Active Regions
- Nesis, A., Hanslmeier, A., Hammer, R., Komm, R., Mattig, W., and Staiger, J. 1993, in IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 222-224: Rapid Variations in Intergranular Space
- Nesme-Ribes, E., Ferreira, E.N., and Mein, P. 1993, *Astron. Astrophys.* 274, 563-570: Solar Dynamics Over Solar Cycle 21 Using Sunspots as Tracers
- Nesme-Ribes, E., Meunier, N., and Collin, B. 1996, *Astron. Astrophys.* 308, 213-218: Fractal Analysis of Magnetic Patterns from Meudon Spectroheliograms
- Neugebauer, M., Forsyth, R.J., Galvin, A.B., Harvey, K.L. et al 1998, *Geophys. Res.* 103, 14587-14599: Spatial Structure of the Solar Wind and Comparisons with Solar Data and Models
- Neupert, W.M. 1989, *Astrophys. J.* 344, 504-512: Transient Coronal Extreme Ultraviolet Emission Before and During the Impulsive Phase of a Solar Flare

- Neupert, W.M., Brosius, J.W., Thomas, R.J., and Thompson, W.T. 1992, *Astrophys. J.* 392, L95-L98: Evidence for Mass Outflow in the Low Solar Corona Over a Large Sunspot
- Neupert, W.M., Epstein, G.L., Thomas, R.J., and Thompson, W.T. 1992, *Solar Phys.* 137, 87-104: An EUV Imaging Spectrograph for High-Resolution Observations of the Solar Corona
- Niggli, S. 1987, Klassische- und Laser-Spektroskopische Untersuchungen an Barium. PhD Thesis. Swiss Federal Institute of Technology (ETH) Dissertation no. 8416. 118p.
- Niggli, S., and Huber, M.C. 1987, *Phys. Rev. A* 35, 2908-2918: Transition Probabilities in Neutral Barium
- Niggli, S., and Huber, M.C. 1989, *Phys. Rev. A* 39, 3924-3921: Transition Probabilities for Infrared and Visible Lines in Neutral Barium
- Nikitin, A., Champion, J.P., Tyuterev, V.G., and Brown, L.R. 1997, *J. Mol. Spectr.* 184, 120-128: The High Resolution Infrared Spectrum of CH<sub>3</sub> in the Region 900-1700 cm<sup>-1</sup>
- Nisenson, P., Stachnik, R.V., and Noyes, R.W. 1986, AFGL Technical Report no. 86-0044(I): Development of a CCD-Based Solar Speckle Imaging System
- Nishio, M., Yaji, K., Kosugi, T., Nakajima, H., and Sakurai, T. 1997, *Astrophys. J.* 489, 976-991: Magnetic Field Configuration in Impulsive Solar Flares Inferred from Coaligned Microwave/X-Ray Images
- Nitschelm, C. 1986, *l'Astronomie* 100, 518-519: Cliche Haute Resolution de la Couronne Solaire sur un Navire les 22/23 Novembre 1984
- Nitta, N., Bastian, T.S., Aschwanden M.J., Harvey, K.L., and Strong, K.T. 1992, *Publ. Astron. Soc. Japan* 44, L167-L172: Simultaneous Observations of Coronal Bright Points in X-Ray and Radio Wavelengths
- Nitta, N., Dennis, B.R., and Kiplinger, A.L. 1990, *Astrophys. J.* 353, 313-322: X-Ray Observations of Two Short but Intense Solar Flares
- Nitta, N., and Kundu, R. 1988, *Solar Phys.* 117, 37-50: A Study of Coronal Bright Points at 20 cm Wavelength
- Nitta, N., White, S.M., Kundu, M.R., Gopalswamy, N., Holman, G.D., Brosius, J.W., Schmelz, J.T., Saba, J.L., and Strong, K.T. 1991, *Astrophys. J.* 374, 374-385: Coronal Magnetic Structures Observing Campaign.I. Simultaneous Microwave and Soft X-ray Observations of Active Regions at the Solar Limb
- November, L.J. 1984, in Small-Scale Dynamical Processes in Quiet Stellar Atmospheres: Workshop Proceedings, Sunspot, New Mexico, 25-29 Jul. 1983. S.L. Keil, ed., 74-87: Radial Velocity Measurements of the Sun Made with a Birefringent Filter
- November, L.J. 1986, *Appl. Opt.* 25, 392-397: Measurement of Geometric Distortion in a Turbulent Atmosphere

- November, L.J. 1986, in United States Air Force Geophysics Scholar Program Management and Technical Report 1984-1985, Appendix 3, Section 12, 1-30 : Multiple Retarder Systems: Measurement and Compensation
- November, L.J. 1988, J. Opt. Soc. Am. A 5, 351-359: Photometric Photography. I. The Multiple Filter Method for Characteristic Curve Measurement
- November, L.J. 1988, in SPIE 891, Polarization Considerations for Optical Systems: Los Angeles, 11-12 January, 1988. R. Chipman, ed., 91-102: Measurement of a Multiple-Component Serial Device of Partial Polarizing and Retarding Elements
- November, L.J. 1989, Astrophys. J. 344, 494-503: The Vertical Component of the Supergranular Convection
- November, L.J. 1989, Optical Engr. 28, 107-113: Determination of the Jones Matrix for the Sacramento Peak Vacuum Tower Telescope
- November, L.J. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 457-471: Proper Motion Measurements of Solar Granulation: the Case for Mesogranulation
- November, L.J. 1991, ed., Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. 501 pp.
- November, L.J. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 149-165: Using the Zeeman Spectral-Polarization Symmetry for Telescope Calibration
- November, L.J. 1991, in The Astronomy and Astrophysics Encyclopedia. S.P. Maran, ed. (Van Nostrand), 194-195: Tunable Optical Filters
- November, L.J. 1992, in LEST Foundation Technical Report no. 56, Software for Solar Image Processing: Proceedings from LEST Mini-Workshop, Oslo, Norway, 14-15 August, 1992. O. Engvold, ed. (Institute of Theoretical Physics), 111-122: FITS Library: FITS Interactive Task and Shell-Script Library
- November, L.J. 1992, in SPIE 1746, Polarization Analysis and Measurement: San Diego, CA, 19-21 July, 1992. D.H. Goldstein and R.A. Chipman, eds., 76-87: Exploiting Spatial Transformations of the Light State for Precise Ellipsometry
- November, L.J. 1993, J. Opt. Soc. Am. A 10, 719-739: Recovery of the Matrix Operators in the Similarity and Congruency Transformations: Applications in Polarimetry
- November, L.J. 1993, in Trends in Optical Engineering. J. Mehon, ed., 163-173: In Situ Calibration for Precise Polarimetry: Invited Review
- November, L.J. 1994, Solar Phys. 154, 1-17: Inferring the Depth Extent of the Horizontal Supergranular Flow

- November, L.J. 1994, in Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992. R.R. Radick, ed., 135-139: Local-Coherence Averaging for Nonisoplanatic Imaging
- November, L.J. 1994, in SPIE 2010, X-Ray and Ultraviolet Polarimetry: Conference Proceedings, 15-16 July, 1993. S. Fineschi, ed., 192-200: Design of Precise Ultraviolet Imaging Polarimeters that Rely on In Situ Calibration
- November, L.J. 1994, in Solar Active Region Evolution: Comparing Models with Observations. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 78-86:Long-Lived Convective Flows in Quiet and Active Regions
- November, L.J. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific. Conf. Ser. Vol. 95.K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 375-384: Dark-Thread Thermodynamics and the Coronal Temperature Structure
- November, L.J. 1997, Linear Algebra and its Applications : Rotation and Lorentz Transformations in 2 x 2 and 4 x 4 Complex Matrices and in Polarized Light Physics
- November, L.J., and Koutchmy, S. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 37-43: White-Light Coronal Fine Structure
- November, L.J., and Koutchmy, S. 1996, *Astrophys. J.* 466, 512-528: White-Light Coronal Dark Threads and Density Fine Structure
- November, L.J., and Simon, G.W. 1988, *Astrophys. J.* 333, 427-442: Precise Proper Motion Measurement of Solar Granulation
- November, L.J., Simon, G.W., Tarbell, T.D., Title, A.M., and Ferguson, S.H. 1987, in Theoretical Problems in High-Resolution Solar Physics: Workshop Proceedings ( 2nd), Boulder CO, 15-17 September, 1986. G. Athay, ed., 121-127: Large-Scale Horizontal Flows from SOUP Observations of Solar Granulation
- November, L.J., and Stauffer, F. 1984, *Appl. Opt.* 23, 2333-2341: Derivation of the Universal Wavelength Tuning Formula for a Lyot Birefringent Filter
- November, L.J., and Wilkins, L.M. 1992, Phillips Laboratory Technical Report 92-2246: The Liquid Crystal Polarimeter for Solid-State Imaging of Solar Vector Magnetic Fields. 16 pp.
- November, L.J., and Wilkins, L.M. 1994, in SPIE 2265, Polarization Analysis and Measurement: Workshop Proceedings, San Diego California, 25-27 July, 1994. D. H. Goldstein and D.B. Chenault, eds., 210-221: The Liquid Crystal Polarimeter for Solid-State Imaging of Solar Vector Magnetic Fields
- November, L.J., and Wilkins, L.M. 1995, in Optical Engr. 34, 1659-1668: The Liquid Crystal Polarimeter: a Solid-State Imager for Solar Vector Magnetic Fields

- Nye, A.H., Thomas, J.H., and Cram, L.E. 1984, *Astrophys. J.* 285, 381-385: Dynamical Phenomena in Sunspots. II. A Moving Magnetic Feature
- O'Brian, T.R., Wickliffe, M.E., Lawler, J.E., Whaling, W., and Brault, J.W. 1991, *J. Opt. Soc. Am. B* 8, 1185-1201: Lifetimes, Transition Probabilities, and Level Energies in Fe I
- O'Brien, L.C. 1987, Laser and Fourier Transform Spectroscopy of Gas Phase Molecules. PhD Thesis (University of Arizona)
- O'Brien, L.C., Brazier, C.R., and Bernath, P.F. 1987, *J. Mol. Spectr.* 124, 489-493: Fourier Transform Spectroscopy of the A2delta- X2pi Electronic Transition of the Jet-Cooled CCl Free Radical
- O'Brien, L.C., Dulick, M., and Davis, S.P. 1999, *J. Mol. Spectr.* 195, 328-: The Near-Infrared Y2Sigma+ - X2Pi Transition of CuS
- O'Brien, L.C., Elliot, A.L., and Dulick, M. 1999, *J. Mol. Spectr.* 194, 124-: Fourier Transform Emission Spectroscopy of the Visible Transitions of AuCl
- O'Brien, L.C., Fernando, W.T., and Bernath, P.F. 1990, *J. Mol. Spectr.* 139, 424-431: Fourier Transform Emission Spectroscopy of the A2Pi -X2Epsilon+ Transition of ZnD
- O'Brien, L.C., Kubicek, R.L., Wall, S.J., Koch, D.E., Friend, R.J., and Brazier, C.R. 1996, *J. Mol. Spectr.* 180, 365-368: Fourier Transform Spectroscopy of the Y2Sigma - X2II Transition of CuO
- O'Brien, L.C., Wall, S.J., and Dulick, M. 1999, *J. Mol. Spectr.* 191, 218-: The A2Sigma+ - X2PiI(0,1) Band and Re-Analyses of the Blue and Ultraviolet Transitions of AgO
- O'Brien, L.C., Wall, S.J., and Sieber, M.K. 1997, *J. Mol. Spectr.* 183, 57-60: Fourier Transform Spectroscopy of the A2Sigma+ - X2Pii Transition of AgO
- O'Neal, D., Saar, S.H., and Neff, J.E. 1996, *Astrophys. J.* 463, 766-775: Measurements of Starspot Area and Temperature on Five Active, Evolved Stars
- Obrikko, V.N., and Shelting, B.D. 1989, *Solar Phys.* 124, 73-80: Coronal Holes as Indicators of Large-Scale Magnetic Fields in the Corona
- Ogilvie, K.W., Coplan, M.A., Yellin, K.A. 1996, *Geophys. Res.* 101, 4805-4811: Coronal Holes Near the Equatorial Plane and the Solar Wind Abundance of Iron
- Ograpishvili, N.B. 1988, *Solar Phys.* 115, 33-41: Large-Scale Structure of Background Fields and Active Regions
- Ohyama, M. 1997, X-Ray Plasma Ejections Associated with Impulsive Solar Flares. PhD Thesis (University of Tokyo).
- Oliphant, N., Lee, A., Bernath, P.F., and Brazier, C.R. 1990, *J. Chem. Phys.* 92, 2244-2247: Fourier Transform Emission Spectroscopy of the Jet-Cooled CCN Free Radical
- Oliviero, M., Severino, G., Jefferies, S.M., and Appourchaux, T. 1999, *Astrophys. J. Lett.* 516, L45-L48: Space and Time Analysis of the Solar Photospheric Dynamics at Moderate l-Values

- Oliviero, M., Severino, G., and Straus, T. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 275-278: The VAMOS Data Analysis Pipeline
- Oliviero, M., Severino, G., Straus, T., Cacciani, A., Dolci, M., and Moretti, P.F. 1998, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 53-54: VAMOS: Velocity and Magnetic Observations of the Sun
- Olson, W.B., Hunt, R.H., Young, B.W., Maki, A.G., and Brault, J.W. 1988, *J. Mol. Spectr.* 127, 11-34: Rotational Constants of the Lowest Torsional Component (0G) of the Ground State and Lowest Torsional Component (1G) of the First Excited Torsional State of Hydrogen Peroxide
- Oluseyi, H.M., Walker, A.B., Porter, J., Hoover, R.B., and Barbee, T.W. 1999, *Astrophys. J.* 524, 1105-1121: Observation and Modeling of the Solar Transition Region. I. Multi-Spectral Solar Telescope Array Observations
- Orton, G., Ortiz, J.L., Baines, K., Bjoraker, G., Carsenty, U., Kuhn, J.R., Lin, H., Varsik, J. et al 1996, *Science* 272, 839-840: Earth-Based Observations of the Galileo Probe Entry Site
- Osten, R.A., and Saar, S.H. 1998, *Mon. Not. Roy. Astron. Soc.* 295, 257-: Physical Properties of Active Stars and Stellar Systems
- Ouardi, O., Hilico, J.C., Loete, M., and Brown, L.R. 1996, *J. Mol. Spectr.* 180, 311-322: The Hot Bands of Methane Between 5 and 10  $\mu\text{m}$
- Owner-Petersen, M. 1994, in Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992. R.R. Radick, ed., 77-85: An Algorithm for Computation of Wavefront Tilts in the LEST Solar Slow Wavefront Sensor
- Owner-Petersen, M., and Darvann, T. 1994, in Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992. R.R. Radick, ed., 63-76: Design of the Slow LEST Wavefront Sensor
- Pallavicini, R., Randich, S., and Giampapa, M.S. 1992, *Astron. Astrophys.* 253, 185-198: Lithium in RS CVn Binaries and Related Chromospherically Active Stars. I. Observational Results
- Pallavicini, R., Randich, S., Giampapa, M.S., and Cutispoto, G. 1990, *ESO Messenger* no. 62, 51-56: Lithium in Chromospherically Active Stars
- Palle, P.L. 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmider, eds. (Kluwer), 15-29: The State of the Art in Helioseismic Ground-Based Experiments
- Palmer, B.A., and Engleman, R. 1984, *J. Opt. Soc. Am. B* 1, 609-625: Wavelengths and Energy Levels of Doubly Ionized Uranium (U III) Using a Fourier-Transform Spectrometer
- Pantellini, F.G., Solanki, S.K., and Stenflo, J.O. 1988, *Astron. Astrophys.* 189, 263-276: Velocity and Temperature in Solar Magnetic Fluxtubes from a Statistical Centre-to-Limb Analysis

- Pap, J. 1992, *Astron. Astrophys.* 264, 249-: Variations in Solar Lyman Alpha Irradiance on Short Time Scales
- Pap, J., and Frohlich, C. 1988, in *Adv. Space Res.* 8, no. 7, 31-34: Correlation of Solar Irradiance Variability with Evolution of Activity
- Pap, J., Guhathakurta, M. 1992, in *The Solar Cycle: Workshop Proceedings*, National Solar Observatory/Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 483-490: Variability of Solar UV Irradiance and Its Relation to the Variability in Coronal Green Line Index and Equivalent Width of He Line at 1083 nm
- Pap, J., Hudson, H.S., Rottman, G.J., Willson, R.C., Donnelly, R.F., and London, J. 1990, in *Climate Impact of Solar Variability: Conference Proceedings*, Goddard Space Flight Center, Greenbelt Maryland, 24-27 April, 1990. NASA CP 3086. K.H. Schatten and A. Arking, eds., 189-196: Modeling Solar Lyman Alpha Irradiance
- Pap, J.M., Frohlich, C. 1992, in *Solers22: Proceedings of the Workshop on the Solar Electromagnetic Radiation Study for Solar Cycle 22*: Boulder, Colorado, June, 1991. R.F. Donnelly, ed. (NOAA), 62-: Multi-Variate Spectral Analysis of Short-Term Irradiance Variations
- Pap, J.M., Marquette, W.H., and Donnelly, R.F. 1991, *Adv. Space Res.* 11, no. 5, 271-274: Modeling Solar Irradiances Using Ground-Based Measurements
- Pap, J.M., Vigouroux, A., and Delache, P. 1996, *Solar Phys.* 167, 125-143: Study of the Distribution of Daily Fluctuations in Observed Solar Irradiances and Other Full-Disk Indices of Solar Activity
- Park, J.H., Rothman, L.S., Rinsland, C.P., Pickett, H., Richardson, D.S., and Namkung, J.O. 1987, *NASA Reference Publication 1188: Atlas of Absorption Lines from 0 to 17,900 cm<sup>-1</sup>*
- Parker, E.N. 1995, in *GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings*, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 3-11: GONG and the Solar Dynamo
- Parnell, C.E. 1994, in *ESA SP-373, Third SOHO Workshop, Solar Dynamic Phenomena and Solar Wind Consequences: Proceedings*, Estes Park Colorado, 26-29 September 1994. A. Poland, ed. (ESA), 149-158: Modelling of Dynamic Coronal Heating
- Pasachoff, J.M., and Livingston, W.C. 1984, *Appl. Opt.* 23, 2803-2808: Coelostat and Heliostat: I. Alignment and use for Eclipse and Other Field Purposes
- Patron, J., Hill, F., Rhodes, E.J., Korzennik, S.G., and Cacciani, A. 1995, *Astrophys. J.* 455, 746-757: Velocity Fields Within the Solar Convection Zone: Evidence from Oscillation Ring Diagram Analysis of Mt. Wilson Dopplergrams
- Patron, J., Hill, F., Rhodes, E.J., Korzennik, S.G., and Cacciani, A. 1995, in *GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings*, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 208-211: Ring Diagram Analysis of Mt. Wilson Data: Velocity Fields Within the Solar Convection Zone
- Patron, J., Hill, F., Rhodes, E.J., Korzennik, S.G., Cacciani, A., and Brown, T.M. 1993, in *GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings*, Boulder, Colorado, 11-14

- August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 437-440: Ring Diagram Analysis of Mt. Wilson Data
- Pauls, U. 1988, Transition Probabilities and Branching Ratios of Astrophysical Interest. PhD Thesis. Swiss Federal Institute of Technology (ETH) Dissertation no. 8566. 67 pages.
- Pauls, U., Grevesse, N., and Huber, M.C. 1988, in IAU Symposium 132, The Impact of Very High S/N Spectroscopy on Stellar Physics: Workshop Proceedings, Meudon, France, 29 June- 3 July, 1987. G. Cayrel de Strobel and M. Spite, eds.: Photospheric Solar Iron Abundance from Weak Fe II Lines
- Pauls, U., Grevesse, N., and Huber, M.C. 1990, Astron. Astrophys. 231, 536-542: Fe II Transition Probabilities and the Solar Iron Abundance
- Paxman, R.G., Seldin, J., Lofdahl, M., Scharmer, G.B., and Keller, C.U. 1996, in Astrophys. J. 466, 1087-1099: Evaluation of Phase-Diversity Techniques for Solar-Image Restoration
- Paxman, R.G., and Seldin, J.H. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmeli, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 311-319: Phase-Diversity Data Sets and Processing Strategies
- Pecynier, R. 1987, Application of Interactive Computing to the Analysis of the Rotational Spectrum of InI PhD Thesis (Univ. of California, Berkeley)
- Pehlemann, E., and Von der Luhe, O. 1989, Astron. Astrophys. 216, 337-346: Technical Aspects of the Speckle Masking Phase Reconstruction Algorithm
- Penn, M., Altrock, R.C., Henry, T., and Guhathakurta, M. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 325-331: Synoptic Coronal Temperature, Magnetic Field and He I 1083 nm Observations
- Penn, M.J. 1995, Griffith Observer 59, no. 3, 2-6: Probing the Depths of Sunspots
- Penn, M.J. 1995, New Mexico Journal of Science 35, 122-129: Mapping Coronal Magnetic Fields: New Prospects
- Penn, M.J. 1995, New Mexico Journal of Science 35, 53-63: The National Solar Observatory at Sacramento Peak
- Penn, M.J. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 69-73: New Observations of IR Coronal Emission Lines
- Penn, M.J. 1998, in ESA SP-404, The Corona and Solar Wind Near Minimum Activity: Proceedings, Fifth SOHO Workshop, Oslo Norway, 17-20 June 1997, 583-586: Quiet Sun He I 1083 Nanometer Chromospheric Flows

- Penn, M.J. 1999, *Astrophys. J. Lett.* 518, L131-L134: New Measurements of the Solar Limb Emission in the OI 777.4 and 844.6 Nanometer Lines
- Penn, M.J., and Allen, C.L. 1997, *Solar Phys.* 174, 359-366: He I 1083 nm Oscillations and Downflows Near the North Solar Pole
- Penn, M.J., Arnaud, J., Mickey, D.L., and LaBonte, B.J. 1994, *Astrophys. J.* 436, 368-371: Near Infrared Emission Line and Continuum Observations from the 1991 Eclipse
- Penn, M.J., and Jones, H.P. 1996, *Solar Phys.* 168, 19-35: Limb Observations of He I 1083 nm
- Penn, M.J., and Kuhn, J.R. 1994, *Astrophys. J.* 434, 807-810: Ground-Based Detection of an Infrared [Si X] Coronal Emission Line and Improved Wavelengths for the Infrared [Fe XIII] Emission Lines
- Penn, M.J., and Kuhn, J.R. 1994, *Solar Phys.* 151, 51-56: How Bright is the [Si-X] 1431 nm Coronal Emission Line?
- Penn, M.J., and Kuhn, J.R. 1995, *Astrophys. J. Lett.* 441, L51-L54: Imaging Spectropolarimetry of the He I 1083 nm Line in a Flaring Solar Active Region
- Penn, M.J., and Kuhn, J.R. 1995, in *Infrared Tools for Solar Astrophysics: What's Next?* 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 393-396: Polarimetric IR Array Observations of a Flare
- Penn, M.J., Kuhn, J.R., Arnaud, J., Mickey, D.L., and Labonte, B.J. 1994, in *Space Science Reviews* 70, 185-188: Coronal Electron Density Measurements Using the Near-IR [Fe XIII] Emission Lines
- Penn, M.J., and LaBonte, B.J. 1993, *Astrophys. J.* 415, 383-396: The Source of Five-Minute Period Photospheric Umbral Oscillations
- Penrod, G.D., and Smith, M.A. 1984, in *Origin of Nonradiative Momentum and Energy in Hot Stars: Conference Proceedings*, Greenbelt Maryland, June 5-7, 1984. A. Underhill, ed., 53-56: Nonradial Pulsation and Mass Loss in Early B-Stars
- Peri, M.L., and Libbrecht, K.G. 1993, in *GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings*, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 489-491: A New Echelle Spectrograph for Asteroseismology
- Peri, M.L., Smithson, R.C., Acton, D.S., Frank, Z.A., and Title, A.M. 1989, in *Solar and Stellar Granulation: Third NATO ASI Workshop*, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 77-89: Active Optics, Anisoplanatism, and the Correction of Astronomical Images
- Perrin, A., Rinsland, C.P., and Goldman, A. 1999, *J. Geophys. Res.* 104, 18661-18666: Spectral Parameters for the nu6 Region of HCOOH and its Measurement in the Infrared Tropospheric Spectrum
- Perrin, A.M., Vasserot, A.M., Flaud, J., Camy-Peyret, C., Devi, V.M., Smith, M.H., Rinsland, C.P., Barbe, A., Bouazza, S., and Plateaux, J.J. 1991, *J. Mol. Spectr.* 149, 519-529: The 2.5 mum Bands of Ozone: Line Positions and Intensities

- Perrin, A.M., Vasserot, A.M., Flaud, J., Camy-Peyret, C., Rinsland, C.P., Smith, M.H., and Devi, V.M. 1990, *J. Mol. Spectr.* 143, 311-317: The nu2 Bands of 18Os+2, 18O16O18O and 16O18O18O: Line Positions and Intensities
- Petro, L.D., Foukal, P.V., and Kurucz, R.L. 1985, *Solar Phys.* 98, 23-38: Photospheric Limb-Darkening Signatures of Global Structure Variations
- Petro, L.D., Foukal, P.V., Rosen, W.A., Kurucz, R.L., and Pierce, A.K. 1984, *Astrophys. J.* 283, 426-438: A Study of Solar Photospheric Limb-darkening Variations
- Pettersen, B.R. 1989, *Astron. Astrophys.* 209, 279-295: Chromospheric Lines in Red Dwarf Flare Stars. III
- Pevtsov, A.A., and Canfield, R.C. 1999, in Magnetic Helicity in Space and Laboratory Plasmas. M.R. Brown, R.C. Canfield, and A.A. Pevtsov, eds., 103-110: Helicity of the Photospheric Magnetic Field
- Pevtsov, A.A., and Longcope, D.W. 1998, *Astrophys. J.* 508, 908-915: NOAA 7926: a Kinked Omega-Loop
- Phillips, J.G., and Davis, S.P. 1988, *Astrophys. J.* 66, 227-232: On the Rotation and Vibration-Rotation Spectrum of FeH
- Phillips, J.G., Davis, S.P., Lindgren, B., and Balfour, W.J. 1987, *Astrophys. J. Suppl. Ser.* 65, 721-778: The Near-Infrared Spectrum of the FeH Molecule
- Pianalto, F.S. 1988, Laser Spectroscopy of Strontium Sulfide and Alkaline Earth Monoborohydrides. PhD Thesis (University of Arizona)
- Pianalto, F.S., O'Brien, L.C., Keller, P.C., and Bernath, P.F. 1988, *J. Mol. Spectr.* 129, 348-353: Vibration-Rotation Spectrum of BH X1Sigma<sup>+</sup> by Fourier Transform Emission Spectroscopy
- Pickett, H.M., Cohen, E., and Margolis, J. 1985, *J. Mol. Spectr.* 110, 186- : The Infrared and Microwave Spectra of Ozone for the (0,0,0), (1,0,0) and (0,0,1) States
- Pickett, H.M., Cohen, E.A., Brown, L.R., Rinsland, C.P., Smith, M.H., Devi, V.M., Goldman, A., Barbe, A., Carli, B., and Carlotti, M. 1988, *J. Mol. Spectr.* 128, 151-171: The Vibrational and Rotational Spectra for Ozone for (0,1,0) and (0,2,0) States
- Pierce, A.K. 1984, *Solar Phys.* 90, 195-197: Fraunhofer Line Profiles
- Pierce, A.K. 1986, *Solar Phys.* 107, 397-398: A Windscreen Around the Heliostat of the McMath Telescope
- Pierce, A.K. 1991, *Solar Phys.* 133, 215-225: The Observed Limb Effect in Fraunhofer Lines, I
- Pierce, A.K. 1992, *Solar Phys.* 139, 1-12: The Observed Limb Effect in Fraunhofer Lines, II
- Pierce, A.K., and LoPresto, J.C. 1984, *Solar Phys.* 93, 155-170: Solar Rotation from a Number of Fraunhofer Lines

- Pijpers, F.P. 1998, Mon. Not. Roy. Astron. Soc. 297, L76-L80: Helioseismic Determination of the Solar Gravitational Quadrupole Moment
- Pijpers, F.P. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 833-836: Helioseismic Determination of the Solar Gravitational Quadrupole Moment
- Pilachowski, C.A., Barden, S., Hill, F., Harvey, J.W., Keller, C.U., and Giampapa, M.S. 1998, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 319-320: The Procyon Campaign: Observations from Kitt Peak
- Pintar, J., and Toussaint, R. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 295-296: GONG Calibration Noise Reduction
- Pintar, J.A., Andersen, B., Anderson, E.R., Armet, D.B., Brown, T.M., Hathaway, D.H., Hill, F., and Jones, H.P. 1988, in Seismology of the Sun and Sun-Like Stars: Symposium Proceedings, Tenerife (Canary Islands), 26-30 September, 1988. E. Rolfe, ed. ESA SP-286, 217-221: The GONG Data Reduction and Analysis System
- Pintar, J.A., and Trueblood, M. 1993, in Astronomy from Large Databases II: Workshop Proceedings, Haguenau France, September 1992. F. Murtagh and A Heck, eds. (ESO), 441-446: GONG's DMAC: Update and Current Plans
- Poletto, G., Gary, G.A., and Machado, M.E. 1993, Solar Phys. 144, 113-140: Interactive Flare Sites Within an Active Region Complex
- Poletto, G., and Kopp, R.A. 1988, Solar Phys. 116, 163-178: The Magnetic Geometry and Structure of the Giant Post-Flare Arch of 21-22 May, 1980
- Poletto, G., Suess, S.T., Khan, J.I., Uchida, Y., Hiei, E., Neugebauer, M., Goldstein, B.E., Strong, K.T., and Harvey, K.L. 1994, in ESA SP-373, Third SOHO Workshop, Solar Dynamic Phenomena and Solar Wind Consequences: Proceedings, Estes Park Colorado, 26-29 September 1994. A. Poland, ed. (ESA), 143-148: X-Ray Bright Points and High-Speed Wind Streams: a Preliminary Analysis from Yohkoh and Ulysses Data
- Poletto, G., and Svestka, Z. 1990, Solar Phys. 129, 363-377: Real-Time Simulation of a Potential Magnetic Field in a Post-Flare Arch
- Polyansky, O.L., Zobov, N.F., Tennyson, J., Lotoski, J.A., and Bernath, P.F. 1997, J. Mol. Spectr. 184, 35-50: Hot Bands of Water in the nu2 Manifold Up to 5nu2
- Polyansky, O.L., Zobov, N.F., Viti, S., Tennyson, J., Bernath, P.F., and Wallace, L. 1997, Astrophys. J. 489, L205-L208: K-Band Spectrum of Water in Sunspots
- Polyansky, O.L., Zobov, N.F., Viti, S., Tennyson, J., Bernath, P.F., and Wallace, L. 1997, Science 277, 346-348: Water on the Sun: Line Assignments Based on Variational Calculations

