

CURRICULUM VITAE

STAMATIOS M. KRIMIGIS

**Member, Academy of Athens,
Chair of Science of Space, Athens, Greece**

**Head Emeritus, Space Department
Applied physics Laboratory
The Johns Hopkins University
Laurel, MD, USA**

Updated: November 12, 2007

CURRICULUM VITAE

STAMATIOS M. KRIMIGIS

Born: September 10, 1938, Chios, Greece

Education:	Bachelor of Physics	University of Minnesota	1961
	M. S. (Physics)	University of Iowa	1963
	Ph.D. (Physics)	University of Iowa	1965

Positions Held:	2005-Present	Member, Academy of Athens, Chair of Science of Space, Athens, Greece
	2004-Present	Head Emeritus, Space Department Applied physics Laboratory The Johns Hopkins University
	1991 - 2004	Head, Space Department Applied Physics Laboratory The Johns Hopkins University
	1980 - 1990	Chief Scientist, Space Department Applied Physics Laboratory The Johns Hopkins University
	1974 - 1981	Group Supervisor, Space Physics and Instrumentation Group Applied Physics Laboratory The Johns Hopkins University
	1968 - 1974	Supervisor, Space Physics Section Member, Principal Staff (1972) Applied Physics Laboratory The Johns Hopkins University
	1966 - 1968	Assistant Professor of Physics Department of Physics and Astronomy University of Iowa

1965 - 1966	Research Associate Department of Physics and Astronomy University of Iowa
1961 - 1965	Teaching Assistant Research Assistant and NASA Trainee Department of Physics and Astronomy University of Iowa

Relevant Research Experience

*As **Principal Investigator** or **Co-Investigator**, designed, built, flown and analyzed data from 21 instruments on NASA/ESA space missions, 1963 to the present, as follows:*

- Principal Investigator, **NASA-ESA Cassini-Huygens** mission to Saturn and Titan, 1990-present
- Principal Investigator, Low Energy Charged Particle (LECP) experiment on the **NASA Voyager 1 and 2** Spacecraft (to Jupiter, Saturn, Uranus and Neptune), 1971-present.
- Principal Investigator, Charged Particle Measurements Experiment (CPME) on **NASA Explorer 47** and **Explorer 50** (IMP-7 and 8) Spacecraft, 1968-1996.
- Principal Investigator, Feasibility Study for a Charge Composition Explorer - Light Ion Release Experiment, **NASA**, 1973.
- Principal Investigator, **NASA** Active Magnetospheric Particle Tracer Explorers (**AMPTE**), 1977-1989.
- Principal Investigator, Imaging Neutral Particle Detector, **NASA** Innovative Research Program, 1985-1989.
- Principal Investigator, Studies of Multiple-Charged Energetic Trapped Nuclei in the radiation Belt, **National Science Foundation**, 1971-1974.
- Principal Investigator, Studies of Solar and Magnetospheric Particles, **National Science Foundation**, 1977-1983.
- Principal Investigator, Studies in Space Physics, **NASA** grants, 1974-1984.
- Co-Principal Investigator, Energetic Particle Detector (EPD) on **NASA Galileo** mission to Jupiter, 1977-2003.
- Co-Investigator, Energetic Particle Experiment (LAN) on the **ESA-NASA Ulysses** solar polar orbiter 1978-present.
- Co-Investigator, Energetic Particle and Ion Composition (EPIC) on **Geotail**, 1985-present.
- Co-Investigator, Ultra Low Energy Isotope Spectrometer (ULEIS) on **ACE**, 1988-present.
- Co-Investigator, Electron, Proton, and Alpha Monitor (EPAM) on **ACE**, 1988-present.
- Co-Investigator, **MESSENGER** mission to orbit the planet Mercury, 1999-present.
- Collaborating Scientist on **New Horizons** mission to flyby the Pluto-Charon system, 2002-present.
- Co-Investigator with J. A. Van Allen on the University of Iowa Particle Experiments on **NASA Mariner 3, 4 (to Mars) and Mariner 5 (to Venus)**.

Co-Investigator, with J. A. Van Allen, Energetic Particle Experiment, **NASA Explorer 33 and Explorer 35** (Anchored IMP), 1965-1970.

Lead Investigator, Solid State Detector experiment on the **NASA University of Iowa Satellite Injun 4**, 1963-1966.

Lead Investigator, Solid State Detector experiment on the **NASA University of Iowa Satellite Injun 5**, 1966-1971.

Co-Investigator with J. A. Van Allen on the University of Iowa Experiment on **NASA OGO-4** satellite, 1966-1970.

Associate Editor, Journal of Geophysical Research (Space Physics), 1975-1977.

Associate Editor, Space Science Reviews, 1996-2002(?)

As **Chief Scientist and Head** of the Johns Hopkins Applied Physics Laboratory Space Department 1980-2004, I participated (without formal scientific involvement) in the concept development/oversight/management of the following missions: **POLAR, Geosat, Polar Bear, MSX, NEAR, FUSE, TIMED, Contour, and STEREO.**

Teaching and post-graduate supervision

Taught formal courses at the undergraduate and graduate level while on the faculty of the University of Iowa. These included (among several), Introduction to Modern Physics, and Solar-Terrestrial Physics (graduate level) for which there was no textbook at the time. In two years, three Masters degrees and a doctoral dissertation were supervised (W. Innanen, M. S., PhD; Lee Burns, M. S.; and Ching-Ming Tsai, M. S.).

Since moving to Johns Hopkins/APL I have worked with post-doctoral students and only supervised Seminars in Space Plasma Physics and Planetary Physics. Some of the names of post-doctoral students over the period 1970-2004 are: Janet Mather, W. Innanen, P. Verzariu, R. Zwickl, E. Sarris, R. Gold, E. Keath, D. Mitchell, G. Chen, P. Briggs, J. Carbary, R. Decker, E. Kirsch, T. Lui, B. Mauk, R. Lopez, D. Sibeck, N. Paschalidis, J. Giacalone, G. Anagnostopoulos, M. Kane, V. Angelopoulos, D. Haggerty, M. Hill, N. Sergis.

Committee Service

Energetic Particles Team Member on the NASA Mariner-Venus-Mercury Flyby Science Advisory Group, 1969-1970.
Deputy Team Leader, Energetic Particles Team, NASA Outer Planets Mission Definition Phase, 1971-1972.
Member, NASA Atmospheric and Space Physics Working Group for the Space Shuttle, 1973.
Member, Out-of-Ecliptic (OOE) Science Working Group, Jet Propulsion Laboratory, 1976-1977.
Member, Committee on Solar and Space Physics, Space Science Board, National Academy of Sciences, 1977-1980.
Member, NASA Interplanetary Physics Working Group, 1976-1977. Member, NASA Science Working Group on the "OPEN" program, 1978-1979.
Member, Panel for the International Magnetospheric Study (IMS) 1979-1983.
Member, NASA experiment selection committees for various satellites and the Space Shuttle.
Member, Committee on Solar-Terrestrial Physics, Geophysics Research Board, National Academy of Sciences, 1979-1982.
Member, American Geophysical Union, Committee on Public Affairs, 1982-84.
Member, American Geophysical Union, Committee on Congressional Affairs, 1982-84.
Member, NASA Ad-Hoc Committee on STARPROBE, 1980-1982. Member of program committees and occasionally Chairman, for several National and International scientific conferences.
Consultant (category of "Expert"), Office of Space Science, NASA Headquarters.
Consultant, Universities Space Research Association (USRA).
Member, Space Science Board, National Academy of Sciences, 1983-1986
Chairman, Committee on Solar and Space Physics, Space Science Board, National Academy of Sciences, 1983-1986
Member, Citizens Advisory Committee, Congressional Caucus on Science and Technology, 1984-
Member, Steering Committee, Space Science in the Twenty First Century, National Academy of Sciences, 1984-1987.
Member, The Johns Hopkins University Applied Physics Laboratory, Advisory Board, 1985-1986.
Member, Electronics Research Panel, Naval Studies Board, National Academy of Sciences, 1987.
Member, Visiting Committee for Evaluation of High Altitude Observatory, Scientific Program, 1987.
Member, NASA Heliospheric Science Working Group, 1987-1989.
Member, NASA Space and Earth Science Advisory Committee, 1987-1988.
Member, NASA Inter-Agency Consultative Group for Space Science (IACG), 1987-1993.
Member, NSF Global Environment Modeling (GEM), Steering Committee, 1987-1989.
Member, NASA Space Science and Applications Advisory Committee, (SSAAC), 1988-1990.
Member, NASA Solar Probe Science Working Group, 1988-1990.
Member, NASA Space Physics Subcommittee (SPS), 1989-1992.