- Pomerantz, M.A., Fossat, E., Gelly, B., Grec, G., Harvey, J.W., and Duvall, T.L. 1985, Antarctic Journal of the U.S. 20, 221-222: Advances in Solar Seismology at the South Pole
- Porter, J.G., and Dere, K.P. 1991, *Astrophys. J.* 370, 775-778: The Magnetic Network Location of Explosive Events Observed in the Solar Transition Region
- Porter, J.G., Falconer, D.A., and Moore, R.L. 1998, in ESA SP-421, Solar Jets and Coronal Plumes: Proceedings of an International Meeting, Guadeloupe France, 23-26 February 1998. S. Koutchmy, P. Martens, and K. Shibata, eds., 147-155: The Magnetic Roots of Enhanced Coronal Heating in Large Loops and Plumes
- Porter, J.G., Falconer, D.A., Moore, R.L., Harvey, K.L., Rabin, D.M., and Shimizu, T. 1996, in IAU Colloquium 153, Magnetodynamic Phenomena in the Solar Atmosphere: Prototypes of Stellar Magnetic Activity. T. Kosugi and Y. Uchida, eds., 429-: Magnetic Roots of Enhanced High Coronal Loops
- Porter, J.G., Fontenla, J.M., and Simnett, G.M. 1995, *Astrophys. J.* 438, 472-479: Simultaneous Ultraviolet and X-Ray Observations of Solar Microflares
- Porter, J.G., Gebbie, K.B., and November, L.J. 1986, in The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium, Sunspot, NM, 20-24 August, 1985. D.F. Neidig, ed., 84-100: The Excitation of Helium Resonance Lines in Solar Flares
- Porter, J.G., Gebbie, K.B., and November, L.J. 1989, *Solar Phys.* 120, 309-341: Helium Resonance Lines in the Flare of 15 June 1973
- Porter, J.G., Moore, R.L., Reichmann, E.J., Engvold, O., and Harvey, K.L. 1987, *Astrophys. J.* 323, 380-390: Microflares in the Solar Magnetic Network
- Porter, J.G., Reichmann, E.J., Moore, R.L., and Harvey, K.L. 1986, in Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985 and 8-10 April, 1986. A.I. Poland, ed. NASA CP- 2442, 383-387: Magnetic Location of C IV Events in the Quiet Network
- Porter, J.G., Toomre, J., and Gebbie, K.B. 1984, *Astrophys. J.* 283, 879-886: Frequent Ultraviolet Brightenings Observed in a Solar Active Region with Solar Maximum Mission
- Potter, A., and Morgan, T.H. 1987, *Icarus* 71, 472-477: Variation of Sodium on Mercury with Solar Radiation Pressure
- Potter, A.E., and Morgan, T.H. 1988, *Geophys. Res. Lett.* 15, 1515-: Extended Sodium Atmosphere of the Moon
- Potter, A.E., and Morgan, T.H. 1988, *Science* 241, 675-680: Discovery of Sodium and Potassium Vapor in the Atmosphere of the Moon
- Potter, A.E., and Morgan, T.H. 1990, *Science* 248, 835-837: Evidence for Magnetospheric Effects on the Sodium Atmosphere of Mercury

- Pougatchev, N.S., Conner, B.J., and Rinsland, C.P. 1995, J. Geophys. Res. 100, 16689-16697: Infrared Measurements of the Ozone Vertical Distribution Above Kitt Peak
- Pougatchev, N.S., Jones, N.B., Connor, B.J., Rinsland, C.P. et al 1998, J. Geophys. Res. 103, 19317-19325: Ground-Based Infrared Solar Spectroscopic Measurements of Carbon Monoxide During 1994 Measurement of Air Pollution from Space Flights
- Pougatchev, N.S., and Rinsland, C.P. 1995, J. Geophys. Res. 100, 1409-1416: Spectroscopic Study of the Seasonal Variation of Carbon Monoxide Vertical Distribution Above Kitt Peak
- Poynter, R.L., and Margolis, J.S. 1984, Mol. Phys. 51, 393-412: The nu2 Spectrum of NH<sub>3</sub>
- Poynter, R.L., and Pickett, H.M. 1985, Appl. Opt. 24, 2235-2240: Submillimeter, Millimeter, and Microwave Spectral Line Catalog
- Prasad, C.V., and Bernath, P.F. 1992, J. Mol. Spectr. 156, 327-340: Fourier Transform Jet Emission Spectroscopy of the A2Sigma<sup>-</sup> - X2Sigma<sup>+</sup> Transition of CN
- Prasad, C.V., and Bernath, P.F. 1994, Astrophys. J. 426, 812-821: Fourier Transform Spectroscopy of the Swan (d3) System of the Jet-Cooled C<sub>2</sub> Molecule
- Prasad, C.V., Bernath, P.F., Frum, C., and Engleman, R. 1992, J. Mol. Spectr. 151, 459-473: Fourier Transform Jet Emission Spectroscopy of the B2Sigma<sup>+</sup> - X2Sigma<sup>+</sup> Transition of CN
- Prasad, C.V., Lacombe, D., Walker, K., Kong, W., Bernath, P.F., and Hepburn, J. 1997, Mol. Phys. 91, 1059-1074: Fourier Transform Emission Spectroscopy of the Second Negative A2Pi<sub>u</sub> - X2Pi<sub>g</sub> System of the O<sub>2</sub> System of the Os<sup>+</sup> Ion
- Priest, E.R. 1989, in Dynamics and Structure of Quiescent Solar Prominences. E.R. Priest, ed. (Kluwer), 1-14: Introduction to Quiescent Solar Prominences
- Prieto, C.A., Cobo, B.R., and Lopez, R.J. 1998, Astrophys. J. 502, 951-960: Model Photospheres for Late-Type Stars from the Inversion of High-Resolution Spectroscopic Observations: the Sun
- Prosser, C.F., and Giampapa, M.S. 1994, in Astron. J. 108, 964-969: A Radial Velocity Survey of the Open Cluster IC 4665
- Provost, J. 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmider, eds. (Kluwer), 121-136: Theoretical Solar Models
- Pryor, W.R., Ajello, J.M., Barth, C.A., Hord, C.W., Stewart, A.I., Simmons, K.E., McClintock, W.E., Sandel, B.R., and Shemansky, D.E. 1992, Astrophys. J. 394, 363-377: The Galileo and Pioneer Venus Ultraviolet Spectrometer Experiments: Solar Lyman-Alpha Latitude Variation at Solar Maximum from Interplanetary Lyman-Alpha Observations
- Pryor, W.R., Barth, C.A., Hord, C.W. et al 1996, Geophys. Res. Lett. 23, 1893-1896: Latitude Variations in Interplanetary Lyman Alpha Data from the Galileo EUVS Modeled with Solar He 1083 Images
- Qing, L.X., Zhang, Z., and Youyi, Z. 1984, Solar Phys. 91, 289-297: A Heating Model for the Transition Zone and Inner Corona

- Qiu, J., Falchi, A., Falciani, R., Cauzzi, G., and Smaldone, L.A. 1997, *Solar Phys.* 172, 171-179:  
Multispectral Observations of an Eruptive Flare
- Qiu, J., Falchi, A., Falciani, R., Cauzzi, G., and Smaldone, L.A. 1997, *Solar Phys.* 172, 171-179:  
Multispectral Observations of an Eruptive Flare
- Querfeld, C.W., and Smartt, R.N. 1984, *Solar Phys.* 91, 299-310: Comparison of Coronal Emission-Line  
Structure and Polarization
- Querfeld, C.W., Smartt, R.N., Bommier, V., Degl'Innocenti, E.L., and House, L.L. 1985, *Solar Phys.* 96,  
277-292: Vector Magnetic Fields in Prominences. II. HeI D3 Stokes Profiles Analysis for Two  
Quiescent Prominences
- Quinet, P., Palmeri, P., Biemont, E., and Brault, J.W. 1993, *Phys. Rev. A* 49, 2446-2452: New Energy  
Levels in Ar II
- Rabello Soares, M.C., and Appourchaux, T. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the  
Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June  
1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 299-304: GONG Low-Degree p-Mode  
Parameters
- Rabello Soares, M.C., Appourchaux, T., and Christensen-Dalsgaard, J. 1999, in SOHO 6/ GONG 98:  
Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings,  
Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 837-  
840: Rotation of the Solar Core Inferred from GONG Data
- Rabello Soares, M.C., Roca Cortes, T., Jimenez, A., Appourchaux, T., and Eff-Darwich, A. 1997,  
*Astrophys. J.* 480, 840-849: Contribution of Low-l rho Modes to the Solar Equatorial Rotation  
Profile
- Rabello-Soares, M.C., Christensen-Dalsgaard, J., Rosenthal, C.S., and Thompson, M.J. 1999, *Astron.  
Astrophys.* 350, 672-679: Effects of Line Asymmetries on the Determination of Solar Internal  
Structure
- Rabello-Soares, M.C., Roca Cortes, T., Jimenez, A., and Appourchaux, T. 1995, in ESA SP 376,  
Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April,  
1995. J.T. Hoeksema, ed. (ESA), Volume 2, 397-400: An Attempt to Estimate the Intensity  
Background Spectra
- Rabin, D.M. 1986, in Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard  
Space Flight Center, 9-11 April, 1985 and 8-10 April, 1986. A.I. Poland, ed., 135-142, 1986.  
NASA CP- 2442: The Prominence-Corona Interface and its Relationship to the Chromosphere-  
Corona Transition
- Rabin, D.M. 1991, *Astrophys. J.* 383, 407-419: Energy Balance in Coronal Funnels
- Rabin, D.M. 1992, *Astrophys. J. Lett.* 390, L103-L106: A True-Field Magnetogram in a Solar Plage  
Region
- Rabin, D.M. 1992, *Astrophys. J.* 391, 832-844: Spatially Extended Measurements of Magnetic Field  
Strength in Solar Plages

- Rabin, D.M. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson, Arizona, October, 1991. M. Giampapa, ed. (Astron. Soc. Pac.), 201-: Fine-Scale Magnetic Fields in the Solar Photosphere
- Rabin, D.M. 1994, in IAU Symposium 154, in Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 449-457: Near Infrared Imaging Magnetometry
- Rabin, D.M. 1997, *Solar Phys.* 174, 281-290: The Solar Magnetic Field in Three Dimensions
- Rabin, D.M., DeVore, C.R., Sheeley, N.R., Harvey, K.L., and Hoeksema, J.T. 1991, in Solar Interior and Atmosphere: Conference Proceedings, Tucson, AZ, 15-18 November, 1988. A.N. Cox, W.C. Livingston, and M. Matthews, eds. (Univ. of Arizona Press), 781-843: The Solar Activity Cycle
- Rabin, D.M., and Dowdy, J.F. 1992, *Astrophys. J.* 398, 665-681: Pervasive Variability in the Quiet Solar Transition Region
- Rabin, D.M., Jaksha, D., Plymate, C., Wagner, J., and Iwata, K. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 361-370: Plage Magnetic Strengths from Near-Infrared Spectra
- Rabin, D.M., Jefferies, J.T., and Lindsey, C., eds. 1994, IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson Arizona, 2-6 March, 1992. (Kluwer). 608 pp.
- Rabin, D.M., and Leibacher, J.W. 1986 eds., Probing Fundamental Astrophysical Scales with High-Resolution Observations of the Sun: Prospects for the 21st Century. (NRC/NSO).
- Rabin, D.M., Moore, R., and Hagyard, M.J. 1984, *Astrophys. J.* 287, 404-411: A Case for Submergence of Magnetic Flux in a Solar Active Region
- Rabin, D.M., Wilson, R.M., and Moore, R.L. 1986, *Geophys. Res. Lett.* 13, 352-354: Bimodality of the Solar Cycle
- Radick, R.R. 1987, in The SHIRSOG Workshop: Proceedings of a Workshop on Prospects for a New Synoptic High Resolution Spectroscopic Facility, Tucson, Arizona, 3 September, 1986. M.S. Giampapa, ed., 133-135: The Solar-Stellar Connection at Low Spectral Resolution
- Radick, R.R. 1989, in Automatic Small Telescopes. D. Hayes and R.M. Genet, eds., 203-208: In Pursuit of Higher Photometric Precision
- Radick, R.R. 1991, in The Sun in Time. C. Sonnett and M. Giampapa, eds. (Univ. of Arizona Press), 787-808: The Luminosity Variability of Solar-Type Stars
- Radick, R.R. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/ Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 450-464: Luminosity Variability of Lower Main-Sequence Stars
- Radick, R.R. 1994, *Science* 266, 1072-1073: Stellar Variability and Global Warming

- Radick, R.R. 1994, in IAU Colloquium 143, The Sun as a Variable Star: Solar and Stellar Irradiance Variations. Proceedings, Boulder, CO, 20-25 June 1993. J. M. Pap, C. Frohlich, H.S. Hudson and S. Solanki, eds. (Cambridge University Press), 109-116: Photometric Variations of Solar-Type Stars
- Radick, R.R. 2000, in 32nd COSPAR Scientific Assembly: Nagoya Japan, 12-19 July 1998, Advances in Space Research 26, no. 11, 1739-1745: A Brief Survey of Chromospheric and Photometric Variability Among Sunlike Stars
- Radick, R.R. 2000, in Journal of Atmospheric and Solar-Terrestrial Physics ( submitted ): Variability of Sunlike Stars
- Radick, R.R. 2001, in International Astronomical Union Symposium 203, Recent Insights into the Physics of the Sun and Heliosphere-- Highlights from SOHO and Other Space Missions. P. Brekke, B. Fleck, and J.B. Gurman, eds. (ASP), 78-85: Stellar Irradiance Variations
- Radick, R.R. 2001, in SPIE 4498, UV/EUV and Visible Space Instrumentation for Astronomy and Solar Physics. H.W. Siegmund, S. Fineschi and M.A. Gummin, eds. (SPIE), 84-90: The Solar Mass Ejection Imager (SMEI) Space Experiment
- Radick, R.R. 2002, in Solar Variability and its Effect on the Earth's Atmospheric and Climate System. J. Pap, P. Fox, and C. Frolich et al, eds. (American Geophysical Union) ( submitted ): Long-Term Solar Variability: Evolutionary Time Scales
- Radick, R.R., and Baliunas, S.L. 1987, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings ( 5th), Boulder, Colorado, 8-11 July, 1987. J.L. Linsky and R.E. Stencel, eds., 217-219: Stellar Activity and the Rotation of Hyades Stars
- Radick, R.R., Henry, G.W., and Sherlin, J.M. 1984, Astron. J. 89, 151-153: Cloudcroft Occultation Summary III. 1982
- Radick, R.R., Lockwood, G.W., and Baliunas, S.L. 1990, Science 247, 39-44: Stellar Activity and Brightness Variations: a Glimpse at the Sun's History
- Radick, R.R., Lockwood, G.W., Skiff, B.A., and Baliunas, S.L. 1998, Astrophys. J. Suppl. 118, 239-258: Patterns of Variation Among Sunlike Stars
- Radick, R.R., Lockwood, G.W., Skiff, B.A., and Thompson, D.T. 1995, Astrophys. J. 452, 332-345: A Twelve Year Photometric Study of Lower Main-Sequence Hyades Stars
- Radick, R.R., Lockwood, G.W., and Thompson, D.T. 1986, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings ( 4th), Santa Fe NM, 16-18 October, 1985. M. Zeilik and D.M. Gibson, eds., 209-211: Variability Characteristics of Lower Main-Sequence Hyades Stars
- Radick, R.R., Restaino, S.R., and Conan, J. 1992, in Adaptive Optics for Large Telescopes: Optical Society of America Workshop, Lahaina, HI, 17-21 August 1992, 179-180: Wavefront Sensing for Solar Imaging
- Radick, R.R., Rimmele, T.R., and Dunn, R.B. 1998, in SPIE 3353, Adaptive Optical System Technologies: Workshop Proceedings, Kona Hawaii, 23-26 March, 1998. D. Bonaccini and R.K.

- Tyson, eds., 621-627: The Image Improvement Program at the NSO/SP Vacuum Tower Solar Telescope
- Radick, R.R., Skiff, B.A., and Lockwood, G.W. 1990, *Astrophys. J.* 353, 524-532: The Activity, Variability, and Rotation of Lower Main-Sequence Members of the Coma Berenices Star Cluster
- Radick, R.R., Thompson, D.T., Lockwood, G.W., Duncan, D.K., and Baggett, W.E. 1987, *Astrophys. J.* 321, 459-472: The Activity, Variability, and Rotation of Lower Main Sequence Hyades Stars
- Radick, R.R., ed. 1994, Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992. 187 pp.
- Radziemski, L.J., Engleman, R., and Brault, J.W. 1995, *Phys. Rev. A* 52, 4462-4470: FTS Measurements in the Spectra of Neutral Lithium, 6Li I and 7 Li I
- Ram, R.S. et al 1999, *Astrophys. J. Suppl. Ser.* 122, 331-: The As+2Phi - X3Delta System (lambda Bands) of TiO: Laboratory and Sunspot Spectra
- Ram, R.S., and Bernath, P.F. 1986, *J. Opt. Soc. Am. B* 3, 1170-1174: Fourier Transform Spectroscopy of NH: the c1pi- A1delta Transition
- Ram, R.S., and Bernath, P.F. 1987, *J. Mol. Spectr.* 122, 275-281: Infrared Fourier Transform Spectroscopy of PH
- Ram, R.S., and Bernath, P.F. 1987, *J. Mol. Spectr.* 122, 282-292: Fourier Transform Spectroscopy of the A2 Pi- X2 Sigma+ System of CP
- Ram, R.S., and Bernath, P.F. 1992, *J. Chem. Phys.* 96, 6344-6347: Fourier Transform Emission Spectroscopy of ScN
- Ram, R.S., and Bernath, P.F. 1992, *J. Mol. Spectr.* 155, 315-325: Fourier Transform Emission Spectroscopy of a New A3Sigmai - X3Sigma- System of NiO
- Ram, R.S., and Bernath, P.F. 1994, *J. Chem. Phys.* 101, 74-79: Fourier Transform Emission Spectroscopy of HfH and HfD
- Ram, R.S., and Bernath, P.F. 1994, *J. Chem. Phys.* 101, 9283-9288: High-Resolution Fourier Transform Emission Spectroscopy of YH
- Ram, R.S., and Bernath, P.F. 1994, *J. Mol. Spectr.* 165, 97-106: Fourier Transform Emission Spectroscopy of the A1Sigma+-X1Sigma+ System of YN
- Ram, R.S., and Bernath, P.F. 1994, *J. Opt. Soc. Am. B* 11, 225-230: High-Resolution Fourier-Transform Emission Spectroscopy of the A4II-X4Sigma- System of WN
- Ram, R.S., and Bernath, P.F. 1995, *J. Mol. Spectr.* 169, 268-285: Fourier Transform Infrared Emission Spectroscopy of a New b3II-a3Delta System of HfO(96V-34 94/08
- Ram, R.S., and Bernath, P.F. 1995, *J. Mol. Spectr.* 171, 169-188: High-Resolution Fourier Transform Emission Spectroscopy of the C1-X1Sigma+ and e3Phi-a3Delta Systems of YD

- Ram, R.S., and Bernath, P.F. 1995, J. Mol. Spectr. 172, 91-101: High-Resolution Fourier Transform Emission Spectroscopy of the A6Sigma+ -X6Sigma+ System of CrD
- Ram, R.S., and Bernath, P.F. 1996, Appl. Opt. 35, 2879-2883: High Resolution Fourier Transform Emission Spectroscopy of the A1II - X1Sigma+ System of AlH
- Ram, R.S., and Bernath, P.F. 1996, J. Chem. Phys. 104, 6444-6451: Fourier Transform Emission Spectroscopy of New Infrared Systems of LaH and LaD
- Ram, R.S., and Bernath, P.F. 1996, J. Chem. Phys. 105, 2668-2675: Fourier Transform Emission Spectroscopy of the B1III - X1Sigma+, C1Sigma+ - X1Sigma+, and G1III - X1Sigma+ Systems of ScH and ScD
- Ram, R.S., and Bernath, P.F. 1996, J. Mol. Spectr. 176, 329-336: Fourier Transform Infrared Emission Spectroscopy of ND and PH
- Ram, R.S., and Bernath, P.F. 1996, J. Mol. Spectr. 180, 414-422: Fourier Transform Infrared Emission Spectroscopy of the b1 - a1II System of BN
- Ram, R.S., and Bernath, P.F. 1997, J. Mol. Spectr. 183, 263-272: Fourier Transform Emission Spectroscopy of ScH and ScD: the New Singlet Electronic States A1Delta, D1Pi, E1Delta, and F1Sigma
- Ram, R.S., and Bernath, P.F. 1997, J. Mol. Spectr. 184, 401-412: Fourier Transform Infrared Emission Spectroscopy of the [6.7]2Sigma+ - X2Sigma+ System of HfN
- Ram, R.S., and Bernath, P.F. 1999, J. Mol. Spectr. 191, 125-: Fourier Transform Emission Spectroscopy of TaOCalculations on OsN
- Ram, R.S., and Bernath, P.F. 1999, J. Mol. Spectr. 193, 363-: Fourier Transform Spectroscopy of the A-1Pi - X1Sigma+ and A1Pi - X1Sigma+ System of IrN
- Ram, R.S., and Bernath, P.F. 1999, J. Mol. Spectr. 195, 299-: Fourier Transform Emission Spectroscopy of the[12.8]2Phi - a2Phi System of TiCl
- Ram, R.S., and Bernath, P.F. 1999, J. Mol. Spectr. 196, 235-: Fourier Transform Emission Spectroscopy of the[7.3]2Delta - a2(\*F and [9.4]2Phi - a2Phi Systems of ZrCl
- Ram, R.S., Bernath, P.F., Balfour, W.J., Cao, J., Qian, C.X., and Rixon, S.J. 1994, J. Mol. Spectr. 168, 350-362:Laser and Fourier Transform Spectroscopy of the [23.8]1-XO+ System of ReN(96V-35 94/06
- Ram, R.S., Bernath, P.F., and Brault, J.W. 1985, J. Mol. Spectr. 113, 269-274: Fourier Transform Emission Spectroscopy: the Vibration- Rotation Spectrum of CuH
- Ram, R.S., Bernath, P.F., and Brault, J.W. 1985, J. Mol. Spectr. 113, 451-457: Fourier Transform Emission Spectroscopy of NeH+
- Ram, R.S., Bernath, P.F., and Brault, J.W. 1985, in SPIE 553, Fourier and Computerized Infrared Spectroscopy: Ottawa, 24-28 June, 1985. T.B Hirschfeld, ed., 374-375: Infrared Fourier Transform Emission Spectroscopy of CuH and NeH+

- Ram, R.S., Bernath, P.F., and Davis, S.P. 1995, J. Mol. Spectr. 173, 146-157: Fourier Transform Infrared Emission Spectroscopy of CS
- Ram, R.S., Bernath, P.F., and Davis, S.P. 1995, J. Mol. Spectr. 173, 158-176: Fourier Transform Emission Spectroscopy of the [10.3]3Phi-X3Phi System of CoF
- Ram, R.S., Bernath, P.F., and Davis, S.P. 1996, J. Chem. Phys. 104, 6949-6955: The Low-Lying Electronic States of CoF
- Ram, R.S., Bernath, P.F., and Davis, S.P. 1996, J. Mol. Spectr. 175, 1-6: Fourier Transform Emission Spectroscopy of the A'3Phi - X3Phi System of CoH
- Ram, R.S., Bernath, P.F., and Davis, S.P. 1996, J. Mol. Spectr. 179, 282-298: Fourier Transform Emission Spectroscopy of the g4II - a4II System of FeF
- Ram, R.S., Bernath, P.F., Engleman, R., and Brault, J.W. 1995, J. Mol. Spectr. 172, 34-42: Fourier Transform Infrared Emission Spectroscopy of SH
- Ram, R.S., Bernath, P.F., and Hinkle, K.H. 1999, J. Chem. Phys. 100, 5557-: Infrared Emission Spectroscopy of NH: Comparison of a Cryogenic Echelle Spectrograph with a Fourier Transform Spectrometer
- Ram, R.S., Bernath, P.F., and Wallace, L. 1996, Astrophys. J. Suppl. Ser. 107, 443-449: Near Infrared Spectroscopy of TiO: Laboratory Measurements and Identification in Sunspots
- Ram, R.S., Brazier, C.R., and Bernath, P.F. 1986, J. Mol. Spectr. 120, 381-402: Fourier Transform Spectroscopy of the A3pi- X3omega- Transition of NH
- Ram, R.S., Dulick, M., Guo, B., Zhang, K.Q., and Bernath, P.F. 1997, J. Mol. Spectr. 183, 360-373: Fourier Transform Infrared Emission Spectroscopy of NaCl and KCl
- Ram, R.S., Engleman, R., and Bernath, P.F. 1999, J. Mol. Spectr. 190, 341-: Fourier Transform Emission Spectroscopy of the A2Delta - X2Pi Transition of SiH and SiD
- Ram, R.S., Jarman, C.N., and Bernath, P.F. 1992, J. Mol. Spectr. 156, 468-486: Fourier Transform Emission Spectroscopy of the Copper Dimer
- Ram, R.S., Lievin, and Bernath, P.F. 1999, J. Chem. Phys. 109, 6329-: Fourier Transform Infrared Emission Spectroscopy and Ab Initio Calculations on RuN
- Ram, R.S., Lievin, and Bernath, P.F. 1999, J. Chem. Phys. 111, 3449-: Fourier Transform Infrared Emission Spectroscopy and Ab Initio Calculations on OsN
- Ram, R.S., Lievin, and Bernath, P.F. 1999, J. Mol. Spectr. 197, 133-: Emission Spectroscopy and Ab Initio Calculations on IrN
- Ram, R.S., Morbi, Z., Guo, B., Zhang, K.Q., Bernath, P.F., Van der Auwera, J., Johns, J.W., and Davis, S.P. 1996, Astrophys. J. Suppl. Ser. 103, 247-254: Infrared Spectra of Hot HF and DF

- Ram, R.S., Peers, J.R., Teng, Y., Adam, A.G., Muntianu, A., Bernath, P.F., and Davis, S.P. 1997, *J. Mol. Spectr.* 184, 186-201: Laser and Fourier Transform Spectroscopy of the G4Phi - X4Phi System of TiF
- Ram, R.S., Tam, S., and Bernath, P.F. 1992, *J. Mol. Spectr.* 152, 89-100: The A2Pii - X2Sigma+ System of CP: Observations of New Bands
- Ramesh, K.B., Nagabushana, B.S., and Varghese, B.A. 1999, *Solar Phys.* 188, 99-113: Green Coronal Intensity Enhancements and Their Relation to the Underlying Photospheric/Chromospheric Activity
- Ramesh, K.B. 1998, *Solar Phys.* 183, 295-303: 5303 AngstromCoronal Irradiance and its Relation to the Photospheric Magnetic Activity
- Randich, S., Giampapa, M.S., and Pallavicini, R. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (*Astron. Soc. Pac.*), 576-577: Lithium Abundances in Northern RS CVn Binaries
- Randich, S., Giampapa, M.S., and Pallavicini, R. 1994, *Astron. Astrophys.* 283, 893-907: Lithium in RS CVn Binaries and Related Chromospherically Active Stars. III. Northern RS CVn Systems
- Randich, S., Gratton, R., and Pallavicini, R. 1992, in High-Resolution Spectroscopy with the VLT. M.H. Ulrich, ed., 155-: Spectrum Synthesis Analysis of Late-Type Spectroscopic Binaries
- Rast, M.P., Fox, P.A., Lin, H., Lites, B.W., Meisner, R.W., and White, O.R. 1999, *Nature* 401, 678-679: Bright Rings Around Sunspots
- Raulin, J.P., Kundu, M.R., Nitta, N., and Raoult, A. 1996, *Astrophys. J.* 472, 874-881: Radio Continuum and Type III Burst Associated with Coronal X-Ray Structures
- Raulin, J.P., Willson, R.F., Kerdraon, A., Klein, K.L., Lang, K.R., Trottet, G. 1991, *Astron. Astrophys.* 251, 298-: Acceleration of Electrons Outside Flares: Coronal Manifestation and Possible Origin
- Reader, J., Acquista, N., Sansonetti, C.J., and Engleman, R. 1988, *J. Opt. Soc. Am. B* 5, 2106-2118: Accurate Energy Levels for Singly Ionized Platinum (Pt /s-3II/s+3)
- Recey, F., and Harvey, K.L. 1986, Solar-Terrestrial Predictions: Workshop Proceedings ( 2nd), Meudon, France, 18-22 June, 1984. P.A. Simon et al, eds., 204-211: He I 10830 Observations of Flare Generated Coronal Holes
- Regulo, C., Jimenez, A., Palle, P.L., Hernandez, F.P., and Roca Cortes, T. 1994, *Astrophys. J.* 434, 384-388: Variation of the Frequencies of Very Low l p-Modes
- Restaino, S.R. 1990, SPIE 1318, Optical Spectroscopic Instrumentation and Techniques for the 1990s: Technical Conference, Las Cruces, New Mexico, 4-6 June, 1990. B. McNamara and J.M. Lerner, eds. : Bidimensional Spectroscopy with a Universal Birefringent Filter and a Fabry-Perot
- Restaino, S.R. 1992, *Appl. Opt.* 31, 7442-7449: Wavefront Sensing and Image Deconvolution of Solar Data

Restaino, S.R. 1993, in ESA SP-348, Coronal Streamers, Coronal Loops, and Coronal and Solar Wind Compositions: Proceedings of the First SOHO Workshop, Annapolis Maryland, 25-28 August, 1992. Clare Mattock, ed. (ESA): Focal Volume Technique for Solar Applications

Restaino, S.R. 1994, in Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992. R.R. Radick, ed., 105-111: Focal Volume Technique for Solar Applications

Restaino, S.R., and Anderson, S. 1993, in ESA SP-348, Coronal Streamers, Coronal Loops, and Coronal and Solar Wind Composition: Proceedings of the First SOHO Workshop, Annapolis Maryland, 25-28 August, 1992. Clare Mattock, ed. (ESA): A New Deconvolution Algorithm for Astronomical Images

Restaino, S.R., and Anderson, S. 1994, in Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992. R.R. Radick, ed., 119-123: A New Deconvolution Algorithm for Astronomical Images

Restaino, S.R., Clark, N., and Radick, R.R. 1994, in SPIE 2200, Amplitude and Intensity Interferometry II: Workshop Proceedings, Kona Hawaii, 13-16 March 1994. J.B. Breckinridge, ed., 512-514: A New Approach for a Correlation Tracker for Imaging Applications

Restaino, S.R., Conley, R.W., Loos, G.C., and Radick, R.R. 1993, in SPIE 2029, Digital Image Recovery and Synthesis II: Proceedings, San Diego California, 14-16 July 1993. P.S. Idell, ed., 390-399: Image Deconvolution from Pupil Masking Experiment

Restaino, S.R., and Donahue, R.A. 1992, The Solar Cycle: Workshop Proceedings, National Solar Observatory/ Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 503-508: Solar and Stellar Chromospheric Contrast

Restaino, S.R., Radick, R.R., and Loos, G.C. 1994, in IAU Symposium 158, Very High Angular Resolution Imaging: Workshop Proceedings, Sydney Australia, 11-15 January 1993. J. Davis and R. Ekers, eds. (Kluwer), 370-372: First Experimental Results from Pupil Masking on a Solar Telescope

Restaino, S.R., Radick, R.R., Loos, G.C., and Conley, R.W. 1994, Appl. Opt. 33, 4143-4146: Validation of Interferometric Imaging from a Pupil Masking Experiment on a Solar Telescope

Restaino, S.R., Stebbins, R.T., and Goode, P.R. 1993, Astrophys. J. Lett. 408, L57-L60: Observation of Impulsive Acoustic Events and the Excitation of Solar Oscillations

Reuter, D., Jennings, D.E., and Brault, J.W. 1986, J. Mol. Spectr. 115, 294-304: The v=1<--0 Quadrupole Spectrum of N<sub>2</sub>

Reynolds, R.J., Magee, K., Roesler, F.L., Scherb, F., and Harlander, J. 1986, Astrophys. J. Lett. L9-L12: H-alpha Scans of the Intergalactic HI Cloud in Leo

Rhodes, E.J., Cacciani, A., Blamont, J., Tomczyk, S., Ulrich, R.K., and Howard, R.F. 1984, in Solar Seismology from Space: Conference Proceedings, Snowmass Colorado, August 17-19 1983. R.K. Ulrich, ed., 125-155: Evaluation of a Magneto-Optical Filter and a Fabry-Perot Interferometer for the Measurement of Solar Velocity Fields from Space

Rhodes, E.J., Cacciani, A., Dappen, W., Didkovsky, L.V., Hill, F., Korzennik, S.G., Kosovichev, A.G., Kotov, V.A., and Scherrer, P.H. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 477-480: Plans for Mt. Wilson - Crimean Observatory High-Degree Helioseismology Network

Rhodes, E.J., Cacciani, A., Garneau, G., Misch, T., Progovac, D., Shieber, T., Tomczyk, S., and Ulrich, R.K. 1988, in MAX '91: Flare Research at the Next Solar Maximum. Workshop no. 1: Scientific Objectives. Kansas City, Kansas, 9-10 June, 1988. R.C. Canfield and B.R. Dennis, eds. (NASA), 33-49: Full-Disk Magnetograms Obtained with a Na Magneto-Optical Filter at the Mount Wilson Observatory

Rhodes, E.J., Cacciani, A., and Korzennik, S.G. 1991, *Adv. Space Res.* 11, no. 4, 17-28: Observations of Intermediate and High-Degree p-Mode Oscillations During Sunspot Cycles 21 and 22

Rhodes, E.J., Cacciani, A., Korzennik, S.G., and Ulrich, R.K. 1993, *Astrophys. J.* 406, 714-722: Confirmation of Solar Cycle-Dependent Intermediate-Degree p-Mode Frequency Shifts

Rhodes, E.J., Cacciani, A., Tomezyk, S., Ulrich, R.K., Blamont, J., Howard, R.F., Dumont, P., and Smith, E.J. 1984, *Adv. Space Res.* 4, no. 8, 103-112: A Compact Dopplergraph/Magnetograph Suitable for Space-Based Measurements of Solar Oscillations and Magnetic Fields

Rhodes, E.J., Woodard, M.F., Cacciani, A., Tomezyk, S., Korzennik, S.G., and Ulrich, R.K. 1988, *Astrophys. J.* 326, 479-485: On the Constancy of Intermediate-Degree P-Mode Frequencies During the Declining Phase of Solar Cycle 21

Ridgway, S.T., and Brault, J.W. 1984, *Ann. Rev. Astron. Astrophys.* 22, 291-317: Astronomical Fourier Transform Spectroscopy Revisited

Rieger, E., Neidig, D.F., Engfer, D.W., and Strelow, D. 1996, *Solar Phys.* 167, 307-320: The Role of High-Energy Protons and Electrons in Powering the Solar White Light Flare Emission

Rimmele, T. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 90-99: The National Solar Observatory-Kiepenheuer Institut Solar Feature Correlation Tracker

Rimmele, T. 1994, in Solar Magnetic Fields: Symposium Proceedings, Freiburg Germany, 29 June-- 2 July, 1993. M. Schuessler and W. Schmidt, eds. (Cambridge Univ. Press), 176-178: The Evershed Effect: a Wave Phenomenon?

Rimmele, T., Balasubramaniam, K.S., and Radick, R.R., eds. 1999, Astronomical Society of the Pacific Conference Series 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. 568 pp.

Rimmele, T.R. 1994, *Astron. Astrophys.* 290, 972-982: On the Temporal Behaviour of the Evershed Effect

Rimmele, T.R. 1995, *Astron. Astrophys.* 298, 260-276: Evidence for Thin Elevated Evershed Channels

- Rimmele, T.R. 1995, *Astrophys. J.* 445, 511-516: Sun-Center Observations of the Evershed Effect
- Rimmele, T.R. 1997, *Astrophys. J.* 490, 458-469: Evidence for Magnetoconvection in a Sunspot Light Bridge
- Rimmele, T.R., Beckers, J.M., Bonaccini, D., Dunn, R.B., and Engvold, O. 1987, in Adaptive Optics in Solar Observations: Workshop Proceedings, Freiburg, 8-9 September, 1987. F. Merkle, O. Engvold, and R. Falomo, eds. LEST Technical Report 28, 233-242: Optical Telescope for LEST Site Survey
- Rimmele, T.R., Dunn, R.B., Richards, K., and Radick, R.R. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 222-230: Solar Adaptive Optics at the National Solar Observatory
- Rimmele, T.R., Goode, P.R., Harold, E., and Stebbins, R.T. 1995, *Astrophys. J.* 444, L119-L122: Dark Lanes in Granulation and the Excitation of Solar Oscillations
- Rimmele, T.R., Goode, P.R., Strous, L.H., and Stebbins, R.T. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 329-334: Dark Lanes in Granulation and the Excitation of Solar Oscillations
- Rimmele, T.R., Kentischer, T., and Wiborg, P.H. 1994, in Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992. R.R. Radick, ed., 24-31: High-Resolution Observations with the NSO/KIS Correlation Tracker
- Rimmele, T.R., and Radick, R.R. 1996, Adaptive Optics, 13, OSA Technical Digest Series (Optical Society of America, Washington DC), Workshop Proceedings, Maui Hawaii, 8-12 July 1996, 247-249 : Experimental Comparison of Two Approaches for Solar Wavefront Sensing
- Rimmele, T.R., and Radick, R.R. 1998, in SPIE 3353, Adaptive Optical System Technologies: Workshop Proceedings, Kona Hawaii, 23-26 March, 1998. D. Bonaccini and R.K. Tyson, eds., 1014-1021: Deconvolving Solar Images Using a Shack-Hartmann Wavefront Sensor
- Rimmele, T.R., and Radick, R.R. 1999, in SPIE 3353, Adaptive Optical System Technologies: Workshop Proceedings, Kona Hawaii, 23-26 March, 1998. D. Bonaccini and R.K. Tyson, eds., 72-81: Solar Adaptive Optics at the National Solar Observatory
- Rimmele, T.R., and Schmidt, W. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 363-368: Observations of Evolving Solar Magnetic Features in the Infrared and Visible Spectrum
- Rimmele, T.R., and Schroter, E.H. 1989, *Astron. Astrophys.* 221, 137-145: The Variation of the Cell Size and Velocities of the Supergranulation with Heliographic Latitude

- Rimmele, T.R., Von der Luhe, O., Wiborg, P.H., Widener, A.L., Dunn, R.B., and Spence, G. 1991, in SPIE 1542, Active and Adaptive Optical Systems: Workshop Proceedings, San Diego CA, 22-24 July, 1991. Mark A. Ealey, ed., 186-193: Solar Feature Correlation Tracker
- Rimmele, T.R., and Von der Luhe, O. 1989, Reviews in Modern Astronomy 2, 105-108: A Correlation Tracker for Solar Fine Scale Studies
- Rimmele, T.R., and Von der Luhe, O. 1990, Sterne und Weltraum 29, 520-: Adaptive Optics for Solar Observations
- Rinsland, C.P., and Benner, D.C. 1984, Appl. Opt. 23, 4523- : Absolute Intensities of Spectral Lines in Carbon Dioxide near 2050 per Centimeter
- Rinsland, C.P., Benner, D.C., Devi, M.V., Ferry, P.S., Sutton, C.H., and Richardson, D.J. 1984, NASA TM-85764: Atlas of High Resolution Infrared Spectra of Carbon Dioxide
- Rinsland, C.P., Benner, D.C., and Devi, V.M. 1985, Appl. Opt. 24, 1644-1650: Measurement of Absolute Line Intensities in CO<sub>2</sub> Bands near 5.2 Microns
- Rinsland, C.P., Benner, D.C., and Devi, V.M. 1986, Appl. Opt. 25, 1204-1214: Absolute Line Intensities in CO<sub>2</sub> Bands Near 4.8 Microns
- Rinsland, C.P., Benner, D.C., Devi, V.M., Ferry, P.S., Sutton, C.H., and Richardson, D.J. 1984, Appl. Opt. 23, 2051-2052: Atlas of High Resolution Infrared Spectra of Carbon Dioxide
- Rinsland, C.P., Boughner, R.E., Larsen, J.C., Stokes, G.M., and Brault, J.W. 1984, J. Geophys. Res. 89, 9613-9622: Diurnal Variations of Atmospheric Nitric Oxide: Ground-Based Infrared Spectroscopic Measurements and Their Interpretation with Time-Dependent Photochemical Model Calculations
- Rinsland, C.P., Brown, L.R., and Farmer, C.B. 1990, J. Geophys. Res. 95, 5577-5585: Infrared Spectroscopic Detection of Sulfur Hexafluoride (SF<sub>6</sub>) in the Lower Stratosphere and Upper Troposphere
- Rinsland, C.P., Devi, V.M., Flaud, J., Camy-Peyret, C., Smith, M.H., and Stokes, G.M. 1985, J. Geophys. Res. 90, 10719-10725: Identification of 18O-Isotopic Lines of Ozone in Infrared Ground-Based Solar Absorption Spectra
- Rinsland, C.P., Devi, V.M., Smith, M.H., and Benner, D.C. 1988, Appl. Opt. 27, 631-651: Measurements of Air-Broadened and Nitrogen-Broadened Lorentz Width Coefficients and Pressure-Shift Coefficients in the nu4 and nu2 Bands of 12CH<sub>4</sub>
- Rinsland, C.P., Devi, V.M., Smith, M.H., and Benner, D.C. 1989, pl. Opt. 28, 2111-2118: Measurements of Argon-Broadened Lorentz Width and Pressure-Induced Line Shift Coefficients in the nu4 Band of 12CH<sub>4</sub>
- Rinsland, C.P., Flaud, J.M., Goldman, A. et al 1998, J. Quan. Spectr. Rad. Trans. 60, 803-: Spectroscopic Parameters for Ozone and its Isotopes: Current Status, Prospects for Improvement, and the Identification of 16O16O17O and 16O17O16O Lines in Infrared Ground-Based and Stratospheric Solar Absorption Spectra

Rinsland, C.P., Goldman, A., Murcray, D.G., Blatherwick, J.J., Kosters, D.G., Murcray, D.G., and Massie, S.T. 1990, *J. Geophys. Res.* 95, 16477-16490: Long-Term Trends in the Concentrations of SF<sub>6</sub>, CHClF<sub>2</sub>, and COF<sub>2</sub> in the Lower Stratosphere from Analysis of High-Resolution Infrared Solar Occultation Spectra

Rinsland, C.P., Goldman, A., Murcray, D.G., Murcray, F.J., Bonomo, F.S., Devi, V.M., Smith, M.H., and Rinsland, P.L. 1985, *J. Geophys. Res.* 90, 7931- : Tentative Identification of the 780 per Centimeter nu4 Band Q Branch of Chlorine Nitrate in High-Resolution Solar Absorption Spectra of the Stratosphere

Rinsland, C.P., Goldman, A., Murcray, F.J., Murcray, F.H., and Murcray, D.G. 1988, *J. Geophys. Res.* 93, 12607-12626: Infrared Measurements of Atmospheric Gases Above Mauna Loa

Rinsland, C.P., Goldman, A., and Stokes, G.A. 1985, *Appl. Opt.* 24, 2044-2046: Identification of Atmospheric C<sub>2</sub>H<sub>2</sub> Lines in the 3230-3340 per cm. Region of High-Resolution Absorption Spectra Recorded at the National Solar Observatory

Rinsland, C.P., Gunson, M.R., Foster, J.C., Toth, R.A., Farmer, C.B., and Zander, R. 1991, *J. Geophys. Res.* 96, 1057-1068: Stratospheric Profiles of Heavy Water Vapor Isotopes and CH<sub>3</sub>D from Analysis of the ATMOS Spacelab 3 Infrared Solar Spectra

Rinsland, C.P., Johnson, D.W., Goldman, A., and Levine, J.S. 1989, *Nature* 337, 535-537: Evidence for a Decline in the Atmospheric Accumulation Rate of CHClF<sub>2</sub> (CFC-22)

Rinsland, C.P., Jones, N.B., Conner, B.J., Logan, J.A., Pougatchev, N.S., Goldman, A., Murcray, F.J., Stephen, T.M., Pine, A.S., Zander, R., Mahieu, E., and Demoulin, P. 1998, *J. Geophys. Res.* 103, 28197-28217: Northern and Southern Hemisphere Ground-Based Infrared Spectroscopic Measurements of Tropospheric Carbon Monoxide and Ethane

Rinsland, C.P., Levine, J.S., Goldman, A., Sze, N.D., Ko, M.K., and Johnson, D.W. 1991, *J. Geophys. Res.* 96, 15523-15540: Infrared Measurements of HF and HCl Total Column Abundances Above Kitt Peak, 1977-1990: Seasonal Cycles, Long-Term Increases, and Comparisons with Model Calculations

Rinsland, C.P., Levine, J.S., and Miles, T. 1985, *Nature* 318, 245-249: Tropospheric Methane Concentration Deduced from 1951 Infrared Solar Spectra

Rinsland, C.P., Smith, M.H., Devi, V.M., and Benner, D.C. 1991, *J. Mol. Spectr.* 150, 173-183: Measurements of Lorentz-Broadening Coefficients and Pressure-Induced Line Shift Coefficients in the nuu2 Band of D<sub>2</sub>O

Rinsland, C.P., Smith, M.H., Devi, V.M., and Benner, D.C. 1991, *J. Mol. Spectr.* 150, 640-646: Measurements of Lorentz-Broadening Coefficients and Pressure-Induced Line Shift Coefficients in the nuu2 Band of HDO

Rinsland, C.P., Smith, M.H., Devi, V.M., Flaud, J., and Camy-Peyret, C. 1990, *J. Mol. Spectr.* 139, 343-352: The 2nu2 + nu2 and 2nu2 + nu1 Bands of 16O<sub>3</sub> at 4.1 mm: Line Positions and Intensities

Rinsland, C.P., Smith, M.H., Devi, V.M., Perrin, A., Flaud, J., and Camy-Peyret, C. 1991, *J. Mol. Spectr.* 149, 474-480: The nu2 Bands of 16O<sub>17</sub>O<sub>17</sub>O: Line Positions and Intensities

- Rinsland, C.P., Smith, M.H., Flaud, J., Camy-Peyret, C., and Devi, V.M. 1988, *J. Mol. Spectr.* 130, 204-212: Line Positions and Intensities of the 2nu3, nu1 + nu3, and 2nu1 Bands of 16O3
- Rinsland, C.P., Smith, M.H., Goldman, A., and Devi, V.M. 1991, *Appl. Opt.* 30, 1427-1438: Measurements of Lorentz Air-Broadening Coefficients and Relative Intensities in the H216O Pure Rotational and nu2 Bands from Long Horizontal Path Atmospheric Spectra
- Rinsland, C.P., and Strow, L.L. 1989, *Appl. Opt.* 28, 457-464: Line Mixing Effects in Solar Occultation Spectra of the Lower Stratosphere: Measurements and Comparisons with Calculations for the 1932 cm<sup>-1</sup> COs+2 Q Branch
- Rinsland, C.P., Toon, G.C., Farmer, C.B., Norton, R.H., and Namkung, J. 1989, *J. Geophys. Res.* 94, 18341-18349: Stratospheric N2O5 Profiles at Sunrise and Sunset from Further Analysis of the ATMOS/Spacelab 3 Solar Spectra
- Rinsland, C.P., Zander, R., Brown, L.R., Farmer, C.B., Park, J.H., Norton, R.H., Russell, J.M., and Raper, O.F. 1986, *Geophys. Res. Lett.* 13, 769-772: Detection of Carbonyl Fluoride in the Stratosphere
- Rinsland, C.P., Zander, R., and Demoulin, P. 1991, *J. Geophys. Res.* 96, 9379-9389: Ground-Based Infrared Measurements of HNO<sub>3</sub> Total Column Abundances: Long-Term Trend and Variability
- Rinsland, C.P., Zander, R., Farmer, C.B., Norton, R.H., Brown, L.R., Russell, J.M., and Park, J.H. 1986, *Geophys. Res. Lett.* 13, 761-764: Evidence for the Presence of the 802.7 Per Centimeter Band Q Branch of HO<sub>2</sub>NO<sub>2</sub> in High Resolution Solar Absorption Spectra of the Stratosphere
- Rinsland, C.P., Zander, R., Farmer, C.B., Norton, R.H., and Russell, J.M. 1987, *J. Geophys. Res.* 92, 11951-11964: Concentrations of Ethane (C<sub>2</sub>H<sub>6</sub>) in the Lower Stratosphere and Upper Troposphere and of Acetylene (C<sub>2</sub>H<sub>2</sub>) in the Upper Troposphere Deduced from ATMOS/Spacelab 3 Spectra
- Ritzwoller, M.H., and Kelly, J.F. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 261-264: Detecting Giant Cell Convection with Helioseismic Linewidths
- Robillot, J.M., Bocchia, R., Fossat, E., and Grec, G. 1984, *Astron. Astrophys.* 137, 43-50: Solar Large-Scale Velocity Structures from Optical Resonance Method
- Robinson, R.D., Cram, L.E., and Giampapa, M.S. 1990, *Astrophys. J. Suppl. Ser.* 74, 891-909: Chromospheric H-alpha and Ca II Lines in Late-Type Stars
- Roddier, F., Roddier, C., and Karovska, M. 1985, in Mass Loss from Red Giants: U.C.L.A. Workshop Proceedings, Los Angeles, California. 1985. M. Morris and B. Zukerman, eds., 63-64: High Angular Resolution Interferometric Observations of Betelgeuse in the Visible
- Roddier, F., Roddier, C., Petrov, R., Martin, F., Ricort, G., and Aime, C. 1986, *Astrophys. J.* 305, L77-L80: New Observations of alpha Orionis with a Rotation Shearing Interferometer
- Roellig, T.L., Becklin, E.E., Jeffries, J.T., Kopp, G.A., Lindsey, C.A., Orrall, F.Q., and Werner, M.W. 1991, *Astrophys. J.* 381, 288-294: Submillimeter Solar Limb Profiles Determined from Observations of the Total Solar Eclipse of March 18 1988

- Roelof, E.C., Simnett, G.M., Decker, R.B., Lanzerotti, L.J., MacLennan, C.G., Armstrong, T.P., and Gold, R.E. 1998, J. Geophys. Res. A 102, 251-262: Reappearance of Recurrent Low-Energy Particle Events at Ulysses/HI-SCALE in the Northern Heliosphere
- Roesler, F.L., Scherb, F., and Oliversen, R.J. 1984, Geophys. Res. Lett. 11, 128- : Periodic Intensity Variation in (SiII) 9531 Å Emission from the Jupiter Plasma Torus
- Rogers, S.A., Brazier, C.R., and Bernath, P.F. 1987, J. Chem. Phys. 87, 159-162: The Infrared Spectrum of XeH<sup>+</sup>
- Rogers, S.A., Brazier, C.R., Bernath, P.F., and Brault, J.W. 1988, Mol. Phys. 63, 901-908: Fourier Transform Emission Spectroscopy of the b3 Pig-a3Sigma+u Transition of He2
- Rolli, E., Wulster, J.P., and Magun, A. 1998, Solar Phys. 180, 361-375: Multiwavelength Flare Observations: Temporal Evolution of the 20 August 1992 Flare
- Rompolt, B. 1991, in Hvar Observatory Bulletin 14, 37-102: Small-Scale Structure and Dynamics of Prominences
- Rompolt, B., and Bogdan, T. 1986, in Coronal and Prominence Plasmas: Proceedings of Workshops Held at Goddard Space Flight Center, 9-11 April, 1985 and 8-10 April, 1986. A.I. Poland, ed. NASA CP- 2442, 81-87: On the Formation of Active Region Prominences (H-alpha Filaments)
- Ronan, R.S., Harvey, J.W., and Duvall, T.L. 1991, Astrophys. J. 369, 549-556: Wavelength Variation of p-Mode Intensity Fluctuations
- Rosenthal, C.S. 1998, Astrophys. J. 508, 864-875: Peaks and Troughs in Helioseismology: the Power Spectrum of Solar Oscillations
- Rosselet, A., Graff, W., Wild, U.P., Keller, C.U., and Gschwind, R. 1995, in SPIE 2480, 205-212: Persistent Spectral Hole Burning Used for Spectrally High-Resolved Imaging of the Sun
- Rothman, L.S., Gamache, R.R., Goldman, A., Brown, L.R., Toth, R.A., Pickett, H., Poynter, R., Flaud, J., Camy-Peyret, C., Barbe, A., Husson, N., Rinsland, C.P., and Smith, M.H. 1987, Appl. Opt. 26, 4058-4097: The HITRAN Database: 1986 Edition
- Rothman, L.S., Rinsland, C.P., Goldman, A. et al 1998, J. Quan. Spectr. Rad. Trans. 60, 665-: The HITRAN Molecular Spectroscopic Database and HAWKS (HITRAN Atmospheric Workstation): 1996 Edition
- Roudier, T., Espagnet, O., Muller, R., and Vigneau, J. 1994, Astron. Astrophys. 287, 982-989: Peculiar Interactions Between Granules and Network Bright Points in the Solar Photosphere
- Roudier, T., Malherbe, J.M., November, L.J., Vigneau, J., Coupinot, G., Lafon, M., and Muller, R. 1997, Astron. Astrophys. 320, 605-611: Intergranular Plumes and Formation of Network Bright Points
- Roudier, T., Muller, R., Vigneau, J., Auffret, H., Espagnet, O., Simon, G.W. et al 1991, Adv. Space Res. 11 no. 5, 205-213: Results from High Resolution Solar Images and Spectra Obtained at the Pic du Midi Observatory (1986-1990)

Roussel-Dupre, R., Wrathall, J., Nicolas, K.R., Bartoe, J.D.F., and Brueckner, G.E. 1984, *Astrophys. J.* 278, 428- : HRTR II EuV Observations of a Solar Ephemeral Region

Rovira, M., Schmieder, B., Demoulin, P., Simnett, G.M., Hagyard, M.J., Reichmann, E., and Tandberg-Hanssen, E. 1999, *Astrophys. J.* 510, 474-484: Bright Points and Subflares in Ultraviolet Lines and X-Rays

Rozelot, J.P., and Livingston, W.C., eds. 1996, Mirror Substrate Alternatives: Workshop Proceedings, Grasse France, 9-11 October 1995 (Paris, France: CNRS, 1996). 238 pp.

Rudawy, P. 1992, Spektrofotometria Spikul Chromosferycznych I Protuberancji. PhD Thesis (Wroclaw University, Poland).

Ruedi, I., Keller, C.U., and Solanki, S.K. 1996, *Solar Phys.* 164, 265-275: Measurement of the Full Stokes Vector of He I 10830 Å

Ruedi, I., Solanki, S., Livingston, W.C., and Stenflo, J.O. 1992, *Astron. Astrophys.* 263, 323-338: Infrared Lines as Probes of Solar Magnetic Features. III. Strong and Weak Magnetic Fields in Plages

Ruedi, I., Solanki, S.K., Balthasar, H., Livingston, W.C., and Schmidt, W. 1995, in *Infrared Tools for Solar Astrophysics: What's Next?* 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 431-436: Chromospheric Magnetic Field Measurements in HeI 10830 Å

Ruedi, I., Solanki, S.K., and Livingston, W.C. 1994, in *Solar Magnetic Fields: Symposium Proceedings*, Freiburg Germany, 29 June-- 2 July, 1993. M. Schuessler and W. Schmidt, eds. (Cambridge Univ. Press), 363-365: Magnetic Fields in the Upper Chromosphere: He I 10830 Å as an Almost Ideal Diagnostic

Ruedi, I., Solanki, S.K., and Livingston, W.C. 1995, *Astron. Astrophys.* 293, 252-262: Infrared Lines as Probes of Solar Magnetic Features. X. He I 10830 Å as a Diagnostic of Chromospheric Magnetic Fields

Ruedi, I., Solanki, S.K., and Livingston, W.C. 1995, *Astron. Astrophys.* 302, 543-550: Infrared Lines as Probes of Solar Magnetic Features. XI. Structure of a Sunspot Umbra with a Light Bridge

Ruedi, I., Solanki, S.K., and Livingston, W.C. 1997, in *Advances in the Physics of Sunspots: First Advances in Solar Physics Euroconference*, Tenerife Spain, 2-6 October, 1996. B. Schmieder, J.C. del Toro Iniesta, and M. Vazquez, eds., 237-241: Umbral Polarimetric Measurements Using the Ti I Multiplet at 2.2 μm

Ruedi, I., Solanki, S.K., Livingston, W.C., and Harvey, J.W. 1995, *Astron. Astrophys.* 113, 91-: Interesting Lines in the Infrared Solar Spectrum. III. A Polarimetric Survey Between 1.05 and 2.50 μm

Ruedi, I., Solanki, S.K., Livingston, W.C., and Harvey, J.W. 1995, in *Laboratory and Astronomical High Resolution Spectra*, *Astron. Soc. Pacific Conf. Ser.* 81, A. Sauval, R. Blomme, and N. Grevesse, eds., 107-: FTS Polarimetric Survey of the Infrared Solar Spectrum Between 1.0 and 2.5 μm

- Ruedi, I., Solanki, S.K., and Rabin, D.M. 1992, *Astron. Astrophys.* 261, L21-L24: Infrared Lines as Probes of Solar Magnetic Features.IV. Discovery of a Siphon Flow
- Ruedi, I., Solanki, S.K., and Keller, C.U. 1999, *Astron. Astrophys.* 348, L37-L40: Infrared Lines as Probes of Solar Magnetic Features. XV. Evershed Flow in Cool, Weak Penumbral Fields
- Ruedi, I., Solanki, S.K., Keller, C.U., and Frutiger, C. 1998, *Astron. Astrophys.* 338, 1089-1101: Infrared Lines as Probes of Solar Magnetic Features. XIV. TiI and the Cool Components of Sunspots
- Russell, J.M., Farmer, C.B., Rinsland, C.P., Zander, R., Froidevaux, L., Toon, G.C., Gao, B.C., Shaw, J., and Gunson, M. 1988, *J. Geophys. Res.* 93, 1718-1736: Measurements of Odd Nitrogen Compounds in the Stratosphere by the ATMOS Experiment on Spacelab 3
- Rust, D.M. 1986, in *The Lower Atmosphere of Solar Flares: Proceedings of the National Solar Observatory/Solar Maximum Mission Symposium Sunspot, NM, 20-24 August, 1985.* D.F. Neidig, ed., 282-296: On the Causes of White-Light Flares
- Rust, D.M. 1993, in *Biological Effects and Physics of Solar and Galactic Cosmic Radiation:.. NATO ASI Workshop, Algarve Portugal, 13-23 October, 1991.* C.E. Swenberg, G. Horneck, and E.G. Stassinopoulos, eds. (Plenum), 73-81: Origins and Effects of Solar Flares
- Rust, D.M. 1994, in *Real-Time and Post-Facto Solar Image Correction. Proceedings of the 13th Sacramento Peak Summer Workshop, Sunspot New Mexico, 15-18 September, 1992.* R.R. Radick, ed., 32-43: A Biologically-Inspired Image Position Sensor
- Rust, D.M., and Appourchaux, T. 1988, in *Seismology of the Sun and Sun-Like Stars: Symposium Proceedings, Tenerife, Spain, 26-30 September, 1988.* E. Rolfe, ed. *ESA SP-286*, 227-233: The Stable Solar Analyzer
- Rust, D.M., Appourchaux, T., and Hill, F. 1988, in *IAU Symposium 123, Advances in Helio- and Asteroseismology.* J. Christensen-Dalsgaard and S. Frandsen, eds., 475-479: Performance of a Stabilized Fabry-Perot Solar Analyzer
- Rust, D.M., Burton, C.H., and Leistner, A.J. 1986, in *SPIE 627, Instrumentation in Astronomy VI: Tucson, Arizona, 3-8 March, 1986.* D.L. Crawford, ed., 39-49: A Tunable, Solid, Fabry-Perot Etalon for Solar Seismology
- Rust, D.M., and Cauzzi, G. 1992, in *IAU Colloquium 133, Eruptive Solar Flares: Workshop Proceedings, Iguazu, Argentina, 2-7 August, 1991.* B.V. Jackson, ed. (Kluwer), 46-52: Variation of the Vector Magnetic Field in an Eruptive Flare
- Rust, D.M., and Keil, S.L. 1992, *Solar Phys.* 140, 55-65: A Search for Polarization in Ellerman Bombs
- Rust, D.M., Kunski, R., and Cohn, R.F. 1986, *Johns Hopkins APL Technical Digest* 7, 209-216: Development of Ultrastable Filters and Lasers for Solar Seismology
- Rust, D.M., Murphy, G., Strohbehn, K., and Keller, C.U. 1996, *Solar Phys.* 164, 403-415: Balloon-Borne Polarimetry: the Flare Genesis Experiment

- Rust, D.M., and O'Byrne, J.W. 1988, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 378-388: High Resolution Vector Magnetograph
- Rust, D.M., and O'Byrne, J.W. 1990, in SPIE 1166, Polarization Considerations for Optical Systems II: Conference Proceedings, San Diego, California, 9-11 August, 1989.: A Low Polarization Solar Vector Magnetograph
- Rust, D.M., and O'Byrne, J.W. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 74-95: Vector Magnetography
- Rust, D.M., O'Byrne, J.W., and Harris, T.J. 1988, in Johns Hopkins APL Technical Digest 9, 349-359: An Optical Instrument for Measuring Solar Magnetism
- Rust, D.M., Sakurai, T., Gaizauskas, V., Hofmann, A., Martin, S.M., Priest, E.R., and Wang, J. 1994, Solar Phys. 153, 1-17: Preflare State
- Rust, D.M., Simnett, G.M., and Smith, D.F. 1985, Astrophys. J. 288, 401-409: Observational Evidence for Thermal Wave Fronts in Solar Flares
- Rutten, R.J. 1994, in Chromospheric Dynamics: Proceedings of a Mini-Workshop Held at the Institute of Theoretical Astrophysics, University of Oslo, Norway, 6-8 June 1994. M. Carlsson, ed. (University of Oslo), 25-46: Internetwork Dynamics
- Rutten, R.J., De Pontieu, B., and Lites, B.W. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 383-388: Internetwork Grains with TRACE
- Ruzmaikin, A., Cadavid, C., Lawrence, J., Rabin, D., and Lin, H. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 375-379: Scaling of Solar Magnetic Fields
- Ruzmaikin, A., Feynman, J., Harvey, J.W., and Harvey, K.L. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 553-561: Enhanced Synoptic Observations: a Spacecraft on the Other Side of the Sun
- Rybansky, M., Rusin, V., Gaspar, P., and Altrock, R.C. 1994, Solar Phys. 152, 487-495: Coronal Index of Solar Activity VII, Years 1988-1991
- Rybansky, M., Rusin, V., and Minarovjech, M. 1998, Solar Phys. 177, 305-310: The Green Corona Index and Soft X-Ray Flux
- Saar, S.H. 1986, in The SHIRSOG Workshop: Proceedings of a Workshop on Prospects for a New Synoptic High Resolution Spectroscopic Facility, Tucson, Arizona, 3 September, 1986, 44:- The Measurement of Magnetic Fields on Cool Stars: Progress, Problems, and Future Prospects