Visiting Committee Chairman, Space Physics Research Laboratory, University of Michigan, 1989, and also 2005.

Member, AGU Planet Earth Committee, 1988-1992.

Member, NASA Discovery Program Science Working Group, 1989-1992.

Member, Solar System Exploration Planning Workshops, 1989.

Co-chair, Mission Integration and Divisional Science panel, Space Physics Strategy Implementation Study, 1989-1991.

Member, NAS/NRC Committee on Cooperation with the USSR on Solar Activity, Solar Wind, Terrestrial Effects, and Solar Acceleration, October 6, 1990-October 5, 1991.

Member, AGU Committee on Congressional Affairs, 1990-1992.

Chair, SPR 1992-93 Federal Budget Review Panel.

Co-Chairman, Committee on Small Satellites, IAA, 1993-2000.

Chairman, Subcommittee on Planetary Missions, IAA, 1993-2001.

Member, Max Planck Society's Fachbeirat for the Max Planck Institute for Extraterrestrial Physics, 1994-2001

Member, Science Committee, International Space Science Institute (ISSI), Bern, Switzerland, 1994-1999.

Member, NASA Solar System Exploration Subcommittee, 1998-2001.

Member, International Academy of Astronautics (IAA) Board of Trustees, 2000-present.

Chairman, Physical Sciences Commission, IAA, 2000-2003.

Member, NASA Headquarters Executive Management Board for the Deep Space Network, 2003-2005.

Co-Chair of IAA Low Cost Planetary Missions Conference, 1994, 1996, 1998, 2000, 2003.

Honorary Chair, IAA Low Cost Planetary Missions Conference, 2005

Chair, External Visiting Committee, Dept. of Electrical and Computer Engineering, Johns Hopkins, 2002; member 2001-2005.

Member, Applied Physics Laboratory Executive Council, 2000-2004.

Chairman, Board of Trustees, Section 1 (Physical Sciences), IAA, 2005-present

President, Section A on Physical Sciences, Academy of Athens, 2007

Chair/Member, External Visiting Committees for several Universities and University Laboratories, 1980-2005

Professional Societies and Awards

Fellow, American Institute of Aeronautics and Astronautics, 2007

Lifetime Achievement Award, Johns Hopkins Applied Physics Laboratory, 2004

Elected Member of the Academy of Athens, **Chair of Science of Space**. 2004

Fellow, American Association for the Advancement of Science, 2004

COSPAR **Space Science Award**, World Space Congress, 2002

Smithsonian Institution **Trophy for Achievement** to the NEAR team (collective award) in 2002.

Aviation Week and Space Technology “**Laurels in Space Award**” in 2001 for resurrecting the mission to Pluto (New Horizons) launched in 2006.

NASA Medal for **Exceptional Scientific Achievement** (1986)

NASA Medal for **Exceptional Scientific Achievement** (1981)

NASA and ESA **Group Achievement Awards** for Voyager, AMPTE, Galileo, Ulysses, ACE, NEAR, Cassini, 1979-2003 (over 30)

Fellow, American Geophysical Union (1980)

Fellow, American Physical Society (1984)

Associate Fellow, American Institute of Aeronautics and Astronautics, (1994)

Space Sciences Award, International Academy of Astronautics (1994)

Member, International Academy of Astronautics (1996)

Corresponding Member, Athens Academy (1995)

Aviation Week and Space Technology “**Laurels in Space Award**” in 1996 and again in 2001 for the Near Earth Asteroid Rendezvous (NEAR) mission.

International Astronomical Union named asteroid 1979UH as **asteroid “8323 Krimigis”**, 1999. Sigma Xi

Referee for various Journals such as *Journal of Geophysical Research* (Space Physics), *Solar Physics*, *Planetary and Space Sciences*, *Geophysical Research Letters*, *Physical Review Letters*, *Reviews of Geophysics and Space Physics*, *Astrophysical Journal Letters*, *Annales Geophysicae*, etc.

Member/Chair of Program Committees for various National and International Meetings and Symposia

Approximately 1100 contributed and invited papers have been presented at various National and International Meetings

Listed in:

Personalities of America, 3rd Edition, American Biographical Institute, Inc., Totowa, NJ, 1985.
Who's Who in America, 44th Edition, Marquis Who's Who, Inc., Chicago, IL, 1985.
Who's Who in Frontiers of Science and Technology, Marquis Who's Who, Inc., Chicago, IL, 1985.
American Men and Women of Science, The Jaques Cattell Press, New York, NY, 1985.
The International Who's Who of Contemporary Achievement, Biographical Publications, Cambridgeshire, England, 1985.
Men of Achievement, 11th Edition, International Biographical Center, Cambridge, England, 1985.
Who's Who in Technology Today, J. Dick Publishing, Lake Bluff, IL, 1985.
Dictionary of International Biography, International Biographical Centre, Cambridge, England, 1985.

Miscellaneous Contributions

“Energetic Particle Measurements at the Environment of Mercury and Venus”, Final Report of the Energetic Particles Experiment Team, for the Venus/Mercury flyby in 1973, Jet Propulsion Laboratory Report 615-5, April 1970.
“Energetic Particle Measurements on the Outer-Solar-System Missions”, A Report of the Energetic Particles Team of the Mission Definition Phase on the OPGT/MJS Mission, Jet Propulsion Laboratory, April 1972.
“Final Report of the Space Shuttle Payload Planning Working Groups: Atmospheric and Space Physics”, Vol. 2, NASA/GSFC, May 1973. “Voyager-77 Project Report”, Magnetospheres/Interactions Working Group, JHU/APL March 1974, (Chairman).
“The NASA/ESA Dual Spacecraft Out-of-Ecliptic Mission, A Scientific Summary”, Jet Propulsion Laboratory Publication 660-53, April 1977.
“Origin of Plasmas in the Earth's Neighborhood”, Final Report of the Science Definition Working Group, NASA/GSFC, April 1979.
“Solar System Space Physics in the 1980's: A Research Strategy”, Report of the Space Science Board Committee on Solar and Space Physics, National Academy of Sciences, April 1980.
“Solar-Terrestrial Research for the 1980's”, Report of the Committee on Solar-Terrestrial Research, Geophysics Research Board, National Academy of Sciences, December 1981.
“An International Discussion on Research in Solar and Space Physics”, National Academy Press, 1983.
“An Implementation Plan for Priorities in Solar-System Space Physics”, Report of Committee on Solar and Space Physics, National Academy Press, 1985 (Chairman).
“Space Science in the Twenty First Century,” Report on the Major Directions in Space Study, National Academy Press, 1988.
“Research Opportunities in Electronics,” Report of Panel on Research Opportunities in Electronics, Naval Studies Board, Commission on Physical Sciences, National Research Council, National Academy Press, 1987.
“Solar Probe, Scientific Rationale and Mission Concept”, Jet Propulsion Laboratory, California Institute of Technology, JPL, D-6797, 1989.

“Space Physics Strategy-Implementation Study, Volume 1: Goals, Objectives, Strategy; Volume 2: Program Plan”, NASA Report, April, 1991.

Congressional Testimony/Presentations

Subcommittee on Space Science & Applications, Committee on Science & Technology, U.S.

House of Representatives, 98th Congress, February 23, 1983;

Subcommittee on Space Science and Applications, Committee on Science and Technology, U.S.

House of Representatives, 99th Congress, October 8, 1985;

Conference on the Future of Space Science, Congressional Space Caucus, United States House of Representatives, 99th Congress, October 9, 1985;

National Commission on Space, Solar System Space Physics, October 22, 1985.