- Saar, S.H. 1987, Observations and Analysis of Photospheric Magnetic Fields on G, K, and M Dwarf Stars. PhD Thesis (Univ. of Colorado).
- Saar, S.H. 1987, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings ( 5th), Boulder, Colorado, 8-11 July, 1987. J.L. Linsky and R.E. Stencel, eds., 10-19: The Photospheric Magnetic Fields of Cool Stars: Recent Results of Survey and Time-Variability Programs
- Saar, S.H. 1988, *Astrophys. J.* 324, 441-465: Improved Methods for the Measurement and Analysis of Stellar Magnetic Fields
- Saar, S.H. 1988, in Hot Thin Plasmas in Astrophysics: NATO ASI Proceedings, Cargese (Corsica), France, 8-18 September, 1987. R. Pallavicini, ed. (Kluwer), 139-146: The Magnetic Fields on Cool Stars and Their Correlation with Chromospheric and Coronal Emission
- Saar, S.H. 1988, in IAU Symposium 132, The Impact of Very High S/N Spectroscopy on Stellar Physics: Workshop Proceedings, Meudon, France, 29 June- 3 July, 1987. G. Cayrel de Strobel and M. Spite, eds., 295- : Measurements of Magnetic Fields on Cool Stars
- Saar, S.H. 1990, in IAU Symposium 138, Solar Photosphere: Structure, Convection, and Magnetic Fields, J.O. Stenflo, ed. (Kluwer), 427-441: Magnetic Fields on Solar-Type Stars: the First Decade
- Saar, S.H. 1991, in IAU Colloquium 130, The Sun and Cool Stars: Activity, Magnetism, and Dynamos. Workshop Proceedings, Helsinki, Finland, 17-21 July, 1990. Ilkka Tuominen, ed. (Springer-Verlag), 389-400: Recent Advances in the Observation and Analysis of Stellar Magnetic Fields
- Saar, S.H. 1991, in Mechanisms of Chromospheric and Coronal Heating: Conference Proceedings, Heidelberg, Germany, 5-8 June, 1990. P. Ulmschneider, E. Priest, and R. Rosner, eds. (Springer), 273-278: Recent Measurements of Stellar Magnetic Fields
- Saar, S.H. 1991, in Memorie della Societa Astronomica Italiana 61, 559-: Spectroscopic Measurements of Magnetic Fields on Solar-Like Stars
- Saar, S.H. 1991, in The Sun in Time. C. Sonnett and M. Giampapa, eds. (Univ. of Arizona Press), 848-858: The Time Evolution of Magnetic Fields on Solar-Like Stars
- Saar, S.H. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin and J.T. Jefferies, eds. (Kluwer), 437-447: Infrared Measurements of Stellar Magnetic Fields
- Saar, S.H. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 493-497: New Infrared Measurements of Magnetic Fields on Cool Stars
- Saar, S.H., and Baliunas, S.L. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/ Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 197-: The Magnetic Cycle of kappa Ceti
- Saar, S.H., Baliunas, S.L. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/ Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific): Recent Advances in Stellar Cycle Research

- Saar, S.H., and Bopp, B.W. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson, Arizona, October, 1991. M. Giampapa, ed. (Astron. Soc. Pac.), 288-: Characteristics of 'Marginal' BY Draconis Stars
- Saar, S.H., Golub, L., Bopp, B.W., Herbst, W., and Huovelin, J. 1990, in Evolution in Astrophysics: IUE Astronomy in the Era of New Space Missions (ESA SP-310), E. Rolfe, ed., 431-: Long and Short Timescale Variability of Magnetic Activity on the BY Dra Star BD 730
- Saar, S.H., and Huovelin, J. 1993, *Astrophys. J.* 404, 739-750: Broad-Band Linear Polarization in Cool Stars. II. Amplitude and Wavelength Dependence for Magnetic and Scattering Regions
- Saar, S.H., Huovelin, J., Giampapa, M.S., Linsky, J.L., and Jordan, C. 1988, in Activity in Cool Star Envelopes: Workshop Proceedings, Tromso Norway, 1987. O. Havnes et al, eds. (Reidel), 45-: Multiwavelength Observations of Magnetic Fields and Related Activity on XI Bootis A
- Saar, S.H., and Linsky, J.L. 1986, *Adv. Space Res.* 6, no. 8, 235-238: New Measurements of Photospheric Magnetic Fields in Late-Type Stars: Emerging Trends
- Saar, S.H., and Linsky, J.L. 1986, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (4th), Santa Fe NM, 16-18 October, 1985. M. Zeilik and D.M. Gibson, eds., 278-: Further Observations of Magnetic Fields on Active Dwarf Stars
- Saar, S.H., Linsky, J.L., and Duncan, D.K. 1986, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (4th), Santa Fe NM, 16-18 October, 1985. M. Zeilik and D.M. Gibson, eds., 275-280: The Time Variability of Magnetic Fields on epsilon Eridani
- Saar, S.H., Linsky, J.L., and Giampapa, M.S. 1988, in Observational Astrophysics with High Precision Data: 27th Liege International Astrophysical Colloquium, 1987, 103-: Four Meter FTS Observations of Photospheric Magnetic Fields on M Dwarfs
- Saar, S.H., and Neff, J.E. 1990, in Cool Stars, Stellar Systems, and the Sun: Proceedings of the Sixth Cambridge Workshop, Seattle, WA, 18-21 Sept. 1989. G. Wallerstein, ed., 171-173: Spot Temperatures and Area Coverages on Active Dwarf Stars
- Saar, S.H., and Piskunov, N.E. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson, Arizona, October, 1991. M. Giampapa, ed. (Astron. Soc. Pac.), 255-258: Magnetic Surface Images of HD 82558 (K2Ve)
- Saar, S.H., Piskunov, N.E., and Tuominen, I. 1994, in Eighth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: Proceedings, Athens Georgia, 11-14 October, 1993. J.P. Caillault, ed., 661-663: Multiple Epoch Magnetic Surface Images of LQ HYA
- Saar, S.H., and Schrijver, C.J. 1987, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (5th), Boulder, Colorado, 8-11 July, 1987. J.L. Linsky and R.E. Stencel, eds., 8-40: Empirical Relations Between Magnetic Fluxes and Atmospheric Radiative Losses for Cool Dwarf Stars
- Saba, J.L., Strong, K.T. 1991, *Astrophys. J.* 375, 789-799: Coronal Dynamics of a Quiescent Active Region
- Sakurai, T. 1985, *Solar Phys.* 95, 311-321: Magnetic Field Structures of Hard X-Ray Flares Observed by Hinotori Spacecraft

- Sakurai, T. 1985, in Hydromagnetics of the Sun: Proceedings of the Fourth European Meeting on Solar Physics, Noordwijkerhout, The Netherlands, 1-3 October, 1984. ESA SP-220, 283-284: Magnetic Field Structures of Hard X-Ray Flares Observed by Hinotori Spacecraft
- Sakurai, T. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 483-495: Long-Term Monitoring Studies of the Sun at the National Astronomical Observatory of Japan
- Salih, S., Lawler, J.E., and Whaling, W. 1985, Phys. Rev. A 31, 744- : Lifetimes, Branching Ratios, and Transition Probabilities in COII
- Salucci, G., Bertello, L., Bonaccini, D., Cavallini, F., Cepatelli, G., and Righini, A. 1992, in Solar Physics and Astrophysics at Interferometric Resolution: an International Workshop to Present SIMURIS. Paris France, 17-19 February, 1992. ESA SP-344. L. Dame and T.D. Guyenne, eds., 157-159: High Resolution Granulation Spectrophotometry with a UBF and a FP Interferometer in Tandem
- Salucci, G., Bertello, L., Cavallini, F., Ceppatelli, G., and Righini, A. 1994, Astron. Astrophys. 285, 322-332: The Height Dependence of Intensity and Velocity Structures in the Solar Photosphere
- Salvatore, A., and Smaldone, L.A. 1998, in Memorie della Societa Astronomica Italiana 69, 639-: Chromospheric K2nu Grains Properties
- Sams, B.J., Golub, L., and Weiss, N.O. 1992, Astrophys. J. 399, 313-317: X-Ray Observations of Sunspot Penumbral Structure
- Sanahuja, B., Heras, A.M., Domingo, V., and Joselyn, J.A. 1991, Solar Phys. 134, 379-394: Three Solar Filament Disappearances Associated with Interplanetary Low-Energy Particle Events
- Sanchez-Ibarra, A. 1990, Solar Phys. 125, 125-132: Longitudinal and Temporal Variations of Sunspot Regions and Coronal Holes During Cycle 21
- Sasada, H., and Amano, T. 1991, J. Chem. Phys. 94, 2401-2407: A New Triplet Band System of C3: The b3IIg - a3IIu Transition
- Sasada, H., Schwendeman, R.H., Magerl, G., Poynter, R.L., and Margolis, J.S. 1986, J. Mol. Spectr. 117, 317-330: High-Resolution Spectroscopy of the nu2 = 2a < nu2 = 1s Band of 14NH3
- Sattarov, I. 1989, in Solar Magnetic Fields and Corona, vol. 1. R.B. Teplitskaya, ed. (Nauka: Novosibirsk), 142-: On the Impulsive Character of the Evolution of Magnetic Fields in Complexes of Activity
- Sauval, A.J., Grevesse, N., Brault, J.W., Stokes, G.M., and Zander, R. 1984, Astrophys. J. 282, 330-338: The Pure Rotation Spectrum of OH and the Solar Oxygen Abundance
- Scheick, X., and Kuhn, J.R. 1994, Astrophys. J. 423, 566-580: Diffuse Light in A2670: Smoothly Distributed?
- Scherb, F., Magee-Sauer, K., Roesler, F.L., and Harlander, J. 1990, Icarus 86, 172-188: Fabry-Perot Observations of Comet Halley H2O+

Scherrer, P.H., Hoeksema, J.T., (nine authors), Leibacher, J.W. et al 1989, in The SOHO Mission: Scientific and Technical Aspects of the Instruments. ESA SP-1104, 25-30: SOI-- The Solar Oscillations Imager for SOHO

Scherrer, P.H., Hoeksema, J.T., Bogart, R.S., Brown, T.M., Christensen-Dalsgaard, J., Gough, D.O., Kuhn, J.R., Leibacher, J.W. et al 1988, in Seismology of the Sun and Sun-Like Stars: Symposium Proceedings, Tenerife (Canary Islands), 26-30 September, 1988. E. Rolfe, ed. ESA SP-286, 375-379: The Solar Oscillations Imager for SOHO

Schmahl, E.J., Shevgaonkar, R.K., Kundu, M.R., and McConnell, D. 1984, Solar Phys. 93, 305-315: Sharp Edges in Solar Microwave Spectra: Neutral Current Sheets or Cyclotron Lines?

Schmelz, J.T., Holman, G.D. 1991, Adv. Space Res. 11, no. 1, 109-: Results from COMSTOC: the Coronal Magnetic Structures Observing Campaign

Schmelz, J.T., Holman, G.D., Brosius, J.W., Gonzalez, R.D. 1992, Astrophys. J. 399, 733-: Coronal Magnetic Structures Observing Campaign II. Magnetic and Plasma Properties of a Solar Active Region

Schmidt, H.U., Simon, G.W., and Weiss, N.O. 1985, Astron. Astrophys. 148, 191-206: Buoyant Magnetic Flux Tubes: II. Three-Dimensional Behaviour in Granules and Supergranules

Schmieder, B., Aulanier, G., Demoulin, P., Van Driel-Gesztelyi, L., Roudier, T., Nitta, N., and Cauzzi, G. 1997, Astron. Astrophys. 325, 1213-1225: Magnetic Reconnection Driven by Emergence of Sheared Magnetic Field

Schmieder, B., Demoulin, P., Aulanier, G., and Golub, L. 1996, Astrophys. J. 467, 881-886: Differential Magnetic Field Shear in an Active Region

Schmieder, B., Forbes, T.G., Malherbe, J.M., and Machado, M.E. 1987, Astrophys. J. 317, 956-963: Evidence for Gentle Chromospheric Evaporation During the Gradual Phase of Large Solar Flares

Schmieder, B., Hagyard, M.J., Ai, G., Zhang, H., Kalman, B., Gyori, L., Rompolt, B., Demoulin, P., and Machado, M.E. 1994, Solar Phys. 150, 199-219: Relationship Between Magnetic Field Evolution and Flaring Sites in AR 6659 in June 1991

Schmieder, B., Van Driel, L., Mein, N., Mein, P., Willson, R., and Raoult, A. 1998, in ESA SP-421, Solar Jets and Coronal Plumes: Proceedings of an International Meeting, Guadeloupe France, 23-26 February 1998. S. Koutchmy, P. Martens, and K. Shibata, eds., 157-162: X-Ray Jets in a Reversed Polarity Region and Interplanetary Effects

Schmitt, J.H., Fleming, T.A., and Giampapa, M.S. 1995, Astrophys. J. 450, 392-400: The X-Ray View of the Low Mass Stars in the Solar Neighborhood

Schou, J., and Brown, T.M. 1994, Astrophys. J. 434, 378-383: On the Rotation Rate in the Solar Convection Zone

Schou, J., Christensen-Dalsgaard, J., Howe, R., Larsen, R.M., Thompson, M.J., and Toomre, J. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson,

eds. ESA SP-418, 845-849: Slow Poles and Shearing Flows from Helioseismic Observations with MDI and GONG Spanning a Year

Schou, J., Christensen-Dalsgaard, J., and Thompson, M.J. 1995, in GONG 94: Helio- and Asteroseismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 528-531: Some Aspects of Helioseismic Time-Series Analysis

Schou, J., and the SOI Internal Rotation Team 1998, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 141-148: Solar Internal Rotation

Schrijver, C.J. 1986, Stellar Magnetic Activity. PhD Thesis (University of Utrecht)

Schrijver, C.J. 1987, Astron. Astrophys. 180, 241-252: Solar Active Regions: Radiative Intensities and Large-Scale Parameters of the Magnetic Field

Schrijver, C.J. 1987, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (5th), Boulder, Colorado, 8-11 July, 1987. J.L. Linsky and R.E. Stencel, eds., 135-144: Heating of Stellar Chromospheres and Coronae: Evidence for Non-Magnetic Heating

Schrijver, C.J. 1989, Solar Phys. 122, 193-208: The Effect of an Interaction of Magnetic Flux and Supergranulation on the Decay of Magnetic Plages

Schrijver, C.J., and Cote, J. 1988, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (5th), Boulder, Colorado, 8-11 July, 1987, 51-53. J.L. Linsky and R.E. Stencel, eds.: The Relation Between the Ca II K-Line Core Flux Density and the Magnetic Flux Density on the Sun

Schrijver, C.J., Cote, J., Zwaan, C., and Saar, S.H. 1989, Astrophys. J. 337, 964-976: Relations Between the Photospheric Magnetic Field and the Emission from the Outer Atmospheres of Cool Stars. I. The Solar Ca II K-Line Core Emission

Schrijver, C.J., Dobson, A.K., and Radick, R.R. 1989, Astrophys. J. 341, 1035-1044: The Magnetic, Basal, and Radiative-Equilibrium Components in Mt. Wilson Ca II H+K Fluxes

Schrijver, C.J., Dobson, A.K., and Radick, R.R. 1992, Astron. Astrophys. 258, 432-448: Nearly Simultaneous Observations of Chromospheric and Coronal Radiative Losses of Cool Stars

Schrijver, C.J., Dobson, A.K., Radick, R.R., and Giommi, P. 1990, in Sixth Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun: .Proceedings, Boulder, Colorado. G. Wallerstein, ed., 136-138: The Relationship Between Exosat Soft X-Ray and Mt. Wilson Ca II H+K Flux Densities

Schrijver, C.J., and Harvey, K.L. 1989, Astrophys. J. 343, 481-488: The Distribution of Solar Magnetic Fluxes and the Nonlinearity of Stellar Flux-Flux Relations

Schrijver, C.J., and Harvey, K.L. 1994, Solar Phys. 150, 1-18: The Photospheric Magnetic Flux Budget

Schrijver, C.J., Shine, R.A., Hagenaar, H.J., Hurlbert, N.E., Title, A.M., Strous, L.H., Jefferies, S.M., Jones, A.R., Harvey, J.W., and Duvall, T.L. 1996, Astrophys. J. 468, 921-932: Dynamics of the Chromospheric Network: Mobility, Dispersal, and Diffusion Coefficients

- Seiden, P.E., and Wentzel, D.G. 1996, *Astrophys. J.* 460, 522-529: Solar Active Regions as a Percolation Phenomenon. II.
- Sekii, T. 1995, in GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 74-77: Angular Inversions of Rotational Splitting Coefficients
- Sekii, T. 1997, in IAU Symposium 181, Sounding Solar and Stellar Interiors. J. Provost and F.X. Schmieder, eds. (Kluwer), 189-202: Internal Solar Rotation
- Seldin, J.H., Paxman, R.G., Carrara, D.A., Keller, C.U., and Rimmele, T. 1999, in SPIE 3815, Digital Image Recovery and Synthesis IV: Workshop Proceedings, Denver Colorado, July 1999. T.J. Schulz and P.S. Idell, eds.: Deconvolution of Narrow-Band Solar Images Using Aberrations Estimated from Phase-Diverse Imagery
- Seldin, J.H., Paxman, R.G., Carrara, D.A., Keller, C.U., and Rimmele, T. 1999, in SPIE 3815, International Symposium on Optical Science, Engineering, and Instrumentation: Proceedings, Denver Colorado, 18-23 July, 1999. D. Begley and W.J. Smith, eds. (SPIE), 153-163: Deconvolution of Narrowband Solar Images Using Aberrations Estimated from Phase-Diverse Imagery
- Seldin, J.H., Paxman, R.G., and Keller, C.U. 1997, in SPIE 2804, Missions to the Sun: Workshop Proceedings, Denver Colorado, 4-9 August 1996. D.M. Rust, ed., 166-174: Time Series Restoration from Ground-Based Solar Observations
- Semel, M., and Skumanich, A. 1998, *Astron. Astrophys.* 331, 383-391: An Ambiguity-Free Determination of  $J_Z$  in Solar Active Regions
- Severino, G., Roberti, G., Marmolino, C., and Gomez, M.T. 1986, *Solar Phys.* 104, 259-272: The Effects of Acoustic-Gravity Waves on the KI 7699 Line
- Severino, G., Straus, T., and Jefferies, S.M. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 53-60: The Solar Background Spectrum: a Gold Mine of Information
- Seykora, E.J. 1985, *Solar Phys.* 99, 39-42: Observations of Very Low Contrast White Light Solar Structures Utilizing Differential Photometry
- Seykora, E.J. 1990, *Appl. Opt.* 29, 5039-5041: Solar Interferometry Utilizing the Visibility of Diffraction-Free Images
- Seykora, E.J. 1993, *Solar Phys.* 145, 389-397: Solar Scintillation and the Monitoring of Solar Seeing
- Seykora, E.J. 1997, *Solar Phys.* 176, 37-44: Evaluation of a Wavefront Sensing Concept for a Full Solar Disk Adaptive Optics System

- Shcherbakov, A.G., Shcherbakova, Z.A. 1991, in The Sun and Cool Stars: Activity, Magnetism, Dynamos, I. Tuominen, D. Moss, G. Rüdiger , eds., 252-265: The He I 10830 Å Line as an Indicator of the Chromospheric and Coronal Activity of the Sun
- Shcherbakov, A.G., Shcherbakova, Z.A., Tuominen, I., and Jetsu, L. 1996, *Astron. Astrophys.* 309, 655-660: He I  $\lambda$ 10830 Å Line as an Indicator of Solar Chromospheric Activity
- Sheeley, N.R. 1995, *Astrophys. J.* 440, 884-887: A Volcanic Origin for High-FIP Material in the Solar Atmosphere
- Sheeley, N.R. 1996, *Astrophys. J.* 469, 423-428: Elemental Abundance Variations in the Solar Atmosphere
- Sheeley, N.R. Jr. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 1-13: The Flux-Transport Model and Its Implications
- Sheeley, N.R., DeVore, C.R., and Shampine, L.R. 1986, *Solar Phys.* 106, 251-268: Simulations of the Gross Solar Magnetic Field During Sunspot Cycle 21
- Sheeley, N.R., Devore, C.R., and Boris, J.P. 1985, *Solar Phys.* 98, 219- : Simulations of the Mean Solar Magnetic Field During Sunspot Cycle 21
- Sheeley, N.R., Nash, A.G., and Wang, Y.M. 1987, *Astrophys. J.* 319, 481-499: The Origin of Rigidly Rotating Magnetic Field Patterns on the Sun
- Sheeley, N.R., and Wang, Y.M. 1991, *Solar Phys.* 131, 165-186: Magnetic Field Configurations Associated with Fast Solar Wind
- Sheeley, N.R., Wang, Y.M., and Harvey, J.W. 1989, *Solar Phys.* 119, 323-340: The Effect of Newly Erupting Flux on the Polar Coronal Holes
- Sheeley, N.R., Wang, Y.M., and Nash, A.G. 1992, *Astrophys. J.* 401, 378-385: A New Determination of the Solar Rotation Rate
- Shelke, R.N., and Pande, M.C. 1985, *Solar Phys.* 95, 193- : Differential Rotation of Coronal Holes
- Sheminova, V.A., and Solanki, S.K. 1999, *Astron. Astrophys.* 351, 701-706: Is the FIP Effect Present Inside Solar Photospheric Magnetic Flux Tubes?
- Shevgaonkar, R.K., and Kundu, M.R. 1984, *Astrophys. J.* 283, 413- : Three-Dimensional Structures of Two Solar Active Regions from VLA Observations at 2, 6, and 20 Centimeter Wavelengths
- Shevgaonkar, R.K., and Kundu, M.R. 1985, *Astrophys. J.* 292, 733- : Dual Frequency Observations of Solar Microwave Bursts Using the VLA
- Shevgaonkar, R.K., and Kundu, M.R. 1985, *Solar Phys.* 98, 119- : VLA Observations of a Radio Plage at Centimeter Wavelengths
- Shevgaonkar, R.K., Kundu, M.R., and Jackson, P.D. 1988, *Astrophys. J.* 329, 982-990: Variability of Metric Emission from the Sun

- Shibasaki, K. 1998, in *Synoptic Solar Physics: 18th NSO/SP Summer Workshop*, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 373-385: Radio Synoptic Maps and Polar Cap Brightening
- Shibata, K. 1998, in *ESA SP-421, Solar Jets and Coronal Plumes: Proceedings of an International Meeting*, Guadeloupe France, 23-26 February 1998. S. Koutchmy, P. Martens, and K. Shibata, eds., 137-146: X-Ray Jets and X-Ray Plasmoids
- Shibata, K. 1998, in *Magnetic Reconnection in the Solar Atmosphere*, ASP Conference Series 111. R. Bentley and J. Mariska, eds., 29-38: Theory and Observations of X-Ray Jets
- Shimizu, T. 1997, Studies of Transient Brightenings (Microflares) Discovered in Solar Active Regions. PhD Thesis (University of Tokyo).
- Shimizu, T., and Tsuneta, S. 1997, *Astrophys. J.* 486, 1045-1057: Deep Survey of Solar Nanoflares with Yohkoh
- Shimojo, M., Shibata, K., and Harvey, K.L. 1997, *Solar Phys.* 178, 379-392: The Magnetic Field Properties of Solar X-Ray Jets
- Shine, R.A., Simon, G.W., and Hurlbert, N.E. 2000, *Solar Phys.* 193, 313-331 [reprinted in *Helioseismic Diagnostics of Solar Convection and Activity* (Kluwer): Supergranule and Mesogranule Evolution
- Shine, R.A., Title, A.M., Tarbell, T.D., (12 authors), Simon, G.W., Harvey, J.W., Leibacher, J.W., Livingston, W.C., November, L.J., and Zirker, J.B. 1987, in *Theoretical Problems in High Resolution Solar Physics II: Workshop Proceedings*, Boulder, CO, 15-17 September, 1986. G. Athay and D.S. Spicer, eds. NASA CP- 2483, 133-141: Sunspot Observations from the SOUP Instrument on Spacelab 2
- Sigwarth, M., Balasubramaniam, K.S., and Knolker, M. 1999, in *Astronomical Society of the Pacific Conference Series* vol. 183, *High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998*. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 36-43: High Resolution Observations of the Dynamics of Magnetic Elements
- Sigwarth, M., Balasubramaniam, K.S., Knolker, M., and Schmidt, W. 1999, *Astron. Astrophys.* 349, 941-955: Dynamics of Solar Magnetic Elements
- Sigwarth, M., and Mattig, W. 1997, *Astron. Astrophys.* 324, 743-749: Velocity and Intensity Oscillations in Sunspot Penumbra
- Sigwarth, M., Schmidt, W., and Schussler, M. 1998, *Astron. Astrophys.* 339, L53-L56: Upwelling in a Young Sunspot

- Silva, A.V., Lin, R.P., De Pater, I., White, S.M., Shibusaki, K., and Nakajima, H. 1998, Solar Phys. 183, 389-405: Images of Gradual Millimeter Emission and Multi-Wavelength Observations of the 17 August 1994 Solar Flare
- Sime, D.G., Fisher, R.R., and Altrock, R.C. 1985, Nat'l Center for Atmos. Research Technical Note no. TN-251+STR, 1985. 71 Pages: Solar Coronal White Light, Fe X, Fe XIV, and Ca XV Observations During 1984: an Atlas of Synoptic Charts
- Sime, D.G., Fisher, R.R., and Altrock, R.C. 1989, Astrophys. J. 336, 454-467: Rotation Characteristics of the Fe XIV (5303 Å) Solar Corona
- Sime, D.G., and Streete, J. 1993, Astrophys. J. 408, 368-372: Solar Coronal Structure Near the Time of the 1991 July 11 Total Solar Eclipse
- Simnett, G.M., Sotirovski, P., and Simon, G.G. 1990, Astron. Astrophys. 227, 235-245: A Multiwavelength Analysis of Flare and Surge Activity and its Relevance to Energy Transfer Within AR 2779
- Simon, G.W. 1989, Workshop on Gravitation, Magneto-Convection, and Accretion: Proceedings, Tegernsee, Germany, 28-31 May, 1989. B. Schmidt, H. Schmidt, and H. Thomas, eds. (Munich: Max-Planck Institut), 8-13: Solar Observations on Magneto-Convection
- Simon, G.W. 1989, in Physics of Space Plasmas: Workshop Proceedings, Boston, 26-29 January, 1988. T. Chang, ed., 481-503: Magnetoconvection on the Solar Surface
- Simon, G.W. 1991, in Astrophysics from the Moon: Workshop Proceedings, Annapolis, MD, 5-7 February, 1990. M. Mumma and H.J. Smith, eds. (AIP), 111-122: Observations of Solar Magnetoconvection from a Lunar Base
- Simon, G.W. 1993, in Encyclopedia of Astronomy. 2nd Edition, S.P. Parker and J.M. Pasachoff, eds. (McGraw-Hill), 448-449: Supergranulation
- Simon, G.W. 2001, in The Encyclopedia of Astronomy and Astrophysics P. Murdin, ed. (MacMillan), 2668-2672: Solar Photosphere: Supergranulation
- Simon, G.W. 2002, in Encyclopedia of Science and Technology. 9th Edition (McGraw-Hill), 705-707: Supergranulation
- Simon, G.W., Brandt, P.N., November, L.J., Scharmer, G.B., and Shine, R.A. 1994, in Solar Surface Magnetism: Workshop Proceedings, Soesterberg The Netherlands, 1-5 November, 1993. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 261-270: Large-Scale Photospheric Motions: First Results from an Extraordinary Eleven-Hour Granulation Observation
- Simon, G.W., Brandt, P.N., November, L.J., Shine, R.A., and Strous, L.H. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 223-226: Warning: Local Correlation Tracking May Be Dangerous to Your (Scientific) Health
- Simon, G.W., Jones, H.P., and Hurlburt, N.E. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA),

Volume 1, 205-207: Surface Flows and Feature Tracking: MDI/GONG Joint Working Group Report

Simon, G.W., November, L.J., Acton, L.W., Ferguson, S.H., Shine, R.A., Tarbell, T.D., Title, A.M., Topka, K.P., and Zirin, H. 1988, *Adv. Space Res.* 8, no. 7, 169-172: Variability of Solar Mesogranulation

Simon, G.W., November, L.J., Acton, L.W., Title, A.M., Tarbell, T.D., Topka, K.P., Shine, R.A., Ferguson, S.H., Weiss, N.O., and Zirin, H. 1988, *Adv. Space Res.* 8, no. 11, 133-139: The Relation Between Convection Flows and Magnetic Structure at the Solar Surface

Simon, G.W., November, L.J., Ferguson, S.H., Shine, R.A., Tarbell, T.D., Title, A.M., Topka, K.P., and Zirin, H. 1989, in *Solar and Stellar Granulation: Third NATO ASI Workshop*, Capri, Italy, 21-25 June, 1988. R. Rutten and G. Severino, eds. (Kluwer), 371-377: Details of Large Scale Solar Motions Revealed by Granulation Test Particles

Simon, G.W., Title, A.M., Topka, K.P., (17 authors), Harvey, J.W., Leibacher, J.W., Livingston, W.C., and November, L.J. 1988, *Astrophys. J.* 327, 964-967: On the Relation Between Photospheric Flow Fields and the Magnetic Field Distribution on the Solar Surface

Simon, G.W., Title, A.M., Topka, K.P., (17 authors), Harvey, J.W., Leibacher, J.W., Livingston, W.C., and November, L.J. 1989, in *Solar System Plasma Physics*. J.H. Waite, J.L. Burch, and R.L. Moore, eds., 53-58: Magnetoconvection on the Solar Surface

Simon, G.W., Title, A.M., and Weiss, N. 1994, in *Solar Active Region Evolution: Comparing Models with Observations*. 14th NSO/Sac Peak Workshop, Sunspot New Mexico, 30 August-- 3 September, 1993. K.S. Balasubramaniam and G.W. Simon, eds. (Astron. Soc. Pacific), 87-95: Kinematic Modeling of Magnetic Field Diffusion at the Solar Surface

Simon, G.W., Title, A.M., Weiss, N., and Ginnet, G.P. 1994, in *Solar Magnetic Fields: Symposium Proceedings*, Freiburg Germany, 29 June-- 2 July, 1993. M. Schuessler and W. Schmidt, eds. (Cambridge Univ. Press), 276-278: Kinematic Modeling of Magnetoconvection

Simon, G.W., Title, A.M., and Weiss, N.O. 1991, *Adv. Space Res.* 11, no. 5, 259-262: Simulating Exploding Granules and Mesogranular Flows

Simon, G.W., Title, A.M., and Weiss, N.O. 1991, *Astrophys. J.* 375, 775-788: Modeling Mesogranules and Exploders on the Solar Surface

Simon, G.W., Title, A.M., and Weiss, N.O. 1995, *Astrophys. J.* 442, 886-897: Kinematic Models of Supergranular Diffusion on the Sun

Simon, G.W., Title, A.M., and Weiss, N.O. 2001, *Astrophys. J.* 561, 427-434: Sustaining the Sun's Magnetic Network with Emerging Bipoles

Simon, G.W., and Weiss, N.O. 1989, *Astrophys. J.* 345, 1060-1078: Simulation of Large-Scale Flows at the Solar Surface

Simon, G.W., and Weiss, N.O. 1989, in *High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium*, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 529-539: Simulating Plumes and Sinks Observed at the Solar Surface

- Simon, G.W., and Weiss, N.O. 1989, in Solar and Stellar Granulation: Third NATO ASI Workshop, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 595-599: A Simple Model of Mesogranular and Supergranular Flows
- Simon, G.W., and Weiss, N.O. 1991, Mon. Not. Roy. Astron. Soc. 252, 1p-5p: Convective Structures in the Sun
- Simon, G.W., and Weiss, N.O. 1997, *Astrophys. J.* 489, 960-967: Kinematic Modeling of Vortices in the Solar Photosphere
- Simon, G.W., and Wilson, P.R. 1985, *Astrophys. J.* 295, 241-257: Flux Changes in Small Magnetic Regions. II. Further Observations and Analysis
- Singh, J., Jain, S.K., Venkatakrishnan, P. 1994, *Astrophys. J.* 150, 49-59: Time Variability of the He I 10830 Å Line Profile
- Singh, J., and Livingston, W.C. 1987, *Solar Phys.* 109, 387-392: Sun as a Star: Rotation Rates from the Ca K Index
- Sivaraman, K.R., Bagare, S.P., Gupta, S.S., and Kariyappa, R. 1987, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (5th), Boulder, Colorado, 8-11 July, 1987. J.L. Linsky and R.E. Stencel, eds., 47-50: Calibration on the Sun for Stellar Magnetic Fields
- Sivaraman, K.R., Gupta, S.S., and Howard, R.F. 1993, *Solar Phys.* 146, 27-47: Measurement of Kodaikanal White-Light Images: I. A Comparison of 30 Years of Kodaikanal and Mount Wilson Sunspot Data
- Sivaraman, K.R., Gupta, S.S., and Howard, R.F. 1999, *Solar Phys.* 189, 69-83: Measurement of Kodaikanal White-Light Images: IV. Axial Tilt Angles of Sunspot Groups
- Skumanich, A., Lean, J.L., White, O.R., and Livingston, W.C. 1984, *Astrophys. J.* 282, 776-783: The Sun as a Star: Three-Component Analysis of Chromospheric Variability in the Calcium K Line
- Skumanich, A., and Lites, B.W. 1985, in Progress in Stellar Spectral Line Formation Theory: Workshop Proceedings, Trieste, Italy, 4-7 September, 1984. J.E. Beckman and L. Crizeuari, eds., 175-187: Radiative Transfer Diagnostics: Understanding Multi-Level Transfer Calculations
- Skumanich, A., Lites, B.W., Low, B.C., and Martinez Pillet, V. 1995, in La Polarimetrie, Outil Pour l'Etude de l'Activite Magnetique Solaire et Stellaire: Observatoire de Nice, 16-18 Novembre 1994. M. Faurobert-Scholl and H. Frisch, eds. (l'Observatoire de Paris). 115-125: Magnetic Structure of Sunspots as Determined from Spectropolarimetric Observations with the Advanced Stokes Polarimeter
- Skumanich, A., Lites, B.W., Martinez Pillet, M.V., and Seagraves, P. 1997, *Astrophys. J. Suppl. Ser.* 110, 357-380: The Calibration of the Advanced Stokes Polarimeter
- Skumanich, A., Lites, B.W., and Martinez Pillet, V. 1994, in Solar Surface Magnetism: NATO ASI Workshop Proceedings, Soesterberg The Netherlands, 1-5 November, 1993. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 99-125: Vector Spectropolarimetry with the Advanced Stokes Polarimeter (ASP) for Quantitative Solar Magnetometry

- Skumanich, A., Rees, D.E., and Lites, B.W. 1985, in Measurements of Solar Vector Magnetic Fields: Workshop Proceedings, Marshall Space Flight Center, Alabama, 14-18 Ma. 1984. NASA CP-2374, 306-321: Least Squares Inversion of Stokes Profiles in the Presence of Velocity Gradients
- Slater, D.C., Morgan, T.H., Smartt, R.N., and Stern, S.A. 1997, in Proceedings of the Second IAA International Conference on Low-Cost Planetary Missions: Laurel, Maryland USA, 16-19 April 1996, pp-pp: UV-Visible All-Reflective Coronagraph Design for a Discovery-Class Mission to Study the Lunar Atmosphere and its Extended Corona
- Smaldone, L.A., and Salvatore, A. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmeli, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 412-419: Effects of the Spectral and Spatial Resolution on the Detection of K2v Grains
- Smartt, R.N. 1984, in SPIE 483, Optical Alignment II. M.C. Ruda, ed., 78-83: Point-diffraction Interferometry as a Diagnostic for Alignment
- Smartt, R.N. 1989, in High Spatial Resolution Solar Observations: Proceedings or the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 232-237: Measurement of Telescope System Aberrations
- Smartt, R.N. 1990, in SPIE MS18, 98-103: Special Applications of the Point-Diffraction Interferometer
- Smartt, R.N. 1991, in The Astronomy and Astrophysics Encyclopedia. S.P. Maran, ed. (Van Nostrand), 133-134: Coronagraphs, Solar
- Smartt, R.N. 1992, in Encyclopedia of Science and Technology. 7th Edition, Vol. 4, (McGraw-Hill), 439: Coronagraph
- Smartt, R.N. 1992, in Space 92: Proceedings of the Third International Conferenceon Engineering, Construction, and Operations in Space. Denver, Colorado, 31 May--4 June 1992. W.Z. Sadeh, S. Sture, and R.J. Miller, eds. (American Society of Civil Engineers), 1890-1901: Some Considerations for Instrumentation for a Lunar-Based Solar Observatory
- Smartt, R.N. 1992, in Surface Finish and its Measurement: Collected Works in Optics. J.M. Bennett, ed. (Optical Society of America), 261-269: Scattered-Light Measurements of Optical Surfaces (republished from SPIE)
- Smartt, R.N. 1993, in Encyclopedia of Astronomy. 2nd Edition, S.P. Parker and J.M. Pasachoff, eds. (McGraw-Hill), 100: Coronagraph
- Smartt, R.N. 1996, Australian Optical Society News vol. 10, no. 2, 27-32: Development of New-Technology Coronagraphs
- Smartt, R.N. 1996, in MacMillan Encyclopedia of Earth Sciences vol. 2 (MacMillan Pub. Co.), 1052-1058: Sun

- Smartt, R.N. 1996, in SPIE MS128, Selected Papers on Zone Plates. J. Ojeda-Castaneda and C.C. Gomez-Reino, eds., 131-138: Zone Plate Interferometer
- Smartt, R.N. 1997, Australian and New Zealand Physicist 34, no. 3/4, 51-52: Legacy of Early Basic Research at the National Measurement Laboratory
- Smartt, R.N. 1997, in Encyclopedia of Science and Technology. 8th Edition, Vol. 4, (McGraw-Hill), 197-198: Spectroheliograph
- Smartt, R.N. 1997, in Encyclopedia of Science and Technology. 8th Edition, Vol. 4, (McGraw-Hill), 489-490: Coronagraph
- Smartt, R.N., and Arnaud, J. 1988, in Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 451-457: Coronal Emission-Line Polarization
- Smartt, R.N., Coulter, R.L., Kuhn, J.R., November, L.J., Koutchmy, S., and the CFHT Team 1993, in Segundo Congreso de Astronomia Solar: Workshop Proceedings, La Paz Mexico, 5-7 April, 1993 J. Farah, ed. (Centro de Investigacion de Astronomia Solar), 54-61: White-Light and Infrared Coronal Observations During the 11 July, 1991 Total Solar Eclipse
- Smartt, R.N., Dunn, R.B., Carmichael, R.E., Gregory, B.S., Plum D.W., Neidig, D.F., Golub, L., Bookbinder, J.A., Nystrom, G.U., Koutchmy, S.L., and Zimmerman, J.P. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific. Conf. Ser. Vol. 95.K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 531-538: White-Light Reflecting Coronagraph for the SWATH Mission
- Smartt, R.N., and Hariharan, P. 1985, Optica Acta 32, 1475-1478: Zone-Plate Radial-Shear Interferometers: a Study of Possible Configurations
- Smartt, R.N., and House, L.L. 1984, Kodaikanal Obs. Bull. 4, 35-42: Vector Magnetic Fields in Prominences: Observations and Analysis
- Smartt, R.N., and Koutchmy, S. 1992, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th), Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pacific), 660-666: Development of Reflecting Coronagraphs
- Smartt, R.N., and Koutchmy, S. 1993, in Segundo Congreso de Astronomia Solar: Workshop Proceedings, La Paz Mexico, 5-7 April, 1993. J. Farah, ed. (Centro de Investigacion de Astronomia Solar), 152-159: Recent Developments in Coronagraph Instrumentation
- Smartt, R.N., and Koutchmy, S. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19--23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 163-173: Reflecting Coronagraphs: Prospects
- Smartt, R.N., and Koutchmy, S. 1998, in SPIE 3352, Advanced Technology Optical/IR Telescopes VI: Conference Proceedings, Kona Hawaii, 23-25 March, 1998. L. M. Stepp, ed., 614-620: Advances in Ground-Based and Space-Based Reflecting Coronagraph Designs

- Smartt, R.N., Koutchmy, S., Colley, S.A., Caron, R., Schwenn, R., and Restaino, S.R. 1990, in SPIE 1236, Advanced Technology Optical Telescopes IV: Tucson, Arizona, 12-16 February, 1990: New Technology Mirror Coronagraph with Extended Applications
- Smartt, R.N., Koutchmy, S., Kim, I.S., Bougaenko, O.I., Carmichael, R.E., Hegwer, S.L., and Zimmermann, J.P. 1996, in Mirror Substrate Alternatives: Workshop Proceedings, Grasse France, 9-12 October 1995. J. Rozelot and W.C. Livingston, eds., 127-134: Application of New-Technology Objective Mirrors in Reflecting Coronagraphs
- Smartt, R.N., Koutchmy, S., and Noens, J. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March 1992. D.M. Rabin, J.T. Jeffries, and C. Lindsey, eds. (Kluwer), 603-608: Near-IR Solar Coronal Observations with New-Technology Reflecting Coronagraphs
- Smartt, R.N., Koutchmy, S., and Vial, J.C. 1990, in Astrophysics from the Moon: Workshop Proceedings, Annapolis, MD, 5-7 February, 1990. M. Mumma and H.J. Smith, eds. (American Institute of Physics), 578-583: UV Solar Reflecting Coronagraph
- Smartt, R.N., and Querfeld, C.W. 1991, in Solar Polarimetry: Workshop Proceedings, National Solar Observatory, Sunspot, New Mexico, 23-31 August, 1990. L.J. November, ed., 326-329: Interpretation of Polarization Measurements of Coronal Fe XIII (10747 Å) Emission
- Smartt, R.N., and Steel, W.H. 1985, Appl. Opt. 24, 1402-1403: Point-diffraction Interference Microscopy
- Smartt, R.N., and Zhang, Z. 1984, Solar Phys. 90, 315-324: Visible Coronal Emission Associated with a Quiescent Prominence
- Smartt, R.N., and Zhang, Z. 1987, in Theoretical Problems in High-Resolution Solar Physics II: Workshop Proceedings, Boulder CO, 15-17 September, 1986. G. Athay and D.S. Spicer, eds. NASA CP- 2483, 129-132: Loop Interaction in the Visible Emission Corona--Morphological Details
- Smartt, R.N., and Zhang, Z. 1990, in IAU Symposium 142, Basic Plasma Processes on the Sun: Workshop Proceedings, Bangalore, India, December 1-5, 1989. V. Krishan and E. Priest, eds. (Kluwer), 350-351: Coronal Loop Interaction
- Smartt, R.N., and Zhang, Z. 1993, in ESA SP-348, Coronal Streamers, Coronal Loops, and Coronal and Solar Wind Compositions: Proceedings of the First SOHO Workshop, Annapolis Maryland, 25-28 August, 1992. Clare Mattock, ed. (ESA), 185-188: Morphology of Coronal Loop Interactions
- Smartt, R.N., and Zhang, Z. 1993, in Physics of Solar and Stellar Coronae: Bicentennial of the Palermo Astronomical Observatory, Palermo Italy, 22-26 June, 1992. J.F. Linsky and S. Serio, eds. (Kluwer), 183-186: Coronal Loop Interaction
- Smartt, R.N., Zhang, Z., and Airapetian, V.S. 1998, in IAU Colloquium 167, New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997. D. Webb, D.M. Rust and B. Schmeider, eds. (Kluwer), 37-40: Observations of the Association of Prominences and the Surrounding Corona
- Smartt, R.N., Zhang, Z., Kim, I.S., and Kaghavili, E.K. 1998, in ESA SP-421, Solar Jets and Coronal Plumes: Proceedings of an International Meeting, Guadeloupe France, 23-26 February 1998. S.

- Koutchmy, P. Martens, and K. Shibata, eds., 333-335: Coronal Loop Crossings and Associated H-alpha Activity
- Smartt, R.N., Zhang, Z., Kim, I.S., and Reardon, K.P. 1994, in IAU Colloquium 144, Solar Coronal Structures. V. Rusin, P. Heinzel, and J.C. Vial, eds. (Kluwer), 219-225: Coronal Loop Interaction Observed at Visible Wavelengths
- Smartt, R.N., Zhang, Z., and Smutko, M.F. 1993, Solar Phys. 148, 139-151: Post-Flare Coronal Loop Interaction
- Smartt, R.N., and Zirker, J.B. 1986, in Solar Terrestrial Physics: Proceedings of Second Indo-US Workshop, New Delhi, Jan.30- Feb.2, 1984(New Delhi: National Physical Laboratory), 269-282: New Observations of the Solar Emission Corona in Fe X and Fe XIV
- Smith, D.H. 1989, Sky and Telescope 77, 598-602: An Observatory at 90 South
- Smith, G., and Drake, J.J. 1988, Mon. Not. Roy. Astron. Soc. 231, 115-123: Collisional Broadening of the Calcium Infrared Triplet Lines by Atomic Hydrogen
- Smith, H.A., Kuhn, J.R., and Hawley, S.L. 1997, in ASP Conference Series 127, Proper Motions and Galactic Astronomy: Workshop Proceedings. R.M. Humphrey, ed.: Tidal Streams from the Carina and Draco Dwarf Galaxies
- Smith, J.B., and Neidig, D.F. 1986, Solar-Terrestrial Predictions: Workshop Proceedings ( 2nd), Meudon, France, 18-22 June, 1984. P.A. Simon et al, eds., 167-169: Working Group C Report on Short-Term Solar Predictions
- Smith, J.B., Neidig, D.F., Wiborg, P.H., West, E.A., Hagyard, M.J., Adams, M., and Seagraves, P.H. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific. Conf. Ser. Vol. 95.K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 55-65: An Objective Test of Magnetic Shear as a Flare Predictor
- Smith, M.A. 1985, Astrophys. J. 288, 266-274: Pulsational Mode-Typing in Line Profile Variables. VI. Nonradial Modes in the Remarkable B-Star epsilon Persei
- Smith, M.A. 1985, Astrophys. J. 297, 206-223: The Nonradial Oscillations of Spica. I. Two Commensurable Modes
- Smith, M.A. 1985, Astrophys. J. 297, 224-232: The Nonradial Oscillations of Spica. II. A "Quasi-Toroidal" Mode
- Smith, M.A. 1986, Astrophys. J. 304, 728-738: Pulsational Mode-Typing in Line Profile Variables. VII. Commensurable Modes and Non-Uniform Period Behaviour in Delta Scorpis
- Smith, M.A. 1986, Astrophys. J. 307, 213-221: The Nonradial Oscillations of epsilon Persei I: a Lawn-Sprinkling Shock
- Smith, M.A. 1986, Publ. Astron. Soc. Pacific 98, 33-34: Nonradial Pulsations in Massive Stars: Observations and Oddities

- Smith, M.A. 1987, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings ( 5th), Boulder, Colorado, 8-11 July, 1987. J.L. Linsky and R.E. Stencel, eds., 192-204: Post Zero-Age Main Sequence Rotation Among Late-Type Stars
- Smith, M.A. 1987, in Hydrodynamic and Magnetohydrodynamic Problems in the Sun and Stars: Unno Workshop Proceedings, Tokyo, 26-28 February, 1986. Y. Osaki, ed., 145-184: Observations of Nonradial Pulsations in OB Stars: a Decade of Progress
- Smith, M.A. 1987, in The SHIRSOG Workshop: Proceedings of a Workshop on Prospects for a New Synoptic High Resolution Spectroscopic Facility, Tucson, Arizona, 3 September, 1986. M.S. Giampapa, ed., 124-132: The McMath Solar-Stellar Nighttime Program
- Smith, M.A. 1987, in The SHIRSOG Workshop: Proceedings of a Workshop on Prospects for a New Synoptic High Resolution Spectroscopic Facility, Tucson, Arizona, 3 September, 1986. M.S. Giampapa, ed., 21-33: Observational Requirements for a Synoptic Spectroscopic Study of Nonradial Pulsations in OB Stars
- Smith, M.A. 1989, *Astrophys. J. Suppl. Ser.* 71, 357-386: Spectral Transient Activity in the He I lambda6678 Line of Lambda Eri (B2e): Magnetic Quasi-Cycles?
- Smith, M.A. 1989, Pulsation and Mass Loss in Stars: Fourth Trieste Conference Proceedings, Trieste, 13-17 September, 1987. R. Stalio and L.A. Willson, eds., 251-272: Nonradial Pulsations and Early Be Stars: Angular Momentum Considerations
- Smith, M.A. 1989, in Angular Momentum and Mass Loss in Hot Stars. L. Willson and R. Stalio, eds., 343-: Chromospheric H-alpha Activity in Alpha Orionis
- Smith, M.A. 1989, in Automatic Small Telescopes. D. Hayes and R.M. Genet, eds., 143-154: Nonradial Pulsations in B Stars: Matchmaking for a Global Network of APTs
- Smith, M.A. 1991, in Rapid Variability in OB-Stars. D. Baade, ed., 59-: Spectral Transients in lambda Eridani and Related Stars
- Smith, M.A. 1992, in Nonisotropic and Variable Outflows from Stars, ASP Conference Series 22. L. Drissen et al, eds. (ASP), 67-: A Model for 'Dimples' in the B2e Star lambda Eridani
- Smith, M.A., Devi, V.M., Benner, D.C., and Rinsland, C.P. 1996, in Symposium on Molecular Spectroscopy (50th): Ohio State University, Columbus Ohio, 12-16 June, 1995, 275-: Measurements of O3 Line Intensities in the nu3 Band
- Smith, M.A., Devi, V.M., Benner, D.C., and Rinsland, C.P. 1997, *J. Mol. Spectr.* 182, 239-259: Temperature Dependence of Air-Broadening and Shift Coefficients of O3 Lines in the nuu1 Band
- Smith, M.A., Fitch, W.S., Africano, J.L., Goodrich, B.D., Halbedel, W., Palmer, L.H., and Henry, G.W. 1984, *Astrophys. J.* 282, 226-235: Stable Nonradial Pulsations in 53 Persei from 1977 to 1983
- Smith, M.A., Fullerton, A.W., and Percy, J.R. 1987, *Astrophys. J.* 320, 768-793: The Nonradial Oscillations of epsilon Persei. II. Nonlinear Characteristics

- Smith, M.A., Fullerton, A.W., and Percy, J.R. 1987, in Stellar Pulsations: Cox Memorial Conference, Los Alamos, NM, 11-15 August, 1986. A.N. Cox, ed. Lecture Notes in Physics no. 274 (Springer-Verlag), 79-82: Nonlinear Behavior of Nonradial Oscillations in epsilon Persei
- Smith, M.A., and Giampapa, M.S. 1987, in Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (5th), Boulder, Colorado, 8-11 July, 1987. J.L. Linsky and R.E. Stencel, eds., 477-479: The McMath Solar-Stellar Synoptic Program
- Smith, M.A., Gies, D.R., and Penrod, G.D. 1987, in U Colloquium 92, Physics of Be Stars: Boulder, CO, 18-22 August, 1986. A. Slettebak and T. Snow, eds., 464-467: Spectral Transients in the Line Profiles of lambda Eridani
- Smith, M.A., Graves, J.E., Jaksha, D.B., Plymate, C.L., and Ramsey, L.W. 1987, Publ. Astron. Soc. Pacific 99, 654-659: Improvements in Spectroscopic Continuum Noise with Fiber-Optics Illumination of a Reticon Array
- Smith, M.A., and Huang, Y., Livingston, W.C. 1987, Pub. Astron. Soc. Pacific 99, 297-302: The Amplification of Solar Line Asymmetries by Rotation
- Smith, M.A., and Jaksha, D.B. 1984, in Cool Stars, Stellar Systems, and the Sun: Cambridge Workshop Proceedings (3rd), Cambridge, Massachusetts, 5-7 October, 1983. S.L. Baliunas and L. Hartmann, eds., 182-185: The NSO Initiative to Pursue the Solar-Stellar Connection on the McMath Solar Telescope
- Smith, M.A., Patten, B.M., and Goldberg, L. 1989, Astron. J. 98, 2233-2248: Radial Velocity Variations in alpha Ori, alpha Sco, and alpha Her
- Smith, M.A., and Penrod, G.D. 1986, in Relations Between Chromospheric-Coronal Heating and Mass Loss in Stars: Third Trieste Workshop, Sunspot, New Mexico, 18-25 August, 1984. J.B. Zirker and R. Stalio, eds., 394-404: Nonradial Modes in Early B-Stars: an Initial Look at Their Influence on the Circumstellar Environment
- Smith, M.A., Peters, G.J., and Grady, C.A. 1991, Astrophys. J. 367, 302-309: Circumstellar Material Around Eridani (B2e). I. Geometry and Kinematics
- Smith, M.A., and Polidan, R.S. 1993, Astrophys. J 408, 323-336: Dynamic Processes in Be Star Atmospheres. I. "Dimple" Formation in the He I lambda 6678 Line of lambda Eridani
- Smith, M.A., Rinsland, C.P., and Devi, V.M. 1991, J. Mol. Spectr. 147, 142-154: Measurements of Self-Broadening of Ozone
- Smith, M.A., Rinsland, C.P., Devi, V.M., Benner, D.C., and Thakur, K.B. 1988, J. Opt. Soc. Am. B 5, 585-592: Measurements of Air-Broadened and Nitrogen-Broadened Halfwidths and Shifts of Ozone Lines Near 9 Microns
- Smith, M.A., Rinsland, C.P., Devi, V.M., Flaud, J., and Camy-Peyret, C. 1990, J. Mol. Spectr. 139, 171-181: The 3.6 Micron Region of Ozone: Line Positions and Intensities
- Smith, M.A., Teays, T.J., Taylor, L.L., Wasatonic, R., Guinan, E.F., and Baliunas, S. 1996, in IAU Colloquium 155, Astrophysical Applications of Stellar Pulsation: Proceedings, Cape Town South

Africa, 6-10 February, 1995. R.S. Stobie and P.A. Whitelock, eds. (A.S.P.), 403-404: Pulsation and Long-Periods in three Nearby M Supergiants

Smith, M.H., Rinsland, C.P., and Devi, V.M. 1991, J. Mol. Spectr. 147, 142-154: Measurements of Self-Broadening of Infrared Absorption Lines of Ozone

Smith, P.L., Lean, J.L., Christensen, A.B., Harvey, K.L., Judge, D.L., Moore, R.L., Toor, M.R., and Woods, T.N. 1993, in Metrologia 60, 275-277: SOURCE: the Solar Ultraviolet Radiation and Correlative Emissions Mission

Smith, Z., Watari, S., Dryer, M., Manoharan, P.K., and McIntosh, P.S. 1997, Solar Phys. 171, 177-190: Identification of the Solar Source for the 18 October 1995 Magnetic Cloud

Smithson, R.C., and Peri, M.L. 1987, in Adaptive Optics in Solar Observations: Workshop Proceedings, Freiburg, 8-9 September, 1987. F. Merkle, O. Engvold, and R. Falomo, eds. LEST Technical Report 28, 193-203: Partial Adaptive Correction of Astronomical Images

Smithson, R.C., and Peri, M.L. 1989, J. Opt. Soc. Am. A 6, 92-97: Partial Correction of Astronomical Images with Active Mirrors

Snodgrass, H.B. 1992, in The Solar Cycle: Workshop Proceedings, National Solar Observatory/Sacramento Peak (12th), 15-18 October, 1991. K.L. Harvey, ed. (Astronomical Society of the Pacific), 71-82: Smokestacks and Balloonmen- A Magnetic Rotation Controversy

Snodgrass, H.B., and Howard, R.F. 1985, Science 228, 945-952: Torsional Oscillations of the Sun

Snodgrass, H.B., Howard, R.F., and Webster, L. 1985, Solar Phys. 95, 221-228: Torsional Oscillations of Low Mode

Sobotka, M., Brandt, P.N., and Simon, G.W. 1996, in JOSO Annual Report 95. M. Saniga, ed., 145: Temporal Evolution of Fine-Structures in Sunspots

Sobotka, M., Brandt, P.N., and Simon, G.W. 1997, Astron. Astrophys. 328, 682-688: Fine Structure in Sunspots. I. Sizes and Lifetimes of Umbral Dots

Sobotka, M., Brandt, P.N., and Simon, G.W. 1997, Astron. Astrophys. 328, 689-694: Fine Structure in Sunspots. II. Intensity Variations and Proper Motions of Umbral Dots

Sobotka, M., Brandt, P.N., and Simon, G.W. 1997, in JOSO Annual Report 96. M. Saniga, ed., 84-85: Fine Structure in Sunspots: Sizes, Lifetimes, Motions, and Temporal Variations

Sobotka, M., Brandt, P.N., and Simon, G.W. 1998, in Comite Cientifico Internacional (CCI) Annual Report 1997, 14: Umbral Dots in Sunspots

Sobotka, M., Brandt, P.N., and Simon, G.W. 1999, Astron. Astrophys. 348, 621-626: Fine Structure in Sunspots. III. Penumbra Grains

Sobotka, M., Brandt, P.N., and Simon, G.W. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam,

and R.R. Radick, eds. (Astron. Soc. Pacific), 116-123: Lifetimes and Motions of Penumbral Grains-- Preliminary Results

Sobotka, M., Brandt, P.N., and Simon, G.W. 1999, in JOSO Annual Report 1998, 89-90: Lifetimes and Motions of Penumbral Grains. Preliminary Results

Sobotka, M., Vazquez, M., Bonet, J.A., Hanslmeier, A., and Hirzberger, J. 1999, *Astrophys. J.* 511, 436-450: Temporal Evolution of Fine Structures in and Around Solar Pores

Solanki, S.K. 1984, in Hydromagnetics of the Sun: Proceedings of the Fourth European Meeting on Solar Physics, Noordwijkerhout, The Netherlands, 1-3 October, 1984. ESA SP-220, 207-209: The Photospheric Temperature Structure of Magnetic Fluxtubes

Solanki, S.K. 1985, in Theoretical Problems in High-Resolution Solar Physics: Proceedings of the MPA/LPARL Workshop in Munchen, 16-18 September 1985. H.U. Schmidt, ed., 172-175: High Spectral Resolution and Properties of Small Magnetic Fluxtubes

Solanki, S.K. 1986, *Astron. Astrophys.* 168, 311-329: Velocities in Solar Magnetic Fluxtubes

Solanki, S.K. 1987, The Photospheric Layers of Solar Magnetic Flux Tubes. PhD Thesis (ETH, Zurich)

Solanki, S.K. 1994, in IAU Colloquium 143, The Sun as a Variable Star: Solar and Stellar Irradiance Variations. Proceedings, Boulder, CO, 20-25 June 1993. J. M. Pap, C. Frohlich, H.S. Hudson and S. Solanki, eds. (Cambridge University Press), 226-235: Irradiance Effects of Small-Scale Magnetic Fields on the Sun

Solanki, S.K. 1994, in IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 393-406: Properties of Magnetic Features from the Analysis of Near-Infrared Spectral Lines

Solanki, S.K., Biemont, E., and Murset, U. 1990, *Astron. Astrophys. Suppl. Ser.* 83, 307-315: Interesting Lines in the Infrared Solar Spectrum Between lambda 1.49 and lambda 1.8 mum

Solanki, S.K., Bruls, J.H., Steiner, O., Ayres, T., Livingston, W.C., and Uitenbroek, H. 1994, in Solar Surface Magnetism: NATO ASI Workshop Proceedings, Soesterberg The Netherlands, 1-5 November, 1993. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 91-98: The Upper and Lower Chromosphere of Small-Scale Magnetic Features

Solanki, S.K., Finsterle, W., Ruedi, I., and Livingston, W.C. 1999, *Astron. Astrophys.* 347, L27-L30: Expansion of Solar Magnetic Flux Tubes Large and Small

Solanki, S.K., Livingston, W.C., and Ayres, T. 1994, *Science* 263, 64-66: New Light on the Dark Heart of the Solar Chromosphere

Solanki, S.K., Livingston, W.C., Muglach, K., and Wallace, L. 1996, *Astron. Astrophys.* 315, 303-311: The Beat of the Solar Chromosphere's Cold Heart

Solanki, S.K., Montavon, C., and Livingston, W.C. 1993, in IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Proceedings, Beijing China, 06-12 September 1992. H. Zirin, G. Ai, and H. Wang, eds., 52-55: Evershed Effect of Sunspots and Their Canopies

Solanki, S.K., Montavon, C.A., and Livingston, W.C. 1994, *Astron. Astrophys.* 283, 221-231: Infrared Lines as Probes of Solar Magnetic Features. VII. On the Nature of the Evershed Effect in Sunspots

Solanki, S.K., Montavon, C.A., and Livingston, W.C. 1994, in *Solar Magnetic Fields: Symposium Proceedings*, Freiburg Germany, 29 June-- 2 July, 1993. M. Schuessler and W. Schmidt, eds. (Cambridge Univ. Press), 173-175: On the Nature of the Evershed Effect

Solanki, S.K., Pantellini, F.G., and Stenflo, J.O. 1986, *Solar Phys.* 107, 57-51: Lines in the Wavelength Range 4300-6700 Angstroms with Large Stokes V Amplitudes Outside Sunspots

Solanki, S.K., Ruedi, I., and Livingston, W.C. 1992, *Astron. Astrophys.* 263, 312-322: Infrared Lines as Probes of Solar Magnetic Features. II. Diagnostic Capabilities of Fe I 15648.5 Å and 15652.9 Å

Solanki, S.K., Ruedi, I., and Livingston, W.C. 1992, *Astron. Astrophys.* 263, 339-350: Infrared Lines as Probes of Solar Magnetic Features. V. The Magnetic Structure of a Simple Sunspot and its Canopy

Solanki, S.K., Ruedi, I., Livingston, W.C., and Schmidt, H.U. 1994, in *IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings*, Tucson, Arizona, 2-6 March, 1992. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 471-475: 1.5 μm Observations and the Depth of Sunspot Penumbrae

Solanki, S.K., Ruedi, I., Livingston, W.C., and Stenflo, J.O. 1992, in *Cool Stars, Stellar Systems, and the Sun: Workshop Proceedings (7th)*, Tucson Arizona, 9-12 October, 1991. M.S. Giampapa and J.A. Bookbinder, eds. (Astron. Soc. Pac.), 262-264: Strong and Weak Solar Magnetic Fields

Solanki, S.K., Ruedi, I., and Rabin, D.M. 1993, in *IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions*: Beijing, China, 6-12 September, 1992. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 534-537: Siphon Flow Across the Magnetic Neutral-Line of an Active Region

Solanki, S.K., Ruedi, I., Finsterle, W., and Livingston, W. 1999, in *International Workshop on Solar Polarization: Proceedings*, Bangalore India, 12-16 October, 1998. K. Nagendra and J.O. Stenflo, eds., 397-408: On the Expansion of Large and Small Flux Tubes with Height

Solanki, S.K., and Stenflo, J.O. 1984, *Astron. Astrophys.* 140, 185-198: Properties of Solar Magnetic Fluxtubes as Revealed by FeI Lines

Solanki, S.K., and Stenflo, J.O. 1985, *Astron. Astrophys.* 148, 123-132: Models of Solar Magnetic Fluxtubes: Constraints Imposed by FeI and II Lines

Solanki, S.K., and Stenflo, J.O. 1986, *Astron. Astrophys.* 170, 120-125: Some Effects of Finite Spectral Resolution on the Stokes V Profile

Solanki, S.K., Walther, U., and Livingston, W.C. 1993, in *IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions*: Beijing, China, 6-12 September, 1992. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 48-51: Field Strength vs. Temperature Relation and the Structure of Sunspots

- Solanki, S.K., Zayer, I., and Stenflo, J.O. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 409-418: The Internal Magnetic Field Structure of Solar Magnetic Elements
- Solanki, S.K., Zufferey, D., Lin, H., Ruedi, I., and Kuhn, J.R. 1996, Astron. Astrophys. 310, L33-L36: Infrared Lines as Probes of Solar Magnetic Features XII. Magnetic Flux Tubes: Evidence of Convective Collapse?
- Solberg, F.C., and McAllister, A. 1998, in IAU Colloquium 167. New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997. D. Webb, D.M. Rust and B. Schmeider, eds. (Kluwer), 171:- Axial Soft X-Ray Brightening Associated with H-Alpha Filaments
- Sonnett, C., and Giampapa, M.S., eds. 1991, The Sun in Time. (Univ. of Arizona Press)
- Soon, W.H., Baliunas, S.L., and Zhang, Q. 1994, in The Solar Engine and Its Influence on Terrestrial Atmosphere and Climate: Proceedings, NATO Advanced Research Series, Paris France, 25-29 October, 1993. E. Ribes, ed. (Springer-Verlag): A Technique for Estimating Long-Term Variations of Solar Total Irradiance: Preliminary Estimates Based on Observations of the Sun and Solar Type Stars
- Sowell, J.R. 1987, Astrophys. J. Suppl. Ser. 64, 241-268: Yellow Evolved Stars in Open Clusters
- Spencer, M.N., Chackerian, C., and Giver, L.P. 1994, J. Mol. Spectr 165, 506-524: The Nitric Oxide Fundamental Band: Frequency and Shape Parameters for Rovibrational Lines
- Spencer, N.M., Chackerian, C., Giver, L.P., and Brown, L.R. 1997, J. Mol. Spectr. 181, 307-315: Temperature Dependence of Nitrogen Broadening of the NO Fundamental Vibrational Band
- Spruit, H.C. 1988, Astron. Astrophys. 194, 319-327: Particle Acceleration in a Flow Accreting Through Shock Waves
- Spruit, H.C. 1988, in The Role of Fine-Scale Magnetic Fields in the Structure of the Solar Atmosphere: Workshop Proceedings, Tenerife (Canary Islands), 6-12 October, 1986 (Cambridge Univ. Press), 199-209: How is the Penumbra Formed?
- Spruit, H.C., Matsuda, T., Inoue, M., and Sawada, K. 1987, Mon. Not. Roy. Astron. Soc. 229, 517-527: Spiral Shocks and Accretion in Disks
- Spruit, H.C., Title, A.M., and Van Ballegooijen, A.A. 1987, Solar Phys. 110, 115-128: Is There a Weak Mixed Polarity Background Field? Theoretical Arguments
- Srivastava, N., Ambastha, A., and Bhatnagar, A. 1991, Solar Phys. 133, 339-355: Evolution of Helically Twisted Prominence Structures of March 11, 1979
- Srivastava, N., Gonzalez, W.D., Gonzalez, A.L., and Masuda, S. 1998, Solar Phys. 183, 419-434: On the Solar Origins of Intense Geomagnetic Storms Observed During 6-11 March 1993
- Stalio, R., and Zirker, J.B. 1986, eds., Relations Between Chromospheric-Coronal Heating and Mass Loss in Stars: Third Trieste Workshop, Sunspot, NM, 18-25 August, 1984. 404 pp.