Augustine Commission Panel, Smithsonian Institutions, Washington, DC, September 27, 1990.

Committee on Science, Subcommittee on Space and Aeronautics, U.S. House of Representatives, 105th Congress, March 19, 1997.

Citations of S. M. Krimigis’ Papers in Scientific Journals

The R. E. Gibson Library (a division of Johns Hopkins Eisenhower Library) performed a citation study in 2004 of 368 publications and identified a total of **5784 citations**. The data are available by year and article number, and can be supplied on a CD. The database, however, only covers **journal articles** but not books or conference proceedings, so it represents **a lower limit**. Because software is not readily available to identify self-citations, a random sample was used to estimate the likely number of such citations. The average rate of self-citations for the sampled articles was approximately 10%. Thus, of the 5784 total, **up to 578 may be self-citations**, leaving a net number of citations at about 5200. The estimated number of citations at this time (2007) is well over 6000.

Publications

(in refereed Journals, book chapters and peer-reviewed Conference proceedings)

1963

1. Krimigis, S. M., Solar protons and their geophysical effects, *Proc. Iowa Academy of Science*, 70, 393-402, 1963.

1965

2. Krimigis, S. M., Interplanetary diffusion model for the time behavior of intensity in a solar cosmic ray event, *J. Geophys. Res.*, 70, 2943-2960, 1965.
3. Van Allen, J. A., L. A. Frank, S. M. Krimigis, and H. K. Hills, Absence of Martian radiation belts and implications thereof, *Science*, 149, 1228-1233, 1965.
4. Van Allen, J. A. and S. M. Krimigis, Impulsive emission of ~40 keV electrons from the sun, *J. Geophys. Res.*, 70, 5737-5751, 1965.

1966

5. Krimigis, S. M., Interplanetary diffusion and cosmic ray modulation, in *Recent Advances in Cosmic Ray Research*, Gauger and Masley, eds., Western Periodicals Co., North Hollywood, California, 147-170, 1966.
6. Krimigis, S. M. and T. P. Armstrong, Observations of protons in the magnetosphere with Mariner 4, *J. Geophys. Res.*, 71, 4641-4650, 1966.
7. Krimigis, S. M. and J. A. Van Allen, Observations of ~500 keV protons in interplanetary space with Mariner IV, *Phys. Rev. Lett.*, 16, 419-423, 1966.

1967

8. Krimigis, S. M. and J. A. Van Allen, Geomagnetically trapped alpha particles, *J. Geophys. Res.*, 72, 5779-5797, 1967.
9. Krimigis, S. M. and J. A. Van Allen, Observations of the February 5-12, 1965, solar particle event with Mariner 4 and Injun 4, *J. Geophys. Res.*, 72, 4471-4486, 1967.
10. Krimigis, S. M., J. A. Van Allen, and T. P. Armstrong, Simultaneous observations of solar protons inside and outside the magnetosphere, *Phys. Rev. Lett.*, 18, 1204-1207, 1967.
11. Van Allen, J. A., S. M. Krimigis, L. A. Frank, and T. P. Armstrong, An upper limit on the intrinsic magnetic dipole moment of Venus based on the absence of a Venusian radiation belt, *Science*, 158, 1673-1675, 1967.

1968

12. Armstrong, T. P. and S. M. Krimigis, Observations of protons in the magnetosphere and magnetotail with Explorer 33, *J. Geophys. Res.*, 73, 143-152, 1968.
13. Krimigis, S. M., Cosmic-ray observations in 1964-65 with Mariner IV, Proc. 10th International Cosmic Ray Conference, *Canadian J. Phys.*, 46, S976-S980, 1968.
14. Krimigis, S. M., Observations of low energy (~0.5 MeV) trapped protons with Injun IV, *Earth's Particles and Fields*, Reinhold Book Corp., New York, B. McCormac, ed., 89-101, 1968.
15. Krimigis, S. M. and J. A. Van Allen, Distribution and energy spectrum of alpha particles in the radiation zones, *Earth's Particles and Fields*, Reinhold Book Corp., New York, B. McCormac, ed., 127-140, 1968.
16. Van Allen, J. A., S. M. Krimigis, L. A. Frank, and T. P. Armstrong, Observed absence of energetic electrons and protons near Venus, *J. Geophys. Res.*, 73, 421-425, 1968.

1969

17. Armstrong, T. P., S. M. Krimigis, and J. A. Van Allen, Observations of the solar particle event of 7 July 1966 with University of Iowa detectors, *Annals of the IQSY*, 3, 313-328, 1969.
18. Fritz, T. A. and S. M. Krimigis, Initial observations of geomagnetically trapped protons and alpha particles with OGO-4, *J. Geophys. Res.*, 74, 5132-5138, 1969.
19. Krimigis, S. M., Observations of low energy solar protons with Mariners 4 and 5, Trudi Mezhdunarodnovo Seminara, *Proc. of the Ioffe Physico-Technical Institute*, Academy of Sciences of the USSR, G. E. Kocharov, ed., Leningrad, 43-86, 1969.
20. Krimigis, S. M., Summary on energetic particles observed during the July 1966 proton flare event, *Annals of the IQSY*, 3, 457-461, 1969.
21. Krimigis, S. M. and D. Venkatesan, The radial gradient of interplanetary radiation measured by Mariners 4 and 5, *J. Geophys. Res.*, 74, 4129-4145, 1969.
22. Krimigis, S. M., J. A. Van Allen, and T. P. Armstrong, Solar particle observations inside the magnetosphere during the 7 July 1966 proton flare event, *Annals of the IQSY*, 3, 395-407, 1969.

1970

23. Armstrong, T. P., S. M. Krimigis, and K. W. Behannon, Proton fluxes at 300 keV associated with propagating interplanetary shock waves, *J. Geophys. Res.*, 75, 5980-5988, 1970.
24. Krimigis, S. M., Alpha particles trapped in the Earth's magnetic field, *Earth's Particles and Fields*, D. Reidel Publishing Co., Dordrecht- Holland, B. McCormac, ed., 364-379, 1970.
25. Krimigis, S. M., The radial gradient of 0.3 MeV protons in inter- planetary space, measured with Mariner 5, Proc. 11th International Cosmic Ray Conference, *Acta Physica Academiae Scientiarum Hungaricae*, 29, Suppl. 2, 125-132, 1970.
26. Krimigis, S. M. and C. D. Wende, X-ray emissions from the Sun, *Proc. of the NATO Advanced Study Institute on Solar Eclipses and the Ionosphere*, Plenum Press, New York, M. Anasassiadis, ed., 115-148, 1970.
27. Krimigis, S. M., P. Verzariu, J. A. Van Allen, T. P. Armstrong, T. A. Fritz, and B. A. Randall, Trapped energetic nuclei $Z \geq 3$ in the Earth's outer radiation zone, *J. Geophys. Res.*, 75, 4210-4215, 1970.
28. Van Allen, J. A., B. A. Randall, and S. M. Krimigis, Energetic carbon, nitrogen, and oxygen nuclei in the Earth's outer radiation zone, *J. Geophys. Res.*, 75, 6085-6091, 1970.

1971

29. Armstrong, T. P. and S. M. Krimigis, Statistical study of solar protons, alpha particles and $Z \geq 3$ nuclei in 1967-1968, *J. Geophys. Res.*, 76, 4230-4244, 1971.
30. Gleeson, L. J., S. M. Krimigis and W. I. Axford, Low-energy cosmic rays near Earth, *J. Geophys. Res.*, 76, 2228-2235, 1971.
31. Krimigis, S. M., Energetic particles, in *The Outer Solar System, Advances in the Astronautical Sciences*, Vol. 29 I, J. Vagners, ed., 529-542, 1971.
32. Krimigis, S. M. and P. Verzariu, Implications on particle storage at the sun from observations of solar-flare proton spectrums, *J. Geophys. Res.*, 76, 792-807, 1971.
33. Krimigis, S. M., E. C. Roelof, T. P. Armstrong, and J. A. Van Allen, Low energy (≥ 0.3 MeV) solar-particle observations at widely separated points (>0.1 AU) during 1967, *J. Geophys. Res.*, 76, 5921-5946, 1971.
34. Krimigis, S. M., P. Verzariu, D. Venkatesan, and B. A. Randall, Redistribution of trapped protons following the 8 March 1970 magnetic storm, Report UAG-12, Part I, *World Data Center A*, 156-159, 1971.
35. Venkatesan, D. and S. M. Krimigis, Observations of low-energy (0.3 to 1.8 MeV) differential spectrums of trapped protons, *J. Geophys. Res.*, 76, 7618-7631, 1971.

1972

36. Armstrong, T. P., S. M. Krimigis, D. V. Reames, and C. E. Fichtel, A comparison of measurements of the charge spectrum of solar cosmic rays from nuclear emulsions and the Explorer 35 solid state detector, *J. Geophys. Res.*, 77, 3607-3612, 1972.

37. Bums, A. L. and S. M. Krimigis, Changes in the distribution of low energy trapped protons associated with the April 17, 1965 magnetic storm, *J. Geophys. Res.*, 77, 112-130, 1972.
38. Verzariu, P. and S. M. Krimigis, Several observations of low-energy solar-proton spectra and possible interpretations, *J. Geophys. Res.*, 77, 3985-3998, 1972.

1973

39. Armstrong, T. P. and S. M. Krimigis, Time variations and angular distributions of alpha particles and medium nuclei for the October 27, 1972 solar particle event, *Proc. 13th International Cosmic Ray Conference*, 2, 1504-1509, 1973.
40. Krimigis, S. M., Absence of coronal particle storage in solar flare events, *Proc. Solar Terrestrial Relations Conference*, 277-281, Calgary, Canada, 1973.
41. Krimigis, S. M., A lower limit to the altitude of coronal particle storage regions deduced from solar proton energy spectra, *Proc. of Symposium on High Energy Phenomena on the Sun*, Ramaty and Stone, eds., 478-485, NASA SP-342, 1973.
42. Krimigis, S. M., The charge composition aspect of energetic trapped particles, *Proc. Solar Terrestrial Relations Conference*, 207-229, Calgary, Canada, 1973.
43. Krimigis, S. M. and T. P. Armstrong, Measurements of the relative abundances of Fe-group, He and M nuclei during the October 29, 1972 solar particle event, *Proc. 13th International Cosmic Ray Conference*, 2, 1510-1515, 1973.
44. Krimigis, S. M. and P. Verzariu, Measurements of geomagnetically trapped alpha particles, 1968-1970: 1. Quiet time distributions, *J. Geophys. Res.*, 78, 7275-7285, 1973.
45. Krimigis, S. M., T. P. Armstrong, and J. W. Kohl, Measurements of the quiet-time low energy proton, alpha, and M-nuclei component in cosmic rays, *Proc. 13th International Cosmic Ray Conference*, 2, 1656-1661, 1973.
46. Roelof, E. C. and S. M. Krimigis, Analysis and synthesis of coronal and interplanetary energetic particle, plasma and magnetic field observations over three solar rotations, *J. Geophys. Res.*, 78, 5375-5410, 1973.
47. Verzariu, P. and S. M. Krimigis, Directional diffusion coefficients of solar protons inside and outside the bow shock, *Planet. Space Sci.*, 21, 971-982, 1973.

1975

48. Armstrong, T. P. and S. M. Krimigis, Variations in the charge composition of the July 2-12, 1974 solar particle event, *Proc. 14th International Cosmic Ray Conference*, 5, 1592-1596, 1975.
49. Armstrong, T. P., S. M. Krimigis, and L. J. Lanzerotti, A reinterpretation of the reported energetic particle fluxes in the vicinity of Mercury, *J. Geophys. Res.*, 80, 4015-4017, 1975.
50. Gold, R. E., S. M. Krimigis, E. C. Roelof, A. S. Krieger, and J. T. Nolte, Relation of large-scale coronal x-ray structure and cosmic rays: 3. Low-intensity solar particle events with enhanced ~ 3 MeV helium and medium fluxes associated with solar wind streams, *Proc. 14th International Cosmic Ray Conference*, 5, 1710-1715, 1975.
51. Krimigis, S. M., J. W. Kohl, and T. P. Armstrong, The magnetospheric contribution to the quiet-time low energy nucleon spectrum in the vicinity of Earth, *Geophys. Res. Lett.*, 2, 457-460, 1975.
52. Krimigis, S. M., J. W. Kohl, and T. P. Armstrong, The quiet-time low energy nucleon spectrum in the vicinity of Earth, *Proc. 14th International Cosmic Ray Conference*, 5, 780-785, 1975.
53. Krimigis, S. M., E. T. Sarris, and T. P. Armstrong, Observations of Jovian electron events in the vicinity of Earth, *Geophys. Res. Lett.*, 2, 561-564, 1975.
54. Krimigis, S. M., E. T. Sarris, and T. P. Armstrong, Observations of quiet-time interplanetary electron enhancements of Jovian origin, *Proc. 14th International Cosmic Ray Conference*, 2, 752-757, 1975.
55. Roelof, E. C. and S. M. Krimigis, Low-energy solar cosmic rays, 1971-1974: A bibliography, *Rev. Geophys. Space Phys.*, 13, 1092-1104, 1975.
56. Roelof, E. C., S. M. Krimigis, W. M. Cronyn, S. D. Shawhan, and P. S. McIntosh, Observation using interplanetary scintillations at 34.3 MHz of the effect of a solar wind disturbance on a solar energetic particle event, *Proc. 14th International Cosmic Ray Conference*, 5, 1692-1697, 1975.

57. Roelof, E. C., R. E. Gold, S. M. Krimigis, A. S. Krieger, J. T. Nolte, P. S. McIntosh, A. J. Lazarus, and J. D. Sullivan, Relation of large scale coronal x-ray structure and cosmic rays: 2. Coronal control of interplanetary injection of 300 keV protons, *Proc. 14th International Cosmic Ray Conference*, 5, 1704-1709, 1975.
58. Sarris, E. T., S. M. Krimigis, and T. P. Armstrong, Observations of energetic particles near interplanetary MHD discontinuities, *Proc. 14th International Cosmic Ray Conference*, 5, 1835-1840, 1975.
59. Wende, C. D., S. M. Krimigis, and J. W. Kohl, Continuous observations of long-term variations in cosmic x-ray sources, *Proc. of International Conference X-Rays in Space*, University of Calgary, Calgary, Alberta, Canada, Vol. II. 935-949, 1975.

1976

60. Armstrong, T. P. and S. M. Krimigis, Interplanetary acceleration of relativistic electrons observed with IMP-7, *J. Geophys. Res.*, 81, 677-682, 1976.
61. Armstrong, T. P., S. M. Krimigis, D. Hovestadt, B. Klecker, and G. Gloeckler, Observation of temporal and spatial variations in the Fe/O charge composition of the solar particle event of 4 July 1974, *Solar Phys.* 49, 395-407, 1976.
62. Roelof, E. C., S. M. Krimigis, W. M. Cronyn, S. D. Shawhan, and P. S. McIntosh, Solar wind and energetic particle events of 20-30 June 1974 analyzed using measurements of interplanetary radio scintillations at 34.3 MHz, *Space Research XVI*, M. J. Rycroft, ed., Akademie-Verlag (Berlin), 727-732, 1976.
63. Sarris, E. T., S. M. Krimigis, and T. P. Armstrong, Observations of a high-energy ion shock spike in interplanetary space, *Geophys. Res. Lett.*, 3, 133-136, 1976.
64. Sarris, E. T., S. M. Krimigis, and T. P. Armstrong, Observations of magnetospheric bursts of high-energy protons and electrons at $\sim 35 R_e$ with IMP-7, *J. Geophys. Res.*, 81, 2341-2355, 1976.
65. Sarris, E. T., S. M. Krimigis, T. Iijima, C. O. Bostrom, and T. P. Armstrong, Location of the source of magnetospheric energetic particle bursts by multispacecraft observations, *Geophys. Res. Lett.*, 3, 437-440, 1976.