- Stanchfield, D.C., Thomas, J.H., and Lites, B.W. 1997, *Astrophys. J.* 477, 485-494: The Vector Magnetic Field, Evershed Flow, and Intensity in a Sunspot
- Stark, G., Brault, J.W., and Abrams, M.C. 1994, *J. Opt. Soc. Am. B* 11, 3-32: Fourier-Transform Spectra of the A2Sigma<sup>+</sup> - X2Pi Deltamu = 0 Bands of OH and OD
- Stathopoulou, M., and Alissandrakis, C.E. 1993, *Astron. Astrophys.* 274, 555-562: A Study of the Asymmetry of Fe I Lines in the Solar Spectrum
- Stauffer, J.R., Giampapa, M.S., Herbst, W., Vincent, J.M., Hartmann, L.W., and Stern, R.A. 1991, *Astrophys. J.* 374, 142-149: The Chromospheric Activity of Low Mass Stars in the Hyades
- Stauffer, J.R., Hartmann, L.W., Prosser, C.F., Randich, S., Balachandran, S., Patten, B., Simon, T., and Giampapa, M.S. 1997, *Astrophys. J.* 479, 776-: Rotational Velocities and Chromospheric Activity of Low Mass Stars in the Young Open Clusters IC 2391 and IC 2602
- Stauffer, J.R., Liebert, J., and Giampapa, M.S. 1995, in *Astron. J.* 109, 298-311: Radial Velocities of Very Low Mass Stars and Candidate Brown Dwarf Members of the Hyades and Pleiades: II
- Stauffer, J.R., Liebert, J., Giampapa, M.S., MacIntosh, B., Reid, N., and Hamilton, D. 1994, in *Astron. J.* 108, 160-174: Radial Velocities of Very Low Mass Stars and Candidate Brown Dwarf Members of the Hyades and Pleiades
- Stauffer, J.R., Prosser, C.F., Giampapa, M.S., Soderblom, D.R., and Simon, T. 1992, *Astron. J.* 106, 229-235: Lithium and Chromospheric Activity in the Alpha Persei Cluster
- Stebbins, R.T., and Goode, P.R. 1987, *Solar Phys.* 110, 237-253: Waves in the Solar Photosphere
- Stebbins, R.T., and Mann, R. 1984, *Antarctic Journal of the U.S.* 18, 268-269 (1983 Review Issue): Observations of Solar Oscillations at the South Pole
- Stebbins, R.T., Rimmele, T.R., and Goode, P.R. 1995, in *GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings*, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 354-357: Photospheric Wave Behavior
- Stebbins, R.T., Ronan, R., and Arrambide, M.R. 1985, *Antarctic Journal of the U.S.* 20, 219-220, 1985: Observation of Solar Brightness Oscillations at the South Pole
- Steffen, M. 1989, in *Solar and Stellar Granulation: Third NATO ASI Workshop*, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 425-440: Spectroscopic Properties of Solar Granulation Obtained from 2-D Numerical Simulations
- Steffen, M., Ludwig, H.G., and Kruess, A. 1989, *Astron. Astrophys.* 213, 371-382: A Numerical Simulation Study of Solar Granular Convection in Cells of Different Horizontal Dimension
- Steinegger, M., Brandt, P.N., and Haupt, H.F. 1996, *Astron. Astrophys.* 310, 635-645: Sunspot Irradiance Deficit, Facular Excess, and the Energy Balance of Solar Active Regions

- Steinegger, M., Vazquez, M., Bonet, J.A., and Brandt, P.N. 1996, *Astrophys. J.* 461, 478-498: On the Energy Balance of Solar Active Regions
- Stellmacher, G., and Wiehr, E. 1991, *Astron. Astrophys.* 248, 227-231: Geometric Line Elevation in Solar Limb Faculae
- Stenflo, J.O. 1984, *Adv. Space Res.* 4, no. 8, 5-16: Fine-Scale Structure of Solar Magnetic Fields
- Stenflo, J.O. 1985, in *Proceedings of the Kunming Workshop on Solar Physics and Interplanetary Travelling Phenomena: Kunming, China, 21-25 November 1983*, 189-195: Structure of the Spatially Unresolved Magnetic Fields on the Sun
- Stenflo, J.O. 1987, *Mitt. Astron. Gesellschaft* 65, 25-40: The Magnetic Field of the Sun
- Stenflo, J.O. 1987, *Solar Phys.* 114, 1-19: Observational Constraints on a "Hidden" Turbulent Magnetic Field of the Sun
- Stenflo, J.O. 1987, in *Small Scale Magnetic Flux Concentrations in the Solar Photosphere: Proceedings of a Workshop Held in Gottingen, 1-3 October, 1985*. W. Deinzer et al, eds.,: Stokes Polarimetry
- Stenflo, J.O. 1988, *Astrophys. Space Sci.* 144, 321-: Global Wave Patterns in the Sun's Magnetic Field
- Stenflo, J.O. 1989, *Astron. Astrophys.* 210, 403-409: Differential Rotation of the Sun's Magnetic Field Pattern
- Stenflo, J.O. 1989, in *Astron. Astrophys. Rev.* 1, 3-48 : Small Scale Magnetic Features on the Sun
- Stenflo, J.O. 1990, *Astron. Astrophys.* 233, 220-228: Time Invariance of the Sun's Rotation Rate
- Stenflo, J.O. 1991, in *IAU Colloquium 130, The Sun and Cool Stars: Activity, Magnetism, and Dynamos. Workshop Proceedings, Helsinki, Finland, 17-21 July, 1990*. Ilkka Tuominen, ed. (Springer-Verlag), 193-212 : Diagnostics of the Solar Dynamo Using the Observed Pattern of Surface Magnetic Fields
- Stenflo, J.O. 1993, in *IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992*. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 205-214: Strong and Weak Magnetic Fields: Nature of the Small-Scale Flux Elements
- Stenflo, J.O. 1994, in *Solar Magnetic Fields: Symposium Proceedings, Freiburg Germany, 29 June-- 2 July, 1993*. M. Schuessler and W. Schmidt, eds. (Cambridge Univ. Press), 301-315: Solar Magnetic Flux at Small Scales
- Stenflo, J.O. 1994, in *Solar Surface Magnetism: NATO Advanced Research Workshop, Soesterberg The Netherlands, 1-5 November, 1993*. R.J. Rutten and C.J. Schrijver, eds. (Kluwer), 365-378: Cycle Patterns of the Axisymmetric Magnetic Field
- Stenflo, J.O. 1996, *Solar Phys.* 164, 1-20: Scattering Physics
- Stenflo, J.O. 1999, in *International Workshop on Solar Polarization: Proceedings, Bangalore India, 12-16 October, 1998*. K. Nagendra and J.O. Stenflo, eds., 1-16: Solar Magnetism and the Second Solar Spectrum: Future Directions

- Stenflo, J.O., Bianda, M., Keller, C.U., and Solanki, S.K. 1997, Astron. Astrophys. 322, 985-994: Center-to-Limb Variation of the Second Solar Spectrum
- Stenflo, J.O., and Gudel, M. 1988, Astron. Astrophys. 191, 137-148: Evolution of Solar Magnetic Fields: Modal Structure
- Stenflo, J.O., and Harvey, J.W. 1985, Solar Phys. 95, 99-118: Dependence of the Properties of Magnetic Fluxtubes on Area Factor or Amount of Flux
- Stenflo, J.O., Harvey, J.W., Brault, J.W., and Solanki, S. 1984, Astron. Astrophys. 131, 333-346: Diagnostics of Solar Magnetic Fluxtubes Using a Fourier Transform Spectrometer
- Stenflo, J.O., and Keller, C.U. 1996, Nature 382, 588:-New Window for Spectroscopy
- Stenflo, J.O., and Keller, C.U. 1997, Astron. Astrophys. 321, 927-934: The Second Solar Spectrum: a New Window for Diagnostics of the Sun
- Stenflo, J.O., Keller, C.U., and Gandorfer, A. 1998, Astron. Astrophys. 329, 319-328: Differential Hanle Effect and the Spatial Variation of the Turbulent Magnetic Fields on the Sun
- Stenflo, J.O., and Solanki, S.K. 1992, in Solar Physics and Astrophysics at Interferometric Resolution: an International Workshop to Present SIMURIS. Paris France, 17-19 February, 1992. ESA SP-344. L. Dame and T.D. Guyenne, eds., 197-200: Polarimetry with an Imaging FTS
- Stenflo, J.O., Solanki, S.K., and Harvey, J.W. 1987, Astron. Astrophys. 171, 305-316: Center-to-Limb Variation of Stokes Profiles and the Diagnostics of Solar Magnetic Fluxtubes
- Stenflo, J.O., Solanki, S.K., and Harvey, J.W. 1987, Astron. Astrophys. 173, 167-179: Diagnostics of Solar Magnetic Fluxtubes with the Infrared Line Fe I lambda 15648.54 Angstroms
- Stenflo, J.O., and Vogel, M. 1986, Nature 319, 285-290: Global Resonances in the Evolution of Solar Magnetic Fields
- Stenflo, J.O., and Weisenhorn, A.L. 1986, Solar Phys. 108, 205-220: Evolution of the Sun's Magnetic Polarities
- Sterling, A.C., and Hudson, H.S. 1997, Astrophys. J. 491, L55-L58' YOHKOH SXT Observations of X-Ray "Dimming" Associated with a Halo Coronal Mass Ejection
- Stewart, R.T. 1985, Solar Phys. 96, 381-395: Solar Noise Storms and Magnetic Sector Structures
- Stewart, R.T., Brueckner, G.E., and Dere, K.P. 1986, Solar Phys. 106, 107-130: Culgoora Radio and Skylab EUV Observations of Emerging Magnetic Flux in the Lower Corona
- Stocke, J.T.; Hartigan, P.M.; Strom, S.E.; Strom, K.M.; Anderson, E.R.; Hartmann, L.W.; Kenyon, S.J. 1988, Astrophys. J. Suppl. Ser. 68, 229-256: A Detailed Study of the Lynds 1551 Star Formation Region

- Strassmeier, K.G. 1990, *Astrophys. J.* 348, 682-699: Photometric and Spectroscopic Modeling of Starspots on the RS CVn Binary HD 26337
- Strassmeier, K.G. 1990, in Active Close Binaries: NATO ASI Proceedings, C. Ibanoglu and I. Yavuz, eds. (Kluwer), 485-491: Synoptic Doppler Imaging and Photometry of Spotted Stars
- Strassmeier, K.G. 1992, in Robotic Telescopes in the 1990's: Proceedings of the 10th ASP Conference. A.V. Filippenko, ed., 39:- Starspot Photometry: Observational Review and Interplay with Spectroscopy
- Strassmeier, K.G. 1992, in Surface Inhomogeneities on Late-Type Stars. P.B. Byrne and D.J. Mullan, eds. (Springer-Verlag), 50-53: The Polar Spot Structure on HD 26337
- Strassmeier, K.G. 1993, in IAU Colloquium 137, Inside the Stars: W.W. Weiss and A. Baglin, eds.: Activity Tracers
- Strassmeier, K.G., and Hooten, J.T. 1988, IAPPP Comm. 34, 21-25: Status Report of the International Campaign of Simultaneous VRI Photometry and Spectroscopy of EI Eri = HD 26337
- Strassmeier, K.G., Neff, J., and Rodono, M. 1989, in Remote Access Small Telescopes. D.S. Hayes and R.M. Genet, eds. (Fairborn Press), 197-202: The McMath-APT-IUE Synoptic Program: Doppler Imaging and Photometry of the RS CVn Binary HD 26337-EI Eri
- Strassmeier, K.G., Rice, J.B., Wehlau, W.H., Vogt, S.S., Hatzes, A.P., Tuominen, I., Piskunov, N.E., Hackman, T., and Poutanen, M. 1992, *Astron. Astrophys.* 247, 130-147: Doppler Imaging of High-Latitude Spot Activityon HD 26337
- Straus, T., and Bonaccini, D. 1997, *Astron. Astrophys.* 324, 704-712: Dynamics of the Solar Photosphere. I. Two-Dimensional Spectroscopy of Mesoscale Phenomena
- Straus, T., Deubner, F., and Fleck, B. 1992, *Astron. Astrophys.* 256, 652-659: Is Mesogranulation a Distinct Regime of Convection?
- Straus, T., Severino, G., Deubner, F.L., Fleck, B., Jefferies, S.M., and Tarbell, T. 1999, *Astrophys. J.* 516, 939-945: Observational Constraints on Models of the Solar Background Spectrum
- Strong, K.T., Benz, A.O., Dennis, B.R., Leibacher, J.W., Mewe, R., Poland, A.I., Schrijver, J., Simnett, G., Smith, J.B., and Sylwester, J. 1984, *Solar Phys.* 91, 325-344: A Multiwavelength Study of a Double Impulsive Flare
- Strong, K.T., Harvey, K.L., Hirayama, T., Nitta, N., Shimizu, T., and Tsuneta, S. 1992, *Publ. Astron. Soc. Japan* 44, L161-l166: Observations of the Variability of Coronal Bright Points by the Soft X-Ray Telescope on Yohkoh
- Strous, L.H. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 213-217: Feature Tracking: Deriving Horizontal Motion and More
- Strous, L.H. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 219-222: Comparison of Flow Maps Derived by Various Techniques

- Strous, L.H., Scharmer, G., Tarbell, T.D., Title, A.M., and Zwaan, C. 1996, *Astron. Astrophys.* 306, 947-949: Phenomena in an Emerging Active Region. I. Horizontal Dynamics
- Strous, L.H., and Simon, G.W. 1998, in *Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997*. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (*Astron. Soc. Pacific*), 161-169: 62 Days Around the Sun: a Search for Supergranular Evolution and Giant Cells
- Suematsu, Y., Fukushima, H., and Nishino, Y. 1994, in *IAU Symposium 154, Infrared Solar Physics: Workshop Proceedings, Tucson, Arizona, 2-6 March, 1992*. D.M. Rabin, J.T. Jefferies, and C. Lindsey, eds. (Kluwer), 205-210: On the Coronal and Prominence Structures Observed at the Total Solar Eclipse of 11 July 1991
- Suematsu, Y., Wang, H., and Zirin, H. 1995, *Astrophys. J.* 450, 411-421: High-Resolution Observation of Disk Spicules. I. Evolution and Kinematics of Spicules
- Sun, W., Giampapa, M.S., and Worden, S.P. 1987, *Astrophys. J.* 312, 930-942: Magnetic Field Measurements on the Sun and Implications for Stellar Magnetic Field Observations
- Svestka, Z.F., Fontenla, J.M., Machado, M.E., Martin, S.F., Neidig, D.F., and Poletto, G. 1986, *Adv. Space Res.* 6, no. 6, 253-: A Dynamic Flare with Anomalously Dense Post-Flare Loops
- Svestka, Z.F., Fontenla, J.M., Machado, M.E., Martin, S.F., Neidig, D.F., and Poletto, G. 1986, *Solar Phys.* 108, 237-250: Multi-Thermal Observations of Newly Formed Loops in a Dynamic Flare
- Sykora, J. 1991, *Adv. Space Res.* 11, no. 1, 71-74: Low Brightness Coronal Regions-- Regularities and Responses
- Takakura, T., Ohki, K., Sakurai, T., Wang, J.L., Xuan, J.Y., Li, S.C., and Zhao, R.Y. 1984, *Solar Phys.* 94, 359- : Hard X-Ray Imaging of a Solar Gradual Hard X-Ray Burst on April . 1981
- Takano, T., Enome, S., Nakajima, H. et al 1994, *Publ. Astron. Soc. Japan* 46, L21-L25: Behavior of Accelerated Electrons in a Small Impulsive Solar Flare on 1992 August 12
- Takata, M., and Shibahashi, H. 1998, *Astrophys. J.* 504, 1035-1050: Solar Models Based on Helioseismology and the Solar Neutrino Problem
- Takata, M., and Shibahashi, H. 1998, in *New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997*. F.L. Deubner, ed., *IAU Symposium 185* (Kluwer), 21-24: Seismic Solar Models and the Neutrino Problem
- Tanaka, K. 1991, *Solar Phys.* 136, 133-149: Studies on a Very Flare-Active Alpha Group. I. Peculiar Alpha Spot Evolution and Inferred Subsurface Magnetic Rope Structure
- Tang, F. 1985, *Solar Phys.* 102, 131-145: Flare Morphologies and Coronal Field Configurations
- Tang, F. 1986, *Solar Phys.* 107, 233-237: Quiescent Prominences--Where are They Formed?

- Tang, F., Akasofu, S.I., Smith, E., and Tsurutani, B. 1985, J. Geophys. Res. 90, 2703- : Magnetic Fields on the Sun and the North-South Component of Transient Variations of the Interplanetary Magnetic Field at One A Unit
- Tapping, K.F., and Harvey, K.L. 1994, in IAU Colloquium 143, The Sun as a Variable Star: Solar and Stellar Irradiance Variations. Proceedings, Boulder, CO, 20-25 June 1993. J. M. Pap, C. Frohlich, H.S. Hudson and S. Solanki, eds. (Cambridge University Press): Slowly-Varying Radio Emissions from the Solar Corona
- Tarbell, T.D., Ferguson, S., Frank, Z., Shine, R., Title, A., Topka, K., and Scharmer, G. 1990, in IAU Symposium 138, Solar Photosphere: Structure, Convection, and Magnetic Fields, J.O. Stenflo, ed. (Kluwer), 147-152: High-Resolution Observations of Emerging Magnetic Fields and Flux Tubes in Active Region Photosphere
- Tarbell, T.D., Ferguson, S., Frank, Z., Title, A.M., and Topka, K. 1988, in MAX '91: Flare Research at the Next Solar Maximum. Workshop no. 1: Scientific Objectives. Kansas City, Kansas, 9-10 June, 1988. R.C. Canfield and B.R. Dennis, eds. (NASA), 50-60: Observations of Photospheric Magnetic Fields and Shear Flows in Flaring Regions
- Tarbell, T.D., Peri, M., Frank, Z., Shine, R., and Title, A. 1988, in Seismology of the Sun and Sun-Like Stars: Symposium Proceedings, Tenerife (Canary Islands), 26-30 September, 1988. E. Rolfe, ed. ESA SP-286, 315-319: Observations of F- and P-Mode Oscillations of High Degree ( $500 < L < 3500$ ) in Quiet and Active Sun
- Tarbell, T.D., Topka, K., Ferguson, S., Frank, Z., and Title, A. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 506-520: High-Resolution Observations of Emerging Magnetic Flux
- Taylor, J.M., Craine, E.R., and Giampapa, M.S. 1999, in Astron. Soc. Pacific Conf. Ser. 189, CCD Precision Photometry Workshop, 238-251: Differential Photometry Using the GNAT 0.5 m. Prototype
- Taylor, S.F., Varsik, J.R., Woodard, M.F., and Libbrecht, K.G. 1998, Solar Phys. 178, 1-12: Spatial Dependence of Solar-Cycle Changes in the Sun's Luminosity
- Thomas, J.H. 1985, Aust. J. Phys. 38, 811-824: Oscillations in Sunspots
- Thomas, J.H. 1993, in IAU Colloquium 141, The Magnetic and Velocity Fields of Solar Active Regions: Beijing, China, 6-12 September, 1992. H. Zirin, Q. Ai, and H. Wang, eds. (Kluwer), 513-521: Sunspot Seismology: the Interaction of Solar p-Modes with a Sunspot
- Thomas, J.H. 1998, Nature 396, 114-115: The Sun at Small Scales
- Thomas, J.H. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 1-16: The Case for High Resolution in Solar Physics

- Thomas, J.H., Cram, L.E., and Nye, A.H. 1984, *Astrophys. J.* 285, 368-380: Dynamical Phenomena in Sunspots. I. Observing Procedures and Oscillatory Phenomena
- Thomas, J.H., Lites, B.W., and Abdelatif, T.E. 1988, in IAU Symposium 123, Advances in Helio- and Asteroseismology. J. Christensen-Dalsgaard and S. Frandsen, eds., 181-182: Sunspot Seismology
- Thomas, J.H., Lites, B.W., Gurman, J.B., and Ladd, E.F. 1987, *Astrophys. J.* 312, 457-461: Simultaneous Measurements of Sunspot Umbral Oscillations in the Photosphere, Chromosphere, and Transition Region
- Thompson, M.J., Toomre, J., Anderson, E., Antia, H.M., Berthomieu, G., Burtonclay, D., Chitre, S.M., Christensen-Dalsgaard, J., Corbard, T., DeRosa, M., Genovese, C.R., Gough, D.O., Haber, D.A., Harvey, J.W., Hill, F., Howe, R., Korzennik, S.G., Kosovichev, A.G., Leibacher, J.W., Pijpers, F.P., Provost, J., Rhodes, E.J., Schou, J., Sekii, T., Stark, P.B., and Wilson, P. 1996, *Science* 272, 1300-1305 : Differential Rotation and Dynamics of the Solar Interior
- Thompson, R.J. 1986, Solar-Terrestrial Predictions: Workshop Proceedings ( 2nd), Meudon, France, 18-22 June, 1984. P.A. Simon et al, eds., 415-419: Radio Observations of Coronal Holes at Fleurs
- Thompson, R.J. 1991, Display and Analysis of Solar Synoptic Maps at IPS (IPS Technical Report TR-91-02).
- Thompson, W.T., Neupert, W.M., Jordan, S.D., Jones, H.P., Thomas, R.J., and Schmeider, B. 1993, *Solar Phys.* 147, 29-46: Correlation of He II Lyman Alpha with He I 10830 Å, and with Chromospheric and EUV Coronal Emission
- Title, C.P. Sonett and M.S. Giampapa, eds. (Univ. of Arizona Press), 658-681: Magnetic Activity in Pre-Main-Sequence Stars
- Tipton, T., Choe, J.I., and Kukolich, S.G. 1989, *J. Chem. Phys.* 90, 1534-1537: Fourier Transform Infrared Spectra of the 2 nu2 and nu2 Plus nu4 Bands of Ph3
- Tipton, T., Choe, J.I., Kukolich, S.G., and Hubbard, R. 1985, *J. Mol. Spectr.* 114, 239-256: Fourier Transform Spectroscopy on the 3nu2, 2nu2 Plus nu6 and nu3 Plus nu5 Bands of H2CO
- Title, A.M., Peri, M.L., Smithson, R.C., and Edwards, C.G. 1987, in Adaptive Optics in Solar Observations: Workshop Proceedings, Freiburg, 8-9 September, 1987. F. Merkle, O. Engvold, and R. Falomo, eds. LEST Technical Report 28, 107-116: High Resolution Techniques at Lockheed Solar Observatory
- Title, A.M., Shine, R.A., Tarbell, T.D., Topka, K.P., and Scharmer, G.B. 1990, in IAU Symposium 138, Solar Photosphere: Structure, Convection, and Magnetic Fields, J.O. Stenflo, ed. (Kluwer), 49-66: High Resolution Observations of the Photosphere
- Title, A.M., and Tarbell, T.D. 1988, in Solar System Plasma Physics. J.H. Waite, J.L. Burch, and R.L. Moore, eds., 31-36: Optical Disk Processing of Solar Images
- Title, A.M., Tarbell, T.D., (13 authors), Simon, G.W., Harvey, J.W., Leibacher, J.W., Livingston, W.C., November, L.J., and Zirker, J.B. 1987, in Theoretical Problems in High Resolution Solar Physics II: Workshop Proceedings, Boulder, CO, 15-17 September, 1986. G. Athay and D.S. Spicer, eds. NASA CP- 2483, 55-77: First Results on Quiet and Magnetic Granulation from SOUP

Title, A.M., Tarbell, T.D., (14 authors), Harvey, J.W., Leibacher, J.W., Livingston, W.C., November, L.J., Simon, G.W., and Ramsey, H. 1989, *Astrophys. J.* 336, 475-494: Statistical Properties of Solar Granulation Derived from the SOUP Instrument on Spacelab 2

Title, A.M., Tarbell, T.D., Simon, G.W., (9 authors), Harvey, J.W., Leibacher, J.W., Livingston, W.C., and November, L.J. 1986, *Adv. Space Res.* 6, no. 8, 253-262: White-Light Movies of the Solar Photosphere from the SOUP Instrument on Spacelab 2

Title, A.M., Tarbell, T.D., and Topka, K.P. 1987, *Astrophys. J.* 317, 892-899: On the Relation Between Magnetic Field Structures and Granulation

Title, A.M., Tarbell, T.D., Topka, K.P., (12 authors), Simon, G.W., Harvey, J.W., Leibacher, J.W., Livingston, W.C., November, L.J., and Zirker, J.B. 1988, *Astrophys. Lett. & Comm.* 27, 141-149: Correlation Lifetimes of Quiet and Magnetic Granulation from the SOUP Instrument on Spacelab 2

Title, A.M., Tarbell, T.D., Topka, K.P., Ferguson, S.H., Shine, R.A., (12 authors), Harvey, J.W., Leibacher, J.W., Livingston, W.C., November, L.J., Ramsey, H., and Simon, G.W. 1989, in *Solar and Stellar Granulation: Third NATO ASI Workshop*, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 225-252: Flows, Random Motions and Oscillations in Solar Granulation Derived from the SOUP Instrument on Spacelab 2

Title, A.M., Tarbell, T.D., and Wolfson, C.J. 1989, in *Solar and Stellar Granulation: Third NATO ASI Workshop*, Capri, Italy, 21-25 June, 1988. R.J. Rutten and G. Severino, eds. (Kluwer), 25-28: Ground-Based Tunable Filter Observations

Title, A.M., Topka, K.P., Tarbell, T.D., Schmidt, W., Balke, C., and Scharmer, G. 1992, *Astrophys. J.* 393, 782-794: On the Differences Between Plage and Quiet Sun in the Solar Photosphere

Tlatov, A.G. 1997, *Astronomicheskij Zhurnal* 74, 621-: Differential Rotation of the Red Solar Corona (FeX 6374 Angstroms) in 1957-1994

Tlatov, A.G. 1997, *Astronomy Reports* 41, 548-: The Differential Rotation of the Red Solar Corona (Fe X 6374 Angstroms) from 1957-1994

Tobiska, W.K., and Eparvier, F.G. 1998, *Solar Phys.* 177, 147-159: EUV97: Improvements to EUV Irradiance Modeling in the Soft X-Rays and FUV

Tobiska, W.K., Pryor, W.R., and Ajello, J.M. 1997, *Geophys. Res. Lett.* 24, 1123-: Solar Hydrogen Lyman-Alpha Variation During Solar Cycles 21 and 22

Tokumaru, M., Mori, H., Tanaka, T., Kondo, T., and Takaba, H. 1997, in *Solar-Terrestrial Predictions V: Workshop Proceedings*, Hitachi Japan, 23-27 January 1996. G. Heckman, K. Marubashi, M.A. Shea, D.F. Smart, and R. Thompson, eds. (RWC, Hiraso Solar-Terr. Res. Center), 662-: Observations of the Solar Wind Close to the Sun Using Interplanetary Scintillation

Toner, C.G., and Harvey, J.W. 1997, in *IAU Symposium 181, Sounding Solar and Stellar Interiors*. J. Provost and F.X. Schmieder, eds. (Kluwer), 57-: Aligning the GONG Network

- Toner, C.G., and Jefferies, S.M. 1993, *Astrophys. J.* 415, 852-861: Accurate Measurement of the Geometry for a Full-Disk Solar Image and Estimation of the Observational Point Spread Function
- Toner, C.G., and Jefferies, S.M. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 433-436: Accurate Measurement of the Geometry for a Full-Disk Solar Image and Estimation of the Observational Point Spread Function
- Toner, C.G., and Jefferies, S.M. 1998, in New Eyes to See Inside the Sun and Stars: Workshop Proceedings, Kyoto Japan, 18-22 August 1997. F.L. Deubner, ed., IAU Symposium 185 (Kluwer), 55-56: Searching for G-Modes at the Solar Limb
- Toner, C.G., and Jefferies, S.M. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 345-348: Oscillatory Signals Near the Solar Limb
- Toner, C.G., Jefferies, S.M., and Duvall, T.L. 1997, *Astrophys. J.* 478, 817-827: Restoration of Long-Exposure, Full-Disk, Solar Intensity Images
- Toner, C.G., Jefferies, S.M., and Toutain, T. 1999, *Astrophys. J. Lett.* 518, L127-L130: Increasing the Visibility of Solar Oscillations
- Toner, C.G., and LaBonte, B.J. 1993, *Astrophys. J.* 415, 847-851: Direct Mapping of Solar Acoustic Power
- Toot, G.D. 1985, Impulsive Brightenings in Quiescent Solar Prominences. PhD Thesis (University of Colorado)
- Toot, G.D., and Malville, J.M. 1987, *Solar Phys.* 112, 67-81: Impulsive Brightenings/ Velocity Transients in Quiescent Solar Prominences.II. Time-Varying Reversal Regions
- Topka, K.P., Ferguson, S., Frank, Z., Tarbell, T.D., and Title, A.M. 1988, in MAX '91: Flare Research at the Next Solar Maximum. Workshop no. 1: Scientific Objectives. Kansas City, Kansas, 9-10 June, 1988. R.C. Canfield and B.R. Dennis, eds. (NASA), 283-293: High-Resolution Digital Movies of Emerging Flux and Horizontal Flows in Active Regions on the Sun
- Topka, K.P., Tarbell, T.D., and Title, A.M. 1986, *Astrophys. J.* 306, 304-316: High-Resolution Observations of Changing Magnetic Features on the Sun
- Toth, R.A. 1984, *Appl. Opt.* 23, 1825-1835: Line Strengths of Nitrous Oxide in the 1120-1440 per Centimeter Region
- Toth, R.A. 1985, *Appl. Opt.* 24, 261-274: Line Positions and Strengths of CO<sub>2</sub> in the 1200-1430. per Centimeter Region
- Toth, R.A. 1986, *J. Opt. Soc. Am. B* 3, 1263-1281: Frequencies of NO<sub>2</sub> in the 1100 to 1440 per Centimeter Region
- Toth, R.A. 1987, *J. Opt. Soc. Am. B* 4, 357-374: N<sub>2</sub>O Vibration-Rotation Parameters Derived from Measurements in the 900-1090 and 1580-2380 per Centimeter Regions