1977

66. Armstrong, T. P., G. Chen, E. T. Sarris, and S. M. Krimigis, Acceleration and modulation of electrons and ions by propagating interplanetary shocks, *Study of Travelling Interplanetary Phenomena*, M. A. Shea *et al.* eds., D. Reidel Pub. Co., Dordrecht, Holland, 367-389, 1977.
67. Armstrong, T. P., R. B. Decker, S. M. Krimigis, and J. W. Kohl, Solar and interplanetary particles observed in the interval 20 March through 5 May with IMP-8, in *Upper Atmosphere Geophysics Report on STIP Interval II*, 1977.
68. Gold, R. E., S. M. Krimigis, and E. C. Roelof, Spatially dominated solar particle events 1972-1976, *Proc. 15th International Cosmic Ray Conference*, (Plovdiv, Bulgaria), 5, 119-124, 1977.
69. Gold, R. E., S. M. Krimigis, E. C. Roelof, and R. W. Fillius, The relationship between Jovian electrons and solar wind stream structure, *Proc. 15th International Cosmic Ray Conference*, (Plovdiv, Bulgaria), 5, 220-225, 1977.
70. Kirsch, E., S. M. Krimigis, E. T. Sarris, R. P. Lepping, and T. P. Armstrong, Possible evidence for large, transient electric fields in the magnetotail from oppositely directed anisotropies of energetic protons and electrons, *Geophys. Res. Lett.*, 4, 137-140, 1977.
71. Krimigis, S. M., R. D. Zwickl, J. W. Kohl, and T. P. Armstrong, The quiet-time low energy nucleon spectrum during 1975, *Proc. 15th International Cosmic Ray Conference*, (Plovdiv, Bulgaria), 5, 280-285, 1977.
72. Krimigis, S. M., T. P. Armstrong, W. I. Axford, C. O. Bostrom, C. Y. Fan, G. Gloeckler, and L. J. Lanzerotti, The Low Energy Charged Particle (LECP) experiment on the Voyager spacecraft, *Space Sci. Rev.*, 21, 329-354, 1977.
73. Roelof, E. C. and S. M. Krimigis, Solar energetic particles below 10 MeV, *Study of Travelling Interplanetary Phenomena*, M. A. Shea *et al.* eds., D. Reidel Pub. Co., Dordrecht, Holland, 343-365, 1977.
74. Zwickl, R. D., S. M. Krimigis, R. E. Gold, E. C. Roelof, and T. P. Armstrong, Observations of enhanced abundances of He through Fe nuclei during solar flare events, 1972 to 1976, *Proc. 15th International Cosmic Ray Conference*, (Plovdiv, Bulgaria), 5, 274-279, 1977.

1978

75. Armstrong, T. P., S. M. Krimigis, and R. P. Lepping, Magnetosheath bursts of predominantly medium nuclei observed with IMP-8 on February 16, 1974, *J. Geophys. Res.*, *83*, 5198-5206, 1978.
76. Krimigis, S. M., D. Venkatesan, J. C. Barichello, and E. T. Sarris, Simultaneous measurements of energetic protons and electrons in the distant magnetosheath, magnetotail and upstream in the solar wind, *Geophys. Res. Lett.*, *5*, 961-964, 1978.
77. Roelof, E. C., S. M. Krimigis, and R. E. Gold, Coronal propagation and storage at energies ~ 1 MeV/nucleon, Solar Probe Workshop, Jet Propulsion Laboratory Publication 78-70, ed. M. Neugebauer and R. W. Davies, *A Close-Up of the Sun*, 219-234, 1978.
78. Sarris, E. T., D. J. Williams, and S. M. Krimigis, Observations of counterstreaming between plasma and energetic particles in the magnetotail, *J. Geophys. Res.*, *83*, 5655-5662, 1978.
79. Sarris, E. T., S. M. Krimigis, C. O. Bostrom, and T. P. Armstrong, Simultaneous multispacecraft observations of energetic proton bursts inside and outside the magnetosphere, *J. Geophys. Res.*, *83*, 4289-4305, 1978.
80. Zwickl, R. D., E. C. Roelof, R. E. Gold, S. M. Krimigis, and T. P. Armstrong, Z-rich solar particle event characteristics 1972-1976, *Astrophys. J.*, *225*, 281-303, 1978.

1979

81. Armstrong, T. P., L. J. Lanzerotti, and S. M. Krimigis, Comment on 'Electron calibration of instrumentation for low-energy high-intensity particle measurements at Mercury' by Christon, Daly, Eraker, Perkins, Simpson and Tuzzolino, *J. Geophys. Res.*, *84*, 4468-4470, 1979.
82. Briggs, P. R., T. P. Armstrong, and S. M. Krimigis, Hydrogen over helium enhancement in successive solar flare particle events from the same active region, *Ap. J. (Letts.)*, *228*, L83-L87, 1979.
83. Carbary, J. F. and S. M. Krimigis, Energetic particle activity at 5-minute and 10-second time resolution in the magnetotail and its relation to auroral activity, *J. Geophys. Res.*, *84*, 7123-7137, 1979.
84. Hamilton, D. C., G. Gloeckler, T. P. Armstrong, W. I. Axford, C. O. Bostrom, C. Y. Fan, S. M. Krimigis, and L. J. Lanzerotti, Recurrent energetic particle events associated with forward/reverse shock pairs near 4 AU in 1978, *Proc. 16th International Cosmic Ray Conference*, (Kyoto, Japan), *5*, 363-368, 1979.
85. Krimigis, S. M., Observations of particle acceleration in the Earth's magnetotail, *Particle Acceleration Mechanisms in Astrophysics*, *Proc. No. 56*, ed. Arons, Max, McKee, 179-197, AIP Conference, American Institute of Physics, 1979.
86. Krimigis, S. M. and E. T. Sarris, Energetic particle bursts in the Earth's magnetotail, *Dynamics of the Magnetosphere*, ed. by S.-I. Akasofu, D. Reidel Publishing Co., Dordrecht, Holland, 599-630, 1979.
87. Krimigis, S. M., T. P. Armstrong, W. I. Axford, C. O. Bostrom, C. Y. Fan, G. Gloeckler, L. J. Lanzerotti, E. P. Keath, R. D. Zwickl, J. F. Carbary, and D. C. Hamilton, Hot plasma environment at Jupiter: Voyager-2 results, *Science*, *206*, 977-984, 1979.
88. Krimigis, S. M., T. P. Armstrong, W. I. Axford, C. O. Bostrom, C. Y. Fan, G. Gloeckler, L. J. Lanzerotti, E. P. Keath, R. D. Zwickl, J. F. Carbary, and D. C. Hamilton, Low-energy charged particle environment at Jupiter - A first look, *Science*, *204*, 998-1003, 1979.
89. Lanzerotti, L. J., S. M. Krimigis, C. O. Bostrom, W. I. Axford, R. P. Lepping, and N. F. Ness, Measurements of plasma flow at the dawn magnetopause by Voyager-1, *J. Geophys. Res.*, *84*, 6483-6488, 1979.

1980

90. Armstrong, T. P. and S. M. Krimigis, Reply to "Comment on 'Magnetosheath burst of predominantly medium nuclei observed with IMP-8 on February 16, 1974'", *J. Geophys. Res.*, *85*, 3503-3504, 1980.
91. Carbary, J. F. and S. M. Krimigis, Encounters with Jupiter: The low energy charged particle results of Voyager, *JHU/APL Tech. Dig.*, *1*, 60-63, 1980.
92. Carbary, J. F. and S. M. Krimigis, Hot plasma measurements at Jupiter, *JHU/APL Developments in Science and Technology*, *8*, 68-71, 1980.
93. Coroniti, F. V., L. A. Frank, D. J. Williams, R. P. Lepping, F. L. Scarf, S. M. Krimigis, and G. Gloeckler, Variability of plasma sheet dynamics, *J. Geophys. Res.*, *85*, 2957-2977, 1980.