- Toth, R.A. 1991, J. Opt. Soc. Am. B 8, 2236-2255: Line Positions and Strengths of H<sub>2</sub>16O from 5750 to 7965 cm<sup>-1</sup>
- Toth, R.A. 1992, J. Opt. Soc. Am. B 9, 462-482: Transition Frequencies and Absolute Strengths of H<sub>2</sub>17O and H<sub>2</sub>18O in the μm Region
- Toth, R.A. 1993, J. Opt. Soc. Am. B 10, 1526-1544: 2ν<sub>2</sub> - ν<sub>2</sub> Bands of H<sub>2</sub>16O, H<sub>2</sub>17O, and H<sub>2</sub>O: Line Positions and Strengths
- Toth, R.A. 1993, J. Opt. Soc. Am. B 10, 2006-2029: ν<sub>1</sub> - ν<sub>2</sub>, ν<sub>3</sub> - ν<sub>2</sub>, ν<sub>1</sub>, and ν<sub>3</sub> Bands of H<sub>2</sub>16O: Line Positions and Strengths
- Toth, R.A. 1994, Appl. Opt. 32, 7326-7365: Line Strengths (900-3600 cm<sup>-1</sup>), Self Broadened Line Widths, and Frequency Shifts (1800-2630 cm<sup>-1</sup>) of N<sub>2</sub>O
- Toth, R.A. 1994, Appl. Opt. 33, 4851- : Extensive Measurements of (H<sub>2</sub>)-o<sub>16</sub> Line Frequencies and Strengths- 5750 to 7965 cm<sup>-1</sup>
- Toth, R.A. 1994, Appl. Opt. 33, 4868-: Transition Frequencies and Strengths of (H<sub>2</sub>O)-O<sub>17</sub> and (H<sub>2</sub>O) - O<sub>18</sub> - 6600 to 7640 cm<sup>-1</sup>
- Toth, R.A. 1994, J. Mol. Spectr. 166, 176-183: Measurements of (H<sub>2</sub>O)-O<sub>16</sub> Line Positions and Strengths- 11610 to 12861 cm<sup>-1</sup>
- Toth, R.A. 1994, J. Mol. Spectr. 166, 184-203: The ν<sub>1</sub> and - ν<sub>3</sub> Bands of H<sub>2</sub>17O and H<sub>2</sub>18O: Line Positions and Strengths
- Toth, R.A. 1998, J. Mol. Spectr. 190, 379-: Water Vapor Measurements Between 590 cm<sup>-1</sup> and 2582 cm<sup>-1</sup>: Line Positions and Strengths
- Toth, R.A. 1999, J. Mol. Spectr. 194, 28-42: Analysis of Line Positions and Strengths of H<sub>2</sub>O<sub>16</sub> Ground and Hot Bands Connecting to Interacting Upper States: (020), (100), and (001)
- Toth, R.A. 1999, J. Mol. Spectr. 195, 73-: HDO and D<sub>2</sub> Low Pressure, Long Path Spectra in the 600-3100 cm<sup>-1</sup> Region. I. HDO Line Positions and Strengths
- Toth, R.A. 1999, J. Mol. Spectr. 195, 98-: HDO and D<sub>2</sub> Low Pressure, Long Path Spectra in the 600-3100 cm<sup>-1</sup> Region. II. D<sub>2</sub>O Line Positions and Strengths
- Toth, R.A., Brown, L.R., and Plymate, C. 1998, J. Quan. Spectr. Rad. Trans. 59, 529-: Self-Broadened Widths and Frequency Shifts of Water Vapor from 590 cm<sup>-1</sup> to 2400 cm<sup>-1</sup>
- Toussaint, R., Harvey, J., and Hubbard, R. 1995, in GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 532-535: GONG Calibration Procedure
- Toutain, T., Appourchaux, T., Baudin, F., Frohlich, C., Gabriel, A., Scherrer, P., Andersen, B.N., Bogart, R., Bush, R., Finsterle, W., Garcia, R.A., Grec, G., Henney, C.J., Hoeksema, J.T., Jimenez, A., Kosovichev, A., Roca Cortes, T., Turch-Chieze, S., Ulrich, R., and Wehrli, C. 1997, Solar Phys. 175, 311-328: Tri-Phonic Helioseismology: Comparison of Solar P-Modes Observed by the Helioseismology Instruments Aboard SOHO

- Tozzi, G.P., Brunner, A.J., and Huber, M.C. 1985, Mon. Not. Roy. Astron. Soc. 217, 423-434: Transition Probabilities in CrI
- Tripathy, S.C., and Antia, H.M. 1999, Solar Phys. 186, 1-11: Influence of Surface Layers on the Seismic Estimate of the Solar Radius
- Tripathy, S.C., and Hill, F. 1995, in GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 334-337: Detection of Chromospheric Oscillations in High-l Data
- Trueblood, M., Erdwurm, W., and Pintar, J.A. 1995, in Astronomical Data Analysis Software and Systems IV: Baltimore Maryland, 26-28 September, 1994. R.A. Shaw, H.E. Payne, and J.J. Hayes, eds. (Astronomical Society of the Pacific), 185-188.: Storing and Distributing GONG Data
- Tsuneta, S. 1996, Astrophys. J. 456, L63-L65: Interacting Active Regions in the Solar Corona
- Tsuneta, S., Takahashi, T., Acton, L.W., Bruner, M.E., Harvey, K., and Ogawara, Y. 1992, Publ. Astron. Soc. Japan 44, L211-2146: Global Restructuring of the Coronal Magnetic Fields Observed with Yohkoh Soft X-Ray Telescope
- Tucker, R.A. 1999, in Astron. Soc. Pacific Conf. Ser. 189, CCD Precision Photometry Workshop, 24-34: Some Practical Aspects of CCD Camera Construction
- Turck-Chieze, S., Basu, S., Brun, S., Christensen-Dalsgaard, J., Eff-Darwich, A., Lopes, I., Perez Hernandez, F., Berthomieu, G., Provost, J., Ulrich, R.K., Baudin, F., Boumier, P., Charra, J., Gabriel, A.H., Garcia, R.A., Grec, G., Renaud, C., Robillot, J.M., and Roca Cortes, T. 1997, Solar Phys. 175, 247-265: First View of the Solar Core from GOLF Acoustic Modes
- Uchida, Y. 1996, in IAU Colloquium 153, Magnetodynamic Phenomena in the Solar Atmosphere: Prototypes of Stellar Magnetic Activity. T. Kosugi and Y. Uchida, eds., 295-302: Problems for Arcade and Loop Flare Models Revealed by Yohkoh
- Uchida, Y. 1998, in IAU Colloquium 167. New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997. D. Webb, D.M. Rust and B. Schmeider, eds. (Kluwer), 163-: Yohkoh Observations of Coronal Structures Surrounding Dark Filaments
- Uchida, Y., Fujisaki, K., Morita, S., and Hirose, S. 1996, in Magnetic Reconnection in the Solar Atmosphere, ASP Conference Series 111. R. Bentley and J. Mariska, eds., 347-352: Yohkoh Evidence Against the Reclosing Opened-Up Arcade Model for Arcade Flares and Arcade Formations
- Uitenbroek, H. 1999, in Astronomical Society of the Pacific Conference Series vol. 183, High- Resolution Solar Physics: Theory, Observations, and Techniques. Proceedings of the 19th Sacramento Peak Summer Workshop held at National Solar Observatory, Sunspot New Mexico, 28 September--2 October, 1998. T.R. Rimmele, K.S. Balasubramaniam, and R.R. Radick, eds. (Astron. Soc. Pacific), 486-493: Imaging Spectroscopy of CO Lines Compared with Three-Dimensional Radiative Transfer

- Uitenbroek, H., and Bruls, J.H. 1992, *Astron. Astrophys.* 265, 268-277: The Formation of Helioseismology Lines. III. Partial Redistribution Effects in Weak Solar Resonance Lines
- Uitenbroek, H., and Noyes, R.W. 1994, in *Chromospheric Dynamics: Proceedings of a Mini-Workshop Held at the Institute of Theoretical Astrophysics, University of Oslo, Norway, 6-8 June 1994*. M. Carlsson, ed. (University of Oslo), 129-138: New Insight in the Solar TMIN Region from the CO Lines at 4.67 Micron
- Uitenbroek, H., Noyes, R.W., and Rabin, D.M. 1994, *Astrophys. J. Lett.* 432, L67-L70: Imaging Spectroscopy of the Solar CO Lines at 4.67  $\mu\text{m}$
- Ulrich, R.K., and Evans, S.E. 1995, in *GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994*. R. Ulrich, ed. (Astronomical Society of the Pacific), 540-543: Preliminary Results from a New Multichannel Spectroscopic Analyzer at the Mt. Wilson 150 Foot Tower
- Uralov, A.M., Grechnev, V.V., Lesovoi, S.V., Sych, R.A., Kardapolova, N.N., Smolkov, G.Y., and Treskov, T.A. 1998, *Solar Phys.* 178, 119-124: Two-Dimensional SSRT Observations of the Flare-Productive Active Region in July 1996
- Urban, S., D'Cunha, R., and Rao, K.N. 1984, *J. Mol. Spectr.* 106, 64-71: Identification of Forbidden Vibration-Rotation Transitions in NH<sub>3</sub>
- Van Ballegooijen, A.A. 1998, in *Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997*. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 17-29: Understanding the Solar Cycle
- Van Ballegooijen, A.A., Cartledge, N.P., and Priest, E.R. 1998, *Astrophys. J.* 501, 866-881: Magnetic Flux Transport and the Formation of Filament Channels on the Sun
- Van Ballegooijen, A.A., Cartledge, N.P., and Priest, E.R. 1998, in *IAU Colloquium 167. New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997*. D. Webb, D.M. Rust and B. Schmeider, eds. (Kluwer), 265-: Magnetic Flux Transport and Formation of Filament Channels
- Van Breda, I., Worrall, G., and Foster, D.C. 1995, *Solar Phys.* 304, 551-562: Profiles of the NaD and MgB Multiplets in the Solar Spectrum
- Van Driel-Gestelyi, L., Schmieder, B., Cauzzi, G., Mein, N., Hofmann, A., Nitta, N., Kurokawa, H., Mein, P., and Staiger, J. 1996, *Solar Phys.* 163, 145-170: X-Ray Bright Point Flares Due to Magnetic Reconnection
- Van Kampen, W.C., and Paxman, R.G. 1998, in *SPIE 3433, Propagation and Imaging Through the Atmosphere II: L.R. Bissonnette, ed.*, 296-307: Multiframe Blind Deconvolution of Infinite-Extent Objects
- Varsik, J.R., Wilson, P.R., and Li, Y. 1999, *Solar Phys.* 184, 223-237: High-Resolution Studies of the Solar Polar Magnetic Fields
- Velusamy, T., Kundu, M.R., Schmahl, E.J., and McCabe, M. 1987, *Astrophys. J.* 319, 984-992: Simultaneous VLA Observations of a Flare at 6 and 20 Centimeter Wavelengths

- Venkatakrishnan, P., Jain, S.K., Singh, J., Recely, F., and Livingston, W.C. 1992, Solar Phys. 138 , 107-121: Spatio-Temporal Fluctuations in the He I 10830 Å Line Parameters: Evidence for Spicule Formation
- Vial, J.C., Koutchmy, S., Coulter, R., November, L.J., Smartt, R.N., Zirker, J.B. et al 1992, in Solar Physics and Astrophysics at Interferometric Resolution: an International Workshop to Present SIMURIS. Paris France, 17-19 February, 1992. ESA SP-344. L. Dame and T.D. Guyenne, eds., 87-90: Evidence of Plasmoid Ejection in the Corona from 1991 Eclipse Observations with the Canada-France-Hawaii Telescope
- Vial, J.C., Koutchmy, S., and Smartt, R.N. 1994, Adv. Space Res. 14, no.6, 43-47: Moon-Based UV Reflecting Coronagraph
- Vigouroux, A., and Pap, J. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. Astron. Soc. Pacific. Conf. Ser. Vol. 95. K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (Astron. Soc. Pacific), 586-593: Studying Solar Irradiance Variability with Wavelet Technique
- Vigouroux, A., Pap, J.M., and Delache, P. 1997, Solar Phys 176, 1-21: Estimating Long-Term Solar Irradiance Variability: a New Approach
- Volz, F.E. 1984, Appl. Opt. 23, 2589- : Volcanic Turbidity, Skylight Scattering Functions, Sky Polarization, and Twilights in New England During 1983
- Von der Luhe, O. 1984, J. Opt. Soc. Am. B 1, 510-519: Estimating Fried's Parameter from a Time Series of an Arbitrary Resolved Object Imaged through Atmospheric Turbulence
- Von der Luhe, O. 1984, in Very Large Telescopes, Their Instrumentation and Programs: Workshop Proceedings, Garching, Germany, 9-12 April, 1984: 203-215: A Method to Estimate Fried's Seeing Parameter from a Time Series of Arbitrary Resolved Structures Imaged Through the Atmosphere
- Von der Luhe, O. 1985, in High Resolution in Solar Physics: Eighth IAU European Regional Astronomy Meeting, Toulouse, 17-21 September, 1984, 96-102: High Resolution Speckle Imaging of Solar Small-Scale Structure: The Influence of Anisoplanatism
- Von der Luhe, O. 1985, in High Resolution in Solar Physics: Eighth IAU European Regional Astronomy Meeting, Toulouse, 17-21 September, 62-82: Adaptive Image Stabilization of Solar Observations: a Review
- Von der Luhe, O. 1986, Speckle Image Reconstruction of Solar Small Scale Structure Observations. PhD Thesis (Albert-LudwigsUniversitet, Freiburg)
- Von der Luhe, O. 1987, in Adaptive Optics in Solar Observations: Workshop Proceedings, Freiburg, 8-9 September, 1987. F. Merkle, O. Engvold, and R. Falomo, eds. LEST Technical Report 28, 155-167: A Wavefront Sensor for Extended, Incoherent Targets

- Von der Luhe, O. 1987, in Adaptive Optics in Solar Observations: Workshop Proceedings, Freiburg, 8-9 September, 1987. F. Merkle, O. Engvold, and R. Falomo, eds. LEST Technical Report 28, 255-262: Photon Noise Analysis for a LEST Multidither Adaptive Optical System
- Von der Luhe, O. 1987, in Interferometric Imaging in Astronomy: Proceedings of the Joint Workshop on High-Resolution Imaging from the Ground Using Interferometric Techniques, Oracle, Arizona, 12-15 Jan., 1987. J.W. Goad, ed. (ESO/NOAO), 225-228: Study of Sizes, Brightness and Dynamics of Solar Facular Points
- Von der Luhe, O. 1987, in Interferometric Imaging in Astronomy: Proceedings of the Joint Workshop on High-Resolution Imaging from the Ground Using Interferometric Techniques, Oracle, Arizona, 12-15 Jan., 1987. J.W. Goad, ed. (ESO/NOAO), 37-40: Application of the Knox-Thompson Method to Solar Observations
- Von der Luhe, O. 1987, in Interferometric Imaging in Astronomy: Proceedings of the Joint Workshop on High-Resolution Imaging from the Ground Using Interferometric Techniques, Oracle, Arizona, 12-15 Jan., 1987. J.W. Goad, ed. (ESO/NOAO), 9-12: Calibration Problems in Solar Speckle Interferometry
- Von der Luhe, O. 1988, *Astron. Astrophys.* 205, 354-360: Measurements of Characteristics of Image Motion with a Solar Image Stabilizing Device
- Von der Luhe, O. 1988, *J. Opt. Soc. Am. A* 5, 721-729: Signal Transfer Function of the Knox-Thompson Speckle Imaging Technique
- Von der Luhe, O. 1988, NSO/SP Correlation Tracker Operator's Manual. Monograph (NSO/SP).
- Von der Luhe, O. 1988, *Optical Engineering* 27, 1078-1087: Wavefront Error Measurement Technique Using Extended, Incoherent Light Sources
- Von der Luhe, O. 1988, in The Role of Fine-Scale Magnetic Fields in the Structure of the Solar Atmosphere: Workshop Proceedings, Tenerife (Canary Islands), 6-12 October, 1986 (Cambridge Univ. Press), 156-161: Photospheric Fine Structure Close to a Sunspot
- Von der Luhe, O. 1989, ed., High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988 (Sunspot: NSO/Sac Peak) 578 pp.
- Von der Luhe, O. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 147-165: Solar Speckle Imaging
- Von der Luhe, O. 1991, in The Solar Interior and Atmosphere: LPL/NSO Conference Proceedings, Tucson, AZ, 15-18 November, 1988. A.N. Cox, W.C. Livingston, and M. Matthews, eds. (Univ. of Arizona Press), 688-726: High Spatial Resolution Techniques
- Von der Luhe, O. 1992, in Solar Physics and Astrophysics at Interferometric Resolution: an International Workshop to Present SIMURIS. Paris France, 17-19 February, 1992. ESA SP-344. L. Dame and T.D. Guyenne, eds., 237-241: Ground-Based High Angular Resolution Observation of the Sun by Interferometry in the Visible

- Von der Luhe, O. 1993, *Astron. Astrophys.* 268, 374-390: Speckle Imaging of Solar Small Scale Structure
- Von der Luhe, O., and Dunn, R.B. 1987, *Astron. Astrophys.* 177, 265-276: Solar Granulation Power Spectra from Speckle Interferometry
- Von der Luhe, O., and Pehlemann, E. 1988, in High Resolution Imaging by Interferometry: NOAO--ESO Conference Proceedings, Garching, Germany, 15-18 March, 1988. F. Markle, ed.: Speckle Masking Imaging of Extended Sources
- Von der Luhe, O., Widener, A.L., Rimmele, T.R., Spence, G., Dunn, R.B., and Wiborg, P. 1989, *Astron. Astrophys.* 224, 351-360: Solar Feature Correlation Tracker for Ground-Based Telescopes
- Von der Luhe, O., and Zirker, J.B. 1988, in High Resolution Imaging by Interferometry: NOAO--ESO Conference Proceedings, Garching, Germany, 15-18 March, 1988. F. Markle, ed., 77-: Scientific Goals for Solar Interferometry
- Von der Luhe, O. 1993, *Astron. Astrophys.* 268, 374-390: Speckle Imaging of Solar Small Scale Structure. I. Methods
- Von der Luhe, O. 1994, *Astron. Astrophys.* 281, 889-910: Speckle Imaging of Solar Small Scale Structure. II. Study of Small Scale Structure in Active Regions
- Vorontsov, S.V., Jefferies, S.M., Duvall, T.L., and Harvey, J.W. 1998, *Mon. Not. Roy. Astron. Soc.* 298, 464-470: Acoustic Interferometry of the Solar Atmosphere: p-modes with Frequencies Near the Acoustic Cutoff
- Vorontsov, S.V., and Zharkov, V.N. 1989, *Soviet Science Review E: Astrophysics and Space Science* 7, 1-103: Helioseismology: Theory and Interpretation of Experimental Data
- Vourlidas, A., and Bastian, T.S. 1997, *Astrophys. J.* 466, 1039-1053: Multiband VLA Observations of Solar Active Regions: Implications for the Distribution of Coronal Plasma
- Vourlidas, A., Bastian, T.S., and Aschwanden, M.J. 1997, *Astrophys. J.* 489, 403-425: The Structure of the Solar Corona Above Sunspots as Inferred from Radio, X-Ray, and Magnetic Fields Observations
- Vourlidas, A., Bastian, T.S., Nitta, N., and Aschwanden, M.J. 1996, *Solar Phys.* 163, 99-120: Joint Radio and Soft X-Ray Imaging of an Anemone Active Region
- Wagner, W.J. 1987, *Solar Phys.* 114, 81-92: Coronal Disturbances.III. Inner Corona Green Line Transients as a Manifestation of White Light Coronal Mass Ejections
- Wagner, W.J. 1988, *Adv. Space Res.* 8, no. 7, 67-76: Observations of 1-8 Å Solar X-Ray Variability During Solar Cycle 21
- Wagner, W.J., and Wagner, J. J. 1984, *Astron. Astrophys.* 133, 288-292: Coronal Mass Ejection Recurrence Studies Indicating Global Activity and Local Suppression

- Wahlgren, G.M., Johansson, S.G., Litz, U., Gibson, N.D., Cooper, J.C., Lawler, J.E., Lackrone, D.S., and Engleman, R. 1997, *Astrophys. J.* 475, 380-386: Atomic Data for the Re II UV 1 Multiplet and the Rhenium Abundance in the HgMn- Type Star chi LuPi
- Walker, A.B., Barbee, T.W., Hoover, R.B., and Lindblom, J.F. 1988, *Science* 241, 1781-1786: Soft X-Ray Images of the Solar Corona with a Normal-Incidence Cassegrain Multilayer Telescope
- Wallace, L., Bernath, P., Livingston, W.C., Hinkle, K., Busler, J., Guo, B., and Zhang, K. 1995, *Science* 268, 1155-1158: Water on the Sun
- Wallace, L., Brault, J.W., Brown, M., and Livingston, W.C. 1984, *Publ. Astron. Soc. Pacific* 96, 836-838: Characteristics of Water Vapor over Kitt Peak as Determined from FTS Data
- Wallace, L., Hinkle, K., and Livingston, W.C. 1993, National Solar Observatory Technical Report 93-001, An Atlas of the Solar Photospheric Spectrum in the Region from 8900 to 13600 cm<sup>-1</sup> (7350 to 11239 Å)
- Wallace, L., Hinkle, K., and Livingston, W.C. 1998, National Solar Observatory Technical Report 98-001, An Atlas of the Spectrum of the Solar Photosphere from 13,500 to 28,000cm<sup>-1</sup> (3570 to 7405 Å)
- Wallace, L., Huang, Y.R., and Livingston, W.C. 1988, *Astrophys. J.* 327, 399-404: Sun-as-a-Star: On Wavelength Stability
- Wallace, L., and Livingston, W.C. 1984, *Publ. Astron. Soc. Pacific* 96, 182-186: Characteristics of Water Vapor over Kitt Peak
- Wallace, L., and Livingston, W.C. 1990, *J. Geophys. Res.* 95, 16383-16390: Spectroscopic Observations of Atmospheric Trace Gases Over Kitt Peak II: Nitrous Oxide and Carbon Monoxide from 1979 to 1985
- Wallace, L., and Livingston, W.C. 1990, *J. Geophys. Res.* 95, 9823-9827: Spectroscopic Observations of Atmospheric Trace Gases Over Kitt Peak I: Carbon Dioxide and Methane from 1979 to 1985
- Wallace, L., and Livingston, W.C. 1991, *J. Geophys. Res.* 96, 15513-15521: Spectroscopic Observations of Atmospheric Trace Gases Over Kitt Peak. 3. Long-Term Trends of Hydrogen Chloride and Hydrogen Fluoride from 1978 to 1990
- Wallace, L., and Livingston, W.C. 1992, *Atlas of a Dark Sunspot: Umbral Spectrum in the Infrared from 1970 to 8640 cm<sup>-1</sup> (1.6 to 5.1 Microns)*. NSO Technical Report 1992-001.
- Wallace, L., and Livingston, W.C. 1992, *Geophys. Res. Lett.* 19, 1209-: The Effect of the Pinatubo Cloud on Hydrogen Chloride and Hydrogen Flouride
- Wallace, L., Livingston, W.C., and Bernath, P. 1994, *An Atlas of the Sunspot Spectrum from 470 to 1233 cm<sup>-1</sup> (8.1 to 21 μm) and the Photospheric Spectrum from 460 to 630 cm<sup>-1</sup> (16 to 22 μm)*. NSO Technical Report 1994-001.
- Wallace, L., Livingston, W.C., Bernath, P.F., and Ram, R.S. 1999, NSO Technical Report 98-002, *An Atlas of the Sunspot Umbral Spectrum in the Red and Infrared from 8900 to 15,050 cm<sup>-1</sup> (6642 to 11,230 Å)*. Monograph. (Cambridge University Press) 234 pp.

- Wallace, L., Livingston, W.C., and Hall, D.N. 1997, Geophysical Research Letters 24, 2363-2366: A Twenty-Five Year Record of Stratospheric Hydrogen Chloride
- Wallace, L., Livingston, W.C., Hinkle, K., and Bernath, P.F. 1996, Astrophys. J. Suppl. Ser. 106, 165-169: Infrared Spectral Atlases of the Sun from NOAO
- Wang, H. 1988, Magnetic Fields and Supergranulation Velocity Fields on the Quiet Sun. PhD Thesis (California Institute of Technology)
- Wang, H. 1988, Solar Phys. 116, 1-16: Structure of Magnetic Fields on the Quiet Sun
- Wang, H. 1988, Solar Phys. 117, 343-358: On the Relationship Between Magnetic Fields and Supergranule Velocity Fields
- Wang, H. 1989, Solar Phys. 123, 21-32: Do Mesogranules Exist?
- Wang, H., and Zirin, H. 1988, Solar Phys. 115, 205-219: The Velocity Pattern of Weak Solar Magnetic Fields
- Wang, H., and Zirin, H. 1989, Solar Phys. 120, 1-17: Study of Supergranules
- Wang, H., Zirin, H., and Ai, G. 1991, Solar Phys. 131, 53-68: Magnetic Flux Transport of Decaying Active Regions and Enhanced Magnetic Network
- Wang, J., Shibata, K., Nitta, N., Slater, G.L., Savy, S.K., and Ogawara, Y. 1997, Astrophys. J. Lett. 478, L41-L44: Shrinkage of Coronal X-Ray Loops
- Wang, Y.M., Hawley, S.H., and Sheeley, N.R. 1996, Science 271, 464-469: The Magnetic Nature of Coronal Holes
- Wang, Y.M., Nash, A.G., and Sheeley, N.R. 1989, Astrophys. J. 347, 529-539: Evolution of the Sun's Polar Fields During Sunspot Cycle 21: Poleward Surges and Long-Term Behavior
- Wang, Y.M., Nash, A.G., and Sheeley, N.R. 1989, Science 245, 712-718: Magnetic Flux Transport on the Sun
- Wang, Y.M., and Sheeley, N.R. 1988, J. Geophys. Res. 93, 11227-11236: The Solar Origin of Long-Term Variations of the Interplanetary Magnetic Field Strength
- Wang, Y.M., and Sheeley, N.R. 1989, Solar Phys. 124, 81-100: Average Properties of Bipolar Magnetic Regions During Sunspot Cycle 21
- Wang, Y.M., and Sheeley, N.R. 1990, Astrophys. J. 365, 372-386: Magnetic Flux Transport and the Sunspot-Cycle Evolution of Coronal Holes and Their Wind Streams
- Wang, Y.M., and Sheeley, N.R. 1992, Astrophys. J. 392, 310-319: On Potential Field Models of the Solar Corona
- Wang, Y.M., and Sheeley, N.R. 1993, Astrophys. J. 414, 916-927: Understanding the Rotation of Coronal Holes

- Wang, Y.M., and Sheeley, N.R. 1994, *Astrophys. J.* 430, 399-412: The Rotation of Photospheric Magnetic Fields: a Random Walk Transport Model
- Wang, Y.M., Sheeley, N.R., Dere, K.P., Duffin, R.T., Howard, R.A., Michels, D.J., Moses, J.D., Harvey, J.W., Branston, D.D. et al 1997, *Astrophys. J.* 484, L75-L78: Association of Extreme-Ultraviolet Imaging Telescope (EIT) Polar Plumes with Mixed-Polarity Magnetic Network
- Wang, Y.M., Sheeley, N.R., Hawley, S.H., Kraemer, J.R., Brueckner, G.E., Howard, R.A., Korendyke, C.M., Michels, D.J., Moulton, N.E., and Socker, D.G. 1997, *Astrophys. J.* 485, 419-429: The Green-Line Corona and its Relation to the Photosphere
- Wang, Y.M., Sheeley, N.R., Nash, A.O., and Shampine, L.R. 1988, *Astrophys. J.* 327, 427-450: The Quasi-Rigid Rotation of Coronal Magnetic Fields
- Wang, Y.M., Sheeley, N.R., Walters, J.H., Brueckner, G.E., Howard, R.A., Michels, D.J., Lamy, P.L., Schwenn, R., and Simnett, G.M. 1998, *Astrophys. J. Lett.* 498, L165-L168: Origin of Streamer Material in the Outer Corona
- Wang, Z., Schmahl, E.J., and Kundu, M.R. 1987, *Solar Phys.* 111, 419-428: Meterwave Observations of a Coronal Hole
- Wang, Z., Yoshimura, H., and Kundu, M. 1988, in Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 458-471: A Two-Zone Model of Coronal Hole Structure in the High Corona
- Watanabe, T. 1991, in Flare Physics in Solar Activity Maximum 22, Y. Uchida et al. , eds., 353:- Search for Transient Coronal Holes by Solar-A Soft X-Ray Telescope
- Watanabe, T., Kozuka, Y., Ohyama, M., Kojima, M., Yamaguchi, K., Watari, S., Tsuneta, S., Joselyn, J.A., Harvey K.L., Acton, L.W., and Klimchuk, J.A. 1992, *Publ. Astron. Soc. Japan* 44, L199-L204: Coronal/Interplanetary Disturbances Associated with Disappearing Solar Filaments
- Watari, S.I. 1991, in Flare Physics in Solar Activity Maximum 22, Y. Uchida et al. , eds., 357:- Application of Solar A SXT Data to Flare and Geomagnetic Storm Forecasting Research
- Webb, D.F. 1985, *Solar Phys.* 97, 321-344: Coronal X-Ray Activity Preceding Solar Flares
- Webb, D.F., and Davis, J.M. 1985, *Solar Phys.* 102, 177-190: The Cyclical Variation of Energy Flux and Photospheric Magnetic Field Strength from Coronal Holes
- Webb, D.F., Davis, J.M., and McIntosh, P.S. 1985, *Solar Phys.* 92, 109-132: Observations of the Reappearance of Polar Coronal Holes and the Reversal of the Polar Magnetic Field
- Webb, D.F., Holman, G.D., Davis, J.M., Kundu, M.R., and Shevgaonkar, R.K. 1987, *Astrophys. J.* 315, 716-728: The Plasma and Magnetic Field Properties of Coronal Loops Observed at High Spatial Resolution
- Webb, D.F., Johnston, J.C., and Radick, R.R. 2002, *EOS Trans. Am. Geophys. Union* 83, 33,38-39: The Solar Mass Ejection Imager (SMEI): A New Tool for Space Weather