94. Hamilton, D. C., G. Gloeckler, S. M. Krimigis, C. O. Bostrom, T. P. Armstrong, W. I. Axford, C. Y. Fan, L. J. Lanzerotti, and D. M. Hunten, Detection of energetic hydrogen molecules in Jupiter's magnetosphere by Voyager-2: Evidence for an ionospheric plasma source, *Geophys. Res. Lett.*, 7, 813-816, 1980.
95. Kirsch, E., E. T. Sarris, and S. M. Krimigis, Two spacecraft observation of particle bursts at the distant magnetopause and in the magnetotail boundary layer, *Planet. Space Sci.*, 28, 487-494, 1980.
96. Krimigis, S. M., T. P. Armstrong, W. I. Axford, C. O. Bostrom, C. Y. Fan, G. Gloeckler, L. J. Lanzerotti, D. C. Hamilton, and R. D. Zwickl, Energetic (~100 keV) tailward-directed ion beam outside the Jovian plasma boundary, *Geophys. Res. Lett.*, 7, 13-16, 1980.
97. Lanzerotti, L. J., C. G. MacLennan, R. P. Lepping, and S. M. Krimigis, Intensity variations in plasma flow at the dawn magnetopause, *Planet. Space Sci.*, 28, 1163-1169, 1980.
98. Lanzerotti, L. J., C. G. MacLennan, S. M. Krimigis, T. P. Armstrong, K. W. Behannon, and N. F. Ness, Statistics of the nightside Jovian plasma sheet, *Geophys. Res. Lett.*, 7, 817-820, 1980.
99. Zwickl, R. D., S. M. Krimigis, T. P. Armstrong, and L. J. Lanzerotti, Ions of Jovian origin observed by Voyager 1 and 2 in interplanetary space, *Geophys. Res. Lett.*, 7, 453-456, 1980.

1981

100. Armstrong, T. P., M. T. Paonessa, S. T. Brandon, S. M. Krimigis, and L. J. Lanzerotti, Low energy charged particle observations in the 5-20 R_J region of the Jovian magnetosphere, *J. Geophys. Res.*, 86, 8343-8355, 1981.
101. Carbary, J. F. and S. M. Krimigis, Low energy charged particles at Saturn, *JHU/APL Tech. Dig.*, 2, 87-89, 1981.
102. Carbary, J. F., S. M. Krimigis, E. P. Keath, G. Gloeckler, W. I. Axford, and T. P. Armstrong, Ion anisotropies in the outer Jovian magnetosphere, *J. Geophys. Res.*, 86, 8285-8299, 1981.
103. Decker, R. B., M. E. Pesses, and S. M. Krimigis, Shock-associated low energy ion enhancements observed by Voyagers 1 and 2, *J. Geophys. Res.*, 86, 8819-8831, 1981.
104. Hamilton, D. C., G. Gloeckler, S. M. Krimigis, and L. J. Lanzerotti, Composition of non-thermal ions in the Jovian magnetosphere, *J. Geophys. Res.*, 86, 8301-8318, 1981.
105. Kirsch, E., S. M. Krimigis, W. H. Ip, and G. Gloeckler, X-ray and energetic neutral particle emission from Saturn's magnetosphere: Measurements by Voyager-1, *Nature*, 292, 718-721, 1981.
106. Kirsch, E., S. M. Krimigis, J. W. Kohl, and E. P. Keath, Upper limits for x-ray and energetic neutral particle emission from Jupiter: Voyager-1 results, *Geophys. Res. Lett.*, 8, 169-172, 1981.
107. Kirsch, E., S. M. Krimigis, E. T. Sarris, and R. P. Lepping, Detailed study on acceleration and propagation of energetic protons and electrons in the magnetotail observed aboard IMP-8 during substorm activity, *J. Geophys. Res.*, 86, 6727-6738, 1981.
108. Krimigis, S. M., Planetary magnetospheres: The *in situ* astrophysical laboratories, *Proc. 17th International Cosmic Ray Conference*, Paris, France, 12, 229-272, 1981.
109. Krimigis, S. M., A post-Voyager view of Jupiter's magnetosphere, *Endeavour*, 5, 50-60, 1981.
110. Krimigis, S. M., J. F. Carbary, E. P. Keath, C. O. Bostrom, W. I. Axford, G. Gloeckler, L. J. Lanzerotti, and T. P. Armstrong, Characteristics of hot plasma in the Jovian magnetosphere: Results from the Voyager spacecraft, *J. Geophys. Res.*, 86, 8227-8257, 1981.
111. Krimigis, S. M., T. P. Armstrong, W. I. Axford, C. O. Bostrom, G. Gloeckler, E. P. Keath, L. J. Lanzerotti, J. F. Carbary, D. C. Hamilton, and E. C. Roelof, Low-energy charged particles in Saturn's magnetosphere: Results from Voyager-1, *Science*, 212, 225-231, 1981.
112. Lanzerotti, L. J., C. G. MacLennan, T. P. Armstrong, S. M. Krimigis, R. P. Lepping, and N. F. Ness, Ion and electron angular distributions in the Io torus region of the Jovian magnetosphere, *J. Geophys. Res.*, 86, 8491-8496, 1981.
113. Lui, A. T. Y. and S. M. Krimigis, Earthward transport of energetic protons in the Earth's plasma sheet, *Geophys. Res. Lett.*, 8, 527-530, 1981.
114. Lui, A. T. Y. and S. M. Krimigis, Several features of the earthward and tailward streaming of energetic protons (0.29-0.5 MeV) in the Earth's plasma sheet, *J. Geophys. Res.*, 86, 11173-11188, 1981.
115. Meng, C.-I., A. T. Y. Lui, S. M. Krimigis, S. Ismail, and D. J. Williams, Spatial distribution of energetic particles in the distant magnetotail, *J. Geophys. Res.*, 86, 5682-5700, 1981.

116. Roelof, E. C., R. B. Decker, S. M. Krimigis, D. Venkatesan, and A. J. Lazarus, Galactic cosmic ray gradients, field-aligned and latitudinal, among Voyagers 1/2 and IMP-8, *Proc. 17th International Cosmic Ray Conference*, Paris, France, 10, 96-99, 1981.
117. Sarris, E. T., S. M. Krimigis, A. T. Y. Lui, K. L. Ackerson, L. A. Frank, and D. J. Williams, Relationship between energetic particles and plasmas in the distant plasma sheet, *Geophys. Res. Lett.*, 8, 349-352, 1981.
118. Zwickl, R. D., S. M. Krimigis, J. F. Carbary, E. P. Keath, T. P. Armstrong, D. C. Hamilton, and G. Gloeckler, Energetic particle events (≥ 30 keV) of Jovian origin observed by Voyager 1 and 2 in interplanetary space, *J. Geophys. Res.*, 86, 8125-8140, 1981.

1982

119. Akasofu, S. I., M. Roederer, and S. M. Krimigis, Dawn-dusk asymmetry of the tail region of the magnetosphere of Saturn and the interplanetary magnetic field, *Planet. Space Sci.*, 30, 1061-1063, 1982.
120. Carbary, J. F. and S. M. Krimigis, Charged particle periodicity in the Saturnian magnetosphere, *Geophys. Res. Lett.*, 9, 1073-1076, 1982.
121. Krimigis, S. M., A post-Voyager view of Saturn's environment, *JHU/APL Tech. Dig.*, 3, 180-188, 1982.
122. Krimigis, S. M., Voyager encounters with Jupiter's magnetosphere: Results of the Low Energy Charged Particle (LECP) experiments, in *Compendium in Astronomy*, edited by E. G. Mariolopoulos, D. Reidel Publishing Company, Dordrecht, The Netherlands, 191-200, 1982.
123. Krimigis, S. M. and T. P. Armstrong, Two component proton spectra in the inner Saturnian magnetosphere, *Geophys. Res. Lett.*, 9, 1143-1146, 1982.
124. Krimigis, S. M., G. Haerendel, R. W. McEntire, G. Paschmann, and D. A. Bryant, The Active Magnetospheric Particle Tracer Explorers (AMPTE) program, *EOS Trans., American Geophysical Union*, 63, 843-850, 1982.
125. Krimigis, S. M., T. P. Armstrong, W. I. Axford, C. O. Bostrom, G. Gloeckler, E. P. Keath, L. J. Lanzerotti, J. F. Carbary, D. C. Hamilton, and E. C. Roelof, Low energy hot plasma and particles in Saturn's magnetosphere, *Science*, 215, 571-577, 1982.
126. Lui, A. T. Y., S. M. Krimigis, and T. P. Armstrong, Association between magnetic field fluctuations and energetic particle bursts in the Earth's magnetotail, *J. Geophys. Res.*, 87, 8315-8320, 1982.
127. MacLennan, C. G., L. J. Lanzerotti, S. M. Krimigis, R. P. Lepping, and N. F. Ness, Effects of Titan on trapped particles in Saturn's magnetosphere, *J. Geophys. Res.*, 87, 1411-1418, 1982.
128. Sarris, E. T. and S. M. Krimigis, Evidence for solar magnetic loops beyond 1 AU, *Geophys. Res. Lett.*, 9, 167-170, 1982.

1983

129. Acuña, M. J., J. K. Alexander, R. A. Brown, T. W. Hill, S. M. Krimigis, L. J. Lanzerotti, and G. L. Siscoe, Physics of the Jovian and Saturnian magnetospheres: Highlights of a conference held at The John Hopkins University Applied Physics Laboratory, October 22-24, 1981, *Space Sci. Rev.*, 35, 269-292, 1983.
130. Armstrong, T. P., M. T. Paonessa, E. V. Bell, and S. M. Krimigis, Voyager observations of Saturnian ion and electron phase space densities, *J. Geophys. Res.*, 88, 8893-8904, 1983.
131. Baker, D. N., R. D. Zwickl, J. F. Carbary, S. M. Krimigis, and R. P. Lepping, Energetic ion acceleration and transport in the upstream region of Jupiter: Voyager 1 and 2, *Adv. Space Res.*, 3, 77-80, 1983.
132. Carbary, J. F., S. M. Krimigis, and W. H. Ip, Energetic particle microsignatures of Saturn's satellites, *J. Geophys. Res.*, 88, 8947-8958, 1983.
133. Carbary, J. F., S. M. Krimigis, and B. H. Mauk, Corotation anisotropies in Saturn's magnetosphere, *J. Geophys. Res.*, 88, 8937-8946, 1983.
134. Decker, R. B., A. T. Y. Lui, and S. M. Krimigis, Modeling of interaction of artificially released lithium with the Earth's bow shock, *Geophys. Res. Lett.*, 10, 525-528, 1983.
135. Krimigis, S. M. and E. C. Roelof, Low energy particle population, in *Physics of the Jovian Magnetosphere*, edited by A. J. Dessler, 106-156, Cambridge University Press, New York, 1983.
136. Krimigis, S. M., G. Haerendel, R. W. McEntire, G. Paschmann, and D. A. Bryant, The Active Magnetospheric Particle Tracer Explorers program, *JHU/APL Tech. Dig.*, 4, 1, 3-11, 1983.

137. Krimigis, S. M., G. Haerendel, R. W. McEntire, G. Paschmann, and D. A. Bryant, The Active Magnetospheric Particle Tracer Explorers program, active experiments in space, *Proc. Symposium at Alpbach, 195*, 317-325, 1983.
138. Krimigis, S. M., J. F. Carbary, E. P. Keath, T. P. Armstrong, L. J. Lanzerotti, and G. Gloeckler, General characteristics of hot plasma and energetic particles in the Saturnian magnetosphere: Results from the Voyager spacecraft, *J. Geophys. Res.*, *88*, 8871-8892, 1983.
139. Lanzerotti, L. J., C. G. MacLennan, R. P. Lepping, and S. M. Krimigis, On the plasma conditions at the dayside magnetopause of Saturn, *Geophys. Res. Lett.*, *10*, 1200-1202, 1983.
140. Lanzerotti, L. J., R. E. Gold, K. A. Anderson, T. P. Armstrong, R. P. Lin, S. M. Krimigis, M. Pick, E. C. Roelof, E. T. Sarris, G. M. Simnett, and W. E. Frain, The ISPM experiment for spectral, composition, and anisotropy measurements of charged particles at low energies, in *The International Solar Polar Mission - Its Scientific Investigations*, edited by K. P. Wenzel, R. G. Marsden and B. Battrock, European Space Agency Special Publication SP-1050, 141-153, Noordwijk, The Netherlands, 1983.
141. Lui, A. T. Y. and S. M. Krimigis, Energetic ion beam in the Earth's magnetotail lobe, *Geophys. Res. Lett.*, *10*, 13-16, 1983.
142. MacLennan, C. G., L. J. Lanzerotti, S. M. Krimigis, and R. P. Lepping, Low energy particles at the bow shock, magnetopause and outer magnetosphere of Saturn, *J. Geophys. Res.*, *88*, 8817-8830, 1983.
143. Roelof, E. C., R. B. Decker, and S. M. Krimigis, Latitudinal and field-aligned cosmic ray gradients 2-5 AU: Voyagers 1 and 2 and IMP-8, *J. Geophys. Res.*, *88*, 9889-9909, 1983.

1984

144. Baker, D. N., R. D. Zwickl, S. M. Krimigis, J. F. Carbary, and M. H. Acuña, Energetic particle transport in the upstream region of Jupiter: Voyager Results, *J. Geophys. Res.*, *89*, 3775-3787, 1984.
145. Decker, R. B., S. M. Krimigis, and D. Venkatesan, Estimate of cosmic-ray latitudinal gradient in 1981-1982, *Astrophys. J.*, *278*, L119-L122, 1984.
146. Krimigis, S. M. and J. Dassoulas, Active experiments in the distant magnetosphere: The AMPTE program, AIAA, *Proc. 22nd Aerospace Sciences Meeting*, Reno, NV, 1984.
147. Lui, A. T. Y. and S. M. Krimigis, Association between energetic particle bursts and Birkeland currents in the geomagnetic tail, *J. Geophys. Res.*, *89*, 10741-10748, 1984.
148. Rosner, R., E. L. Chupp, G. Gloeckler, D. J. Gorney, S. M. Krimigis, Y. Mok, R. Ramaty, D. W. Swift, L. Vlahos, and E. G. Zweibel, Particle acceleration, in *Solar-Terrestrial Physics: Present and Future*, edited by D. Butler and K. Papadopoulos, NASA-RP, 1120, 1984.
149. Venkatesan, D., R. B. Decker, and S. M. Krimigis, Cosmic ray intensity gradients in the radial distance 1-13 AU as determined from a comparative study of observations by spacecraft Voyagers 1 and 2, and Earth-orbiting satellite IMP-8, *Proc. 18th International Cosmic Ray Conference*, Bangalore, India, *10*, 156, 1984.
150. Venkatesan, D., R. B. Decker, and S. M. Krimigis, Radial gradient of cosmic ray intensity from a comparative study of data from Voyager 1 and 2 and IMP-8, *J. Geophys. Res.*, *89*, 3735-3746, 1984.
151. Venkatesan, D., R. B. Decker, and S. M. Krimigis, A review of *in-situ* observations of cosmic ray intensity in the heliosphere during 1977-1982, *Proc. International Symposium on Cosmic Ray Modulation in the Heliosphere*, Morioka, Japan, 263-278, 1984.
152. Venkatesan, D., R. B. Decker, S. M. Krimigis, and J. A. Van Allen, The *in-situ* observations of the cosmic ray minimum in the heliosphere during Solar Cycle 21, *Proc. International Symposium on Cosmic Ray Modulation in the Heliosphere*, Morioka, Japan, 279-282, 1984.