- Webb, D.F., Kahler, S.W., McIntosh, P.S., and Klimchuck, J.A. 1997, Geophys. Res. 102, 24161-24174: Large-Scale Structures and Multiple Neutral Lines Associated with Coronal Mass Ejections
- Webb, D.F., Martin, S.F., Moses, D., and Harvey, J.W. 1993, Solar Phys. 144, 15-35: The Correspondence Between X-Ray Bright Points and Evolving Magnetic Features on the Bright Sun
- Webb, D.F., and Moses, J.D. 1990, Adv. Space Res. 10, no. 9, 185-190: The Correspondence Between Small-Scale Coronal Structures and the Evolving Solar Magnetic Field
- Weber, M., Sirota, J.M., and Reuter, D.C. 1996, J. Mol. Spectr. 177, 211-220: I-Resonance Intensity Effects and Pressure Broadening of N<sub>2</sub>O at 17 Microns
- Wennberg, P.O., Brault, J.W., Hanisco, T.F., Salawitch, R.J., and Mount, G.H. 1997, J. Geophys. Res. 102, 8887-8898: The Atmospheric Column Abundance of Io: Implications for Stratospheric Ozone
- West, E.A., and Balasubramaniam, K.S. 1992, in SPIE 1746, Polarization Analysis and Measurement: San Diego, CA, 19-21 July, 1992. D.H. Goldstein and R.A. Chipman, eds., 281-294: Crosstalk in Solar Polarization Measurements
- Westendorp Plaza, C., Del Toro Iniesta, J., Ruiz Cobo, B., Martinez Pillet, V., Lites, B.W., and Skumanich, A. 1997, Nature 389, 47-49: Evidence for a Downward Mass Flux in the Penumbral Region of a Sunspot
- Westendorp Plaza, C., Del Toro Iniesta, J.C., Ruiz Cobo, B., Martinez Pillet, V., Lites, B.W., and Skumanich, A. 1997, in Advances in the Physics of Sunspots: First Advances in Solar Physics Euroconference, Tenerife Spain, 2-6 October, 1996. B. Schmieder, J.C. del Toro Iniesta, and M. Vazquez, eds., 202-: Optical Tomography of a Sunspot: Preliminary Results
- Westendorp Plaza, C., Del Toro Iniesta, J.C., Ruiz Cobo, B., Martinez Pillet, V., Lites, B.W., and Skumanich, A. 1998, Astrophys. J. 494, 453-471: Optical Tomography of a Sunspot. I. Comparison Between Two Inversion Techniques
- Whaling, W., Anderson, W.H., Carle, M.T., Brault, J.W., and Zarem, H.A. 1995, J. Quan. Spectr. Rad. Trans. 53, 1-22: Argon Ion Linelist and Level Energies in the Hollow-Cathode Discharge
- Whaling, W., and Brault, J.W. 1988, Phys. Scripta 38, 707-718: Comprehensive Transition Probabilities in MoI
- Whaling, W., Chevako, C., and Lawler, J.E. 1986, J. Quan. Spectr. Rad. Trans. 36, 491-496: Lifetimes, Branching Ratios, and Transition Probabilities in Molybdenum I
- Whaling, W., Hannaford, P., and Lowe, R.M. 1985, Astron. Astrophys. 153, 109-115: Absolute Transition Probabilities in Vanadium I and the Solar Abundance of Vanadium
- Whaling, W., Hannaford, P., Lowe, R.M., Biemont, E., and Grevesse, N. 1984, J. Quan. Spectr. Rad. Trans. 32, 69- : Lifetimes, Branching Ratios, and Transition Probabilities in MoI

- White, O.R. 1988, in Solar Radiative Output Variation: Workshop Proceedings, Boulder, CO, 9-11 November, 1987, 87-: Ground-Based Surrogates for UV and EUV Fluxes
- White, O.R. 1994, in IAU Colloquium 143, The Sun as a Variable Star: Solar and Stellar Irradiance Variations. Proceedings, Boulder, CO, 20-25 June 1993. J. M. Pap, C. Frohlich, H.S. Hudson and S. Solanki, eds. (Cambridge University Press), 45-53: The Solar Spectral Irradiances from X-Ray to Radio Wavelengths
- White, O.R., Livingston, W.C., and Keil, S.L. 1992, in Solers22: Proceedings of the Workshop on the Solar Electromagnetic Radiation Study for Solar Cycle 22: Boulder, Colorado, June, 1991. R.F. Donnelly, ed. (NOAA), 160-165: Solar Cycle Ca II Measurements and Activity Cycles in Solar-Type Stars
- White, O.R., Livingston, W.C., Keil, S.L., and Henry, T.W. 1998, in Synoptic Solar Physics: 18th NSO/SP Summer Workshop, Sunspot New Mexico, 9-12 September, 1997. K.S. Balasubramaniam, J.W. Harvey, and D.M. Rabin, eds. (Astron. Soc. Pacific), 293-300: Variability of the Solar CaII K Line Over the 22-Year Hale Cycle
- White, O.R., Livingston, W.C., and Wallace, L. 1987, J. Geophys. Res. 92, 823-827: Variability of Chromospheric and Photospheric Lines in Solar Cycle 21
- White, O.R., Rottman, G.J., and Livingston, W.C. 1990, Geophys. Res. Lett. 17, 575-578: Estimation of the Solar Lyman Alpha Flux from Ground-Based Measurements of the Ca II K Line
- White, O.R., Rottman, G.J., Woods, T.N., Knapp, B.G., Keil, S.L., Livingston, W.C., Tapping, K.F., Donnelly, R.F., and Puga, L.C. 1994, J. Geophys. Res. 99, 369-372: Change in the Radiative Output of the Sun in 1992 and its Effect in the Thermosphere
- White, O.R., Skumanich, A., Lean, J., Livingston, W.C., and Keil, S.L. 1992, Pub. Astron. Soc. Pacific 104, 1139-1143: The Sun in a Non-Cycling State
- White, S.M., Kundu, M.R., and Gopalswamy, N. 1992, Astrophys. J. Suppl. Ser. 78, 599-617: High Dynamic Range Multifrequency Radio Observations of a Solar Active Region
- White, S.M., Thejappa, G., and Kundu, M.R. 1992, Solar Phys. 138, 163-187: Observations of Mode Coupling in the Solar Corona and Bipolar Noise Storms
- Wickliffe, M.E., and Lawler, J.E. 1997, J. Opt. Soc. Am. B 14, 737-753: Atomic Transition Probabilities for Tm I and Tm II
- Widing, K.G. 1997, Astrophys. J. 480, 400-405: Emerging Active Regions on the Sun and the Photospheric Abundance of Neon
- Wiehr, E., Balthasar, H., and Stellmacher, G. 1988, in Seismology of the Sun and Sun-Like Stars: Tenerife, Canary Islands, 26-30 September, 1988. E. Rolfe, ed. ESA SP-286, 269-272: Oscillations in Presence of Local Magnetic Fields
- Wiehr, E., and Stellmacher, G. 1989, Astron. Astrophys. 225, 528-532: Velocity and Magnetic Field Fluctuations in Penumbral Fine-Structures

- Wiese, W.L., Brault, J.W., Danzmann, K., Helbig, V., and Kock, M. 1989, Phys. Rev. A 39, 2461-2471: A Unified Set of Atomic Transition Probabilities for Neutral Argon
- Williams, W., Hill, F., and Toner, C. 1993, in Astronomical Data Analysis Software and Systems II: Boston, MA, 2-4 November, 1992. R.J. Hanisch, R.J. Brissenden, and L.J. Barnes, eds. (Astron. Soc. Pacific), 494-498: Tests of a Simple Data Merging Algorithm for the GONG Project
- Williams, W., Hill, F., Toner, C., and Brown, T.M. 1993, in GONG 1992: Seismic Investigation of the Sun and Stars. Conference Proceedings, Boulder, Colorado, 11-14 August, 1992. T. Brown, ed. (Astronomical Society of the Pacific), 441-444: Tests of a Simple GONG P-Mode Merging Algorithm
- Williams, W.E., Goodrich, J., and Toussaint, R. 1994, in Astronomical Data Analysis Software and Systems III: Victoria Canada, 12-15 October, 1993. Crabtree, Barnes, and Hanisch, eds. (Astronomical Society of the Pacific), 312-: Automated Image Quality Assessment for the GONG Project
- Williams, W.E., Hill, F., and Toner, C. 1993, in Astronomical Data Analysis Software and Systems II: Boston, MA, 2-4 November 1992. R.J. Hanisch, R.J. Brissenden, and J. Barnes, eds. (Astronomical Society of the Pacific): Tests of a Simple Data Merging Algorithm for the GONG Project
- Williams, W.E., and Toner, C. 1997, Astron. Soc. Pacific Conf. Ser. 101, Astronomical Data Analysis Software and Systems V, Tucson AZ, 23-25 Oct. 1995 (A.S.P.), 219-222: Image Quality Assessment Using the Modulation Transfer Function
- Williams, W.E., Toner, C., and Hill, F. 1995, in ESA SP 376, Helioseismology: Proceedings, Fourth SOHO Workshop, Pacific Grove CA, USA, 2-6 April, 1995. J.T. Hoeksema, ed. (ESA), Volume 2, 185-189: Implementation of an MTF-Based Merging Algorithm for GONG Image Data
- Williams, W.E., Toner, C., and Hill, F. 1995, in GONG 94: Helio- and Astero-Seismology from the Earth and Space. Conference Proceedings, Los Angeles California, 16-20 May 1994. R. Ulrich, ed. (Astronomical Society of the Pacific), 500-503: Test of a Data Merging Algorithm Based on the Modulation Transfer Function
- Wills-Davey, M.J., and Thompson, B.J. 1999, Solar Phys. 190, 467-483: Observations of a Propagating Disturbance in Space
- Willson, R.C., and Mordvinov, A. 1999, Geophys. Res. Lett. fR, 3613-: Time-Frequency Analysis of Total Solar Irradiance Variations
- Willson, R.F. 1985, Astrophys. J. 298, 911-917: VLA Observations of Solar Active Regions at Closely Spaced Frequencies: Evidence for Thermal Cyclotron Line Emission
- Willson, R.F. 1985, Solar Phys. 96, 199- : VLA Observations of Narrow-Band Decimetric Burst Emission
- Willson, R.F. 1988, in Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 54-65: Microwave Observations of Solar and Stellar Coronae

- Willson, R.F. 1991, in Flares 22 Workshop: Dynamics of Solar Flares. Chantilly France, October 16-19, 1990. B. Schmieder and E. Priest, eds., 155-156: VLA Studies of Large-Scale Coronal Loops
- Willson, R.F. 1998, in ESA SP-421, Solar Jets and Coronal Plumes: Proceedings of an International Meeting, Guadeloupe France, 23-26 February 1998. S. Koutchmy, P. Martens, and K. Shibata, eds., 349-354: The Radio and EUV Signatures of Small-Scale Coronal Magnetic Reconnection Events
- Willson, R.F., Kile, J.N., and Rothberg, B. 1997, *Solar Phys.* 170, 299-320: Very Large Array Observations of Evolving Noise Storm Sources on the Sun
- Willson, R.F., Lang, K.R., and Gary, D.E. 1993, *Astrophys. J.* 418, 490-495: Particle Acceleration and Flare Triggering in Large-Scale Magnetic Loops Joining Widely-Spaced Active Regions
- Willson, R.F., Lang, K.R., and Liggett, M. 1990, *Astrophys. J.* 350, 856-867: Impulsive Microwave Burst and Solar Noise Storm Emission Resolved with the VLA
- Willson, R.F., Schmelz, J.T., Gonzalez, R.D., Lang, K.R., Smith, K.L. 1991, *Astrophys. J.* 378, 360-: Multi-Wave Band SMM-VLA Observations of an M2 Flare and an Associated Coronal Mass Ejection
- Wilson, P.R. 1992, *Astrophys. J.* 399, 294-299: Helioseismology Data and the Solar Dynamo
- Wilson, P.R. 1992, *Solar Phys.* 138, 11-21: The Reversal of the Solar Polar Magnetic Fields. III. The Large-Scale Fields and the First Active Regions of Cycle 22
- Wilson, P.R. 1994, Solar and Stellar Activity Cycles. Monograph. (Cambridge University Press) 274 pp.
- Wilson, P.R. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 845-849: Slow Poles and Shearing Flows from Helioseismic Observations with MDI and GONG Spanning a Year
- Wilson, P.R., Altrock, R.C., Harvey, K.L., Martin, S.F., and Snodgrass, H.B. 1988, *Nature* 333, 748-750: The Extended Solar Activity Cycle
- Wilson, P.R., Burtonclay, D., and Li, Y. 1997, *Astrophys. J.* 489, 395-402: The Rotational Structure of the Region Below the Solar Convection Zone
- Wilson, P.R., and Li, Y. 1999, in SOHO 6/ GONG 98: Structure and Dynamics of the Interior of the Sun and Sun-Like Stars: Workshop Proceedings, Boston Massachusetts, 1-4 June 1998. S.G. Korzennik and A. Wilson, eds. ESA SP-418, 857-859: Is the Solar Rotation Uniform Below the Tachocline?
- Wilson, P.R., and McIntosh, P.S. 1991, *Solar Phys.* 136, 221-237: The Reversal of the Solar Polar Magnetic Fields II: Simulations of the Large-Scale Fields
- Wilson, R.M., Rabin, D.M., and Moore, R.L. 1987, *Solar Phys.* 111, 279-285: 10.7-cm. Solar Radio Flux and the Magnetic Complexity of Active Regions

- Winkel, R.J. 1984, Infrared Spectra of Diatomic Molecules of Astrophysical Interest: Carbon-Monosulfide, Sulfur-Monohydride, Iron-Monohydride (Zirconium-Monosulfide). PhD Thesis (University of California, Berkeley)
- Winkel, R.J., and Davis, S.P. 1984, Can. J. Phys. 62, 1420- : lambda-Doubling in the Infrared Spectrum of SH
- Winkel, R.J., Davis, S.P., Pecynner, R., and Brault, J.W. 1984, Can. J. Phys. 62, 1414-1419: The Infrared Spectrum of CS
- Withbroe, G.L., Fisher, R.R., Antiochos, S., Brueckner, G., Hoeksema, J.T., Hudson, H., Moore, R., Radick, R.R., Rottman, G., and Scherrer, P. 1991, in Space Physics Strategy Implementation Study. Volume I: Goals, Objectives, Strategy. A Report to the Space Physics Subcommittee of the Space Science and Applications Advisory Committee, 67-83: Report of the Solar Physics Panel
- Withbroe, G.L., Kohl, J.L., Weiser, H., and Munro, R.H. 1985, Astrophys. J. 297, 324-337: Coronal Temperatures, Heating, and Energy Flow in a Polar Region of the Sun at Solar Maximum
- Wolff, S.C., Boesgaard, A., and Simon, T. 1986, Astrophys. J. 310, 360-370: Activity in F Stars
- Wood, C.H., Habbal, S.R., Esser, R., and Penn, M. 1999, in Solar Wind Nine: Workshop Proceedings, 293-296: Spectral Line Observations in a Coronal Hole and Streamer Below 1.5 Rsun
- Woodard, M. 1984, Short-Period Oscillations in the Total Solar Irradiance. PhD Thesis (University of California, San Diego)
- Woodard, M.F., Kuhn, J.R., Murray, N., and Libbrecht, K.G. 1991, Astrophys. J. Lett. 373, L81-L84: Short-Term Changes in Solar Oscillation Frequencies and Solar Activity
- Worden, J., Harvey, J.W., and Shine, R. 1999, Astrophys. J. 523, 450-457: Bright Chromospheric Grains and the Magnetic Intranetwork
- Worden, J., Woods, T.N., Neupert, W.M., and Delaboudiniere, J. 1998, Astrophys. J. 496, 998-1014: Evolution of Chromospheric Structures Derived from Ca II K Spectroheliograms: Implications for Solar Ultraviolet Irradiance Variability
- Worden, J.R., White, O.R., and Woods, T.N. 1998, Solar Phys. 177, 255-264: Plage and Enhanced Network Indices Derived from Ca II K Spectroheliograms
- Worden, S.P., Schneeberger, T.J., Deluca, E.E., Giampapa, M.S., and Cram, L.E. 1984, Astrophys. J. 276, 270-280: The Response of Chromospheric Emission Lines to Flares on YZ Canis Minoris
- Wu, S.T. et al 1986, in Energetic Phenomena on the Sun: SMM Flare Workshop Proceedings, Goddard Space Flight Center, June 1983 and Feb. 1984. M. Kundu and B. Woodgate, eds. NASA CP-2401, Chapter 5: 1-73: Flare Energetics
- Wulser, J.P., and Canfield, R.C. 1990, in MAX '91: Workshop no. 2, Laurel, Maryland, 8-9 June, 1989, 291-294: Halpha Imaging Spectroscopy of March 1989 Flares

- Wulser, J.P., Canfield, R.C., and Rieger, E. 1991, in MAX '91: Workshop no. 3, Estes Park, Colorado, 3-7 June, 1990. R.M. Winglee and A.L. Kiplinger, eds., 149-152: Chromospheric Response During the Gamma Ray Flare on March 10, 1989
- Wulser, J.P., and Marti, H. 1989, *Astrophys. J.* 341, 1088-1096: High Time Resolution Observations of Halpha Line Profiles During the Impulsive Phase of a Solar Flare
- Wulser, J.P., Zarro, D.M., and Canfield, R.C. 1992, *Astrophys. J.* 384, 341-347: Energetics and Dynamics in a Large Solar Flare of March 1989
- Yashiro, S., Shibata, K., and Shimojo, M. 1998, *Astrophys. J.* 493, 970-977: Early Evolution of Coronal Active Regions Observed with the YOHKOH Soft X-Ray Telescope. I. Expansion Velocity
- Ye, B., and Livingston, W.C. 1998, *Solar Phys.* 179, 1-15: Peering Over the Sun's Pole: Behavior of its Rotational Vortex
- Yoon, T., Yun, H.S., and Kim, J. 1995, *J. Korean Astron. Soc.* 28, 245-253: Dynamical Characteristics of Sunspot Chromospheres II. Analysis of CaII H, K and Lamda 8498 Lines of a Sunspot (SPO 5007) for Oscillatory Motions
- Yoshimura, H. 1985, *Publ. Astron. Soc. Japan* 37, 171-181: Cooling of Magnetic Flux Tubes as a Mechanism for Suppression of Magnetic Buoyant Escape of the Flux Tubes from the Sun. and Stars
- Yoshimura, H. 1996, in Solar Drivers of Interplanetary and Terrestrial Disturbances: 16th NSO/Sac Peak Workshop, Sunspot New Mexico, 16-20 October, 1995. *Astron. Soc. Pacific. Conf. Ser.* Vol. 95. K.S. Balasubramaniam, S.L. Keil, and R.N. Smartt, eds. (*Astron. Soc. Pacific*), 601-608: Coupling of Total Solar Irradiance and Magnetic Field Variations with Time Lags: Magneto-Thermal Pulsation of the Sun
- Yoshimura, H., Wang, Z., and Wu, F. 1984, *Astrophys. J.* 280, 865-872: Linear Astrophysical Dynamos in Rotating Spheres: Differential Rotation, Anisotropic Turbulent Magnetic Diffusivity, and Solar-Stellar Cycle Magnetic Parity
- Yoshimura, H., Wang, Z., and Wu, F. 1984, *Astrophys. J.* 283, 870-878: Linear Astrophysical Dynamos in Rotating Spheres: Mode Transition Between Steady and Oscillatory Dynamos as a Function of Dynamo Strength and Anisotropic Turbulent Magnetic Diffusivity
- Yoshimura, H., Wu, F., and Wang, Z. 1984, *Astrophys. J.* 285, 325-338: Linear Astrophysical Dynamos in Rotating Spheres: Solar and Stellar Cycle North-South Hemispheric Parity Selection Mechanism and Turbulent Magnetic Diffusivity
- Yun, H.S., and Beebe, H.A. 1986, *Astrophys. Space Sci.* 118, 173-175: Reference Models of Sunspot Chromospheres
- Yun, H.S., Beebe, H.A., and Baggett, W.E. 1984, *Solar Phys.* 92, 145-151: A Model of a Penumbral Chromosphere
- Zachariadis, T., Alissandrakis, C.E., and Banos, G. 1985, in High Resolution in Solar Physics: Eighth IAU European Regional Astronomy Meeting, Toulouse, 17-21 September, 1984, 304-308: Observations of Ellerman Bombs in H alpha

- Zachariadis, T.G., Georgakilas, A.A., Koutchmy, S., and Alissandrakis, C.E. 1999, Solar Phys. 184, 77-86: Fine Structure of the Solar Chromosphere: Arch-Shaped Mottles
- Zander, R., Rinsland, C.P., Farmer, C.B., Brown, L.R., and Norton, R.H. 1986, Geophys. Res. Lett. 13, 757-760: Observation of Several Chlorine Nitrate Bands in Stratospheric Infrared Spectra
- Zander, R., Rinsland, C.P., Farmer, C.B., and Norton, R.H. 1987, J. Geophys. Res. 92, 9836-9850: Infrared Spectroscopic Measurements of Halogenated Source Gases in the Stratosphere with the ATMOS Instrument
- Zarro, D.M., and Canfield, R.C. 1989, Astrophys. J. Lett. 338, L33-L36: H-alpha Redshifts as a Diagnostic of Solar Flare Heating
- Zarro, D.M., and Canfield, R.C. 1990, in IAU Colloquium 104, Solar and Stellar Flares: Workshop Proceedings, Stanford, California, 15-19 August, 1988. B.M. Haisch and M. Rodono, eds., 203-206: Chromospheric Downflows as a Diagnostic of Solar Flare Heating
- Zarro, D.M., Canfield, R.C., Strong, K.T., and Metcalf, T.R. 1988, Astrophys. J. 324, 582-589: Explosive Plasma Flows in a Solar Flare
- Zarro, D.M., Strong, K.T., Canfield, R.C., Metcalf, T., and Saba, J.L. 1986, Adv. Space Res. 6, no. 6, 155-158: Evidence for Explosive Chromospheric Evaporation in a Solar Flare Observed with SMM
- Zarro, D.M., Wulser, J.P., and Canfield, R.C. 1991, in MAX '91: Workshop no. 3, Estes Park, Colorado, 3-7 June, 1990. R.M. Winglee and A.L. Kiplinger, eds., 77-87: Chromospheric Plasma Motions in the X 1.2 Flare of 1536 UT, March 11, 1989
- Zayer, I., Solanki, S.K., and Stenflo, J.O. 1989, Astron. Astrophys. 211, 463-475: The Internal Magnetic Field Distribution and the Diameters of Solar Magnetic Elements
- Zayer, I., Solanki, S.K., Stenflo, J.O., and Keller, C.U. 1990, Astron. Astrophys. 239, 356-366: Dependence of the Properties of Solar Magnetic Flux Tubes on Filling Factor
- Zhang, H. 1993, Solar Phys. 146, 75-92: Solar Chromospheric Magnetic Fields in Active Regions Inferred by Monochromatic Images of the Stokes' Parameter nu of the HBeta Line
- Zhang, H., and Song, M. 1992, Solar Phys. 138, 68-92: Vector Magnetogram and Dopplergram Observation of Magnetic Flux Emergence and its Explanation
- Zhang, M., Zhang, H.Q., Ai, G.X., and Wang, H.N. 1999, Solar Phys. 190, 79-90: Different Spatial Structures Between Network Regions and Active Regions Indicated by Trace 171 A Observation
- Zhang, Q., Soon, W.H., Baliunas, S.L., Lockwood, G.W., Skiff, B.A., and Radick, R.R. 1994, Astrophys. J. Lett. 427, L111-L114: A Method of Determining Possible Brightness Variations of the Sun in Past Centuries from Observations of Solar-Type Stars
- Zhang, Q.Z., Livingston, W.C., Hu, J., and Fang, C. 1987, Solar Phys.. 114, 245-252: Spectral Analysis and the Two-Dimensional Distribution of Physical Parameters in a Quiescent Prominence

- Zhang, Q.Z., Livingston, W.C., Hu, J., and Fang, C. 1988, *Vistas in Astronomy* 31, 35-38: Spectral Analysis and the Two-Dimensional Distribution of Physical Parameters in a Quiescent Prominence
- Zhang, Y., and Engvold, O. 1991, *Solar Phys.* 134, 275-286: Vertical Velocities and Oscillations in Quiescent Filaments
- Zhang, Y., Engvold, O., and Keil, S.L. 1991, *Solar Phys.* 132, 63-80: Structure and Oscillations in Quiescent Filaments from Observations in He I  $\lambda$ 10830A
- Zhang, Z., Li, X., and Smartt, R.N. 1994, in *Adv. Space Res.* 14, no. 4, 41-44: Analysis of Loop Interaction in the Visible Emission Corona
- Zhang, Z., Li, X., and Smartt, R.N. 1995, *Astrophys. Space Sci.* 226, 31-46: Magnetic Reconnection Model for X-Ray Flare Loop Interaction
- Zhang, Z., and Smartt, R.N. 1986, *Solar Phys.* 105, 355-363: Electric Field Measurements in Solar Flares
- Zhang, Z., and Smartt, R.N. 1992, *Acta Astronomica Sinica* 32, 233-238: Interaction of Coronal Loops
- Zhang, Z., and Smartt, R.N. 1994, in *Progress in Astronomy* 12, 287-294: Progress in Dynamic Research of Solar Flare Magnetic Loops (Review)
- Zhao, X., and Hoeksema, J.T. 1992, *J. Geophys. Res.* 97, pp-pp: Identification of Driver Gas-Associated Bz Events and Prediction of Their Orientation
- Zhao, X., and Hoeksema, J.T. 1992, in *Solar Wind Seven: Proceedings of the 3rd COSPAR Colloquium Held in Goslar Germany, 16-20 September 1991*. E. Marsch and R. Schwenn, eds. (Pergamon Press), 697-700: Prediction of Large North-South IMF Component Events Occurring in Driver Gas
- Zhao, X.P., Hoeksema, J.T., and Scherrer, P.H. 1998, in *ESA SP-404, The Corona and Solar Wind Near Minimum Activity: Proceedings, Fifth SOHO Workshop, Oslo Norway, 17-20 June 1997*, 751-755: Modeling Boot-Shaped Coronal Holes Using SOHO-MDI Magnetic Measurements
- Zirin, H., and Popp, B. 1989, *Astrophys. J.* 340, 571- : Observations of the 12-Micron Mg I Lines in Various Solar Features
- Zirker, J.B. 1984, *Total Eclipses of the Sun*. Monograph (Van Nostrand Reinhold). 210 pp.
- Zirker, J.B. 1984, in *Effects of Variable Mass Loss on the Local Stellar Environment: Second Trieste Workshop, Trieste Italy, August 1983*. R. Stalio and R. Thomas, eds., 25-38: The Structure and Variability of the Solar Wind
- Zirker, J.B. 1985, *Mercury* 14, 98-106: Testing Einstein's General-Relativity During Eclipses of the Sun
- Zirker, J.B. 1985, *Solar Phys.* 100, 281-287: Progress in Coronal Physics
- Zirker, J.B. 1985, *Solar Phys.* 102, 33-40: Prominence Hydrogen Lines at 10-20 Microns

- Zirker, J.B. 1986, in Relations Between Chromospheric-Coronal Heating and Mass Loss in Stars: Third Trieste Workshop, Sunspot, New Mexico, 18-25 August, 1984. J.B. Zirker and R. Stalio, eds.: A Review of the Summer Workshop on Chromospheric Diagnostics and Modelling
- Zirker, J.B. 1987, Solar Phys. 111, 235-242: Interferometric Imaging: a Numerical Simulation
- Zirker, J.B. 1987, in Spectroscopy of Astrophysical Plasmas. (Cambridge Univ. Press), 165-184: Spectroscopy of the Solar Corona
- Zirker, J.B. 1987, in Theoretical Problems in High-Resolution Solar Physics II: Workshop Proceedings, Boulder CO, 15-17 September, 1986. G. Athay and D. Spicer, eds. NASA CP- 2483, 143-144: Imaging Interferometry with Non-Redundant Arrays
- Zirker, J.B. 1988, in Solar and Stellar Coronal Structure and Dynamics: a Festschrift in Honor of Dr. John W. Evans. Proceedings of the Ninth Sacramento Peak Summer Symposium, Sunspot, NM, 17-21 August, 1987. R.C. Altrock, ed., 71-79: Wind, Holes, and Bright Points
- Zirker, J.B. 1989, Solar Phys. 119, 341-356: Quiescent Prominences
- Zirker, J.B. 1989, Solar Phys. 120, 253-259: Interferometric Imaging II: Two-Dimensional Non-Redundant Arrays
- Zirker, J.B. 1989, in High Spatial Resolution Solar Observations: Proceedings of the Tenth Sacramento Peak Summer Symposium, Sunspot, New Mexico, 22-26 August, 1988. O. Von der Luhe, ed., 187-190: Phase Recovery with Dual Non-Redundant 2-D Arrays
- Zirker, J.B. 1993, Solar Phys. 147, 47-53: Photospheric Vortices and Coronal Heating
- Zirker, J.B. 1993, in Solar Phys. 148, 43-60: Coronal Heating (Invited Review)
- Zirker, J.B. 1994, Mercury 23, no. 4, 23-26: A Radical in Tweeds
- Zirker, J.B. 1995, in Infrared Tools for Solar Astrophysics: What's Next? 15th NSO/Sac Peak Summer Workshop, Sunspot New Mexico, 19-23 September, 1994. J. Kuhn and M. Penn, eds. (World Scientific), 13-15: Mechanisms of Coronal Heating
- Zirker, J.B. 1998, Solar Phys. 182, 1-19: The Sacramento Peak Observatory
- Zirker, J.B., and Brown, T.M. 1986, J. Opt. Soc. Am. A 3, 2077-2081: Phase Recovery with Dual Non-Redundant Arrays
- Zirker, J.B., and Cleveland, F.M. 1993, Solar Phys. 144, 341-347: Nanoflare Mechanisms: Twisting and Braiding
- Zirker, J.B., and Cleveland, F.M. 1993, Solar Phys. 145, 119-128: Avalanche Models of Active Region Heating and Flaring
- Zirker, J.B., and Cleveland, F.M. 1994, Solar Phys. 153, 245-254: Searching for Nanoflares
- Zirker, J.B., Engvold, O., and Martin, S.F. 1998, Nature 396, 440-441: Counter-Streaming Gas Flows in Solar Prominences as Evidence for Vertical Magnetic Fields

- Zirker, J.B., Engvold, O., and Zhang, Y. 1994, Solar Phys. 150, 81-86: Flows in Quiescent Prominences
- Zirker, J.B., and Koutchmy, S. 1990, Hvar Obs. Bull 13, 41-50: On the Spatial Distribution of Prominence Threads
- Zirker, J.B., and Koutchmy, S. 1990, Solar Phys. 127, 109-118: Prominence Fine Structure
- Zirker, J.B., and Koutchmy, S. 1991, Solar Phys. 131, 107-118: Prominence Fine Structure II: Diagnostics
- Zirker, J.B., Koutchmy, S., Nitschelm, C., Stellmacher, G., Zimmermann, J.P., Martinez, P., Kim, I., Dzubenko, N., Kurochka, L., Makarov, V., Fatianov, M., Rusin, V., Klocok, L., and Matsuura, O.T. 1992, Astron. Astrophys. 258, L1-L4: Structural Changes in the Solar Corona During the July 1991 Eclipse
- Zirker, J.B., Leroy, J.L., and Gaizauskas, V. 1998, Solar Phys. 176, 279-283: The Sinistral-Dextral Regularity: an Independent Test
- Zirker, J.B., Leroy, J.L., and Gaizauskas, V. 1998, in IAU Colloquium 167. New Perspectives on Solar Prominences: a Memorial Colloquium to Lucien D'Azambuja; Aussois France, 28 April-- 4 May, 1997. D. Webb, D.M. Rust and B. Schmeider, eds. (Kluwer), 439-441: Are All Prominences Either Sinistral or Dextral?
- Zirker, J.B., Martin, S.F., Harvey, K.L., and Gaizauskas, V. 1997, Solar Phys. 175, 27-44: Global Magnetic Patterns of Chirality
- Zlobec, P., Messerotti, M., Dulk, G.A., and Kucera, T. 1992, Solar Phys. 141, 165-180: VLA and Trieste Observations of Type I Storms, Type IV and Pulsations
- Zwaan, C., Brants, J. J., and Cram, L.E. 1985, Solar Phys. 95, 3-13: High Resolution Spectroscopy of Active Regions. 1. Observing Procedures
- Zwann, C. 1985, Solar Phys. 100, 397-414: The Emergence of Magnetic Flux