1985

153. Behannon, K. W., M. L. Goldstein, R. P. Lepping, H. K. Wong, B. H. Mauk, and S. M. Krimigis, Low frequency waves and associated energetic ions downstream of Saturn, *J. Geophys. Res.*, *90*, 10791-10808, 1985.
154. Bryant, R. A., S. M. Krimigis, and G. Haerendel, Outline of the active magnetospheres particle tracer explorers (AMPTE) mission, *IEEE Trans. on Geoscience and Remote Sensing*, *23*, 177-181, 1985.
155. Cheng, A. F., S. M. Krimigis, and T. P. Armstrong, Near equality of ion phase space densities at Earth, Jupiter, and Saturn, *J. Geophys. Res.*, *90*, A1, 526-530, 1985.

156. Gold, R. E., L. J. Lanzerotti, C. G. MacLennan, and S. M. Krimigis, Latitude dependence on co-rotating shock acceleration, *Proc. 19th International Cosmic Ray Conference*, San Diego, CA, 4, 186-189, 1985.
157. Krimigis, S. M., Early results from the Active Magnetospheric Particle Tracer Explorers (AMPTE) satellite experiments, *JHU/APL Tech. Dig.*, 6, 3, 263-268, 1985.
158. Krimigis, S. M., Guest editor's introduction, *JHU/APL Tech. Dig.*, 6, 2-3, 1985.
159. Krimigis, S. M. and E. T. Sarris, Acceleration of ions and electrons near cosmic ray energies in a perpendicular shock: The January 6, 1978 event, *Proc 19th International Cosmic Ray Conference*, 4, 170-173, 1985.
160. Krimigis, S. M., R. D. Zwickl, and D. N. Baker, Energetic ions upstream of Jupiter's bow shock, *J. Geophys. Res.*, 90, 3947-3960, 1985.
161. Krimigis, S. M., G. Gloeckler, R. W. McEntire, T. A. Potemra, F. L. Scarf, and E. G. Shelley, Magnetic storm of September 4, 1984: A synthesis of ring current spectra and energy densities measured with AMPTE/CCE, *Geophys. Res. Lett.*, 12, 5, 329-332, 1985.
162. Lanzerotti, L. J. and S. M. Krimigis, Comparative magnetospheres, *Physics Today*, 38, 25-34, 1985.
163. Mauk, B. H., S. M. Krimigis, and R. P. Lepping, Particle and field stress balance within a planetary magnetosphere, *J. Geophys. Res.*, 90, 8253-8264, 1985.
164. McEntire, R. W., A. T. Y. Lui, S. M. Krimigis, and E. P. Keath, AMPTE/CCE energetic particle composition measurements during the September 4, 1984 magnetic storm, *Geophys. Res. Lett.*, 12, 317-320, 1985.
165. McEntire, R. W., E. P. Keath, D. E. Fort, A. T. Y. Lui, and S. M. Krimigis, The Medium Energy Particle Analyzer (MEPA) on the AMPTE/CCE spacecraft, *IEEE Trans. on Geoscience and Remote Sensing*, GE-23, 3, 230-233, 1985.
166. Sarris, E. T. and S. M. Krimigis, Multispacecraft observations of the East-West asymmetry of solar energetic storm particle events, *Sol. Phys.*, 96, 413-421, 1985.
167. Sarris, E. T. and S. M. Krimigis, Quasi-perpendicular shock acceleration of ions to ~ 200 MeV and electrons to ~2 MeV observed by Voyager-2, *Astrophys. J.*, 298, 676-683, 1985.
168. Sarris, E. T., R. B. Decker, and S. M. Krimigis, Deep space observations of the east-west asymmetry of solar energetic storm particle events: Voyagers 1 and 2, *J. Geophys. Res.*, 90, A5, 3961-3965, 1985.
169. Venkatesan, D., R. B. Decker, and S. M. Krimigis, Voyager 1 and 2 measurements of radial and latitudinal cosmic ray gradients in 1981-84, *Proc. 19th International Cosmic Ray Conference*, 5, 202-205, 1985.
170. Venkatesan, D., R. B. Decker, S. M. Krimigis, and J. A. Van Allen, The galactic cosmic ray intensity minimum in the inner and outer heliosphere in solar cycle 21, *J. Geophys. Res.*, 90, A3, 2905-2909, 1985.

1986

171. Anagnostopoulos, G., E. T. Sarris, and S. M. Krimigis, Magnetospheric origin of energetic ($E \geq 50$ keV) ions upstream of the bow shock: The October 31, 1977 event, *J. Geophys. Res.*, 91, 3020-3028, 1986.
172. Gold, R. E., L. J. Lanzerotti, G. C. MacLennan, and S. M. Krimigis, Latitude dependence of co-rotating shock acceleration in the outer heliosphere, in *The Sun and the Heliosphere in Three Dimensions*, *Proc. 19th European Space Laboratory Conference*, edited by R. G. Marsden, D. Reidel Publishing Company, Dordrecht, The Netherlands, 325-329, 1986.
173. Krimigis, S. M., Energetic ions upstream of planetary bow shocks: Fermi acceleration or leakage?, in *Comparative Study of Magnetospheric Systems*, edited by CNES, CEPADUES, Toulouse, France, 99-124, 1986.
174. Krimigis, S. M., Luncheon at the White House: On comets and the planet Uranus, *JHU/APL Tech. Dig.*, 7, 383-393, 1986.
175. Krimigis, S. M., Measurements of energetic ions and electrons by the Voyager spacecraft upstream of the bow shocks of Earth, Jupiter, Saturn, and Uranus, *Proc. International Symposium on Space Physics*, Chinese Academy of Science, 3-007, 1986.
176. Krimigis, S. M., D. G. Sibeck, and R. W. McEntire, Magnetospheric particle injection and the upstream ion event of September 5, 1984, *Geophys. Res. Lett.*, 13, 1376-1379, 1986.
177. Krimigis, S. M., T. P. Armstrong, W. I. Axford, A. F. Cheng, G. Gloeckler, D. C. Hamilton, E. P. Keath, L. J. Lanzerotti, and B. H. Mauk, The magnetosphere of Uranus: Hot plasma and radiation environment, *Science*, 233, 97-102, 1986.

178. Krimigis, S. M., G. Haerendel, G. Gloeckler, R. W. McEntire, E. G. Shelley, R. B. Decker, G. Paschmann, T. A. Potemra, F. W. Scarf, A. L. Brinca, and H. Lühr, AMPTE lithium tracer releases in the solar wind: Observations inside the magnetosphere, *J. Geophys. Res.*, *91*, 1339-1353, 1986.
179. Lanzerotti, L. J. and S. M. Krimigis, Comparative magnetospheres, *JHU/APL Tech. Dig.*, *7*, 335-347, 1986.
180. Lopez, R. E., M. J. Engebretson, R. W. McEntire, A. T. Y. Lui, L. J. Zanetti, T. A. Potemra, and S. M. Krimigis, The response of energetic particles to nightside magnetic pulsations as seen by AMPTE/CCE, *Adv. Space Res.*, *6*, 235-239, 1986.
181. Lui, A. T. Y., R. W. McEntire, S. M. Krimigis, and E. P. Keath, Acceleration of energetic oxygen ($E > 137$ keV) in the storm-time ring current, *Proc. Chapman Conference on Ion Acceleration in the Magnetosphere and Ionosphere*, ed. by T. Chang, Washington, DC, 38, 149-152, 1986.
182. Venkatesan, D., R. B. Decker, and S. M. Krimigis, Measurement of radial and latitudinal gradients of cosmic ray intensity during the decreasing phase of sunspot cycle 21, *Proc. 19th ESLAB Symposium On the Sun and the Heliosphere in Three Dimensions*, Dordrecht, Holland, 389-394, 1986.
183. Williams, D. J., T. A. Potemra, and S. M. Krimigis, The twenty-two most frequently cited APL publications - III, *JHU/APL Tech. Dig.*, *7*, 394-405, 1986.

1987

184. Anagnostopoulos, G. C., E. T. Sarris, and S. M. Krimigis, Further on the October 31, 1977 upstream event - A response to Ellison, *J. Geophys. Res.*, *92*, 12461-12468, 1987.
185. Behannon, K. W., R. P. Lepping, E. C. Sittler, N. F. Ness, Jr., B. H. Mauk, S. M. Krimigis, and R. L. McNutt, The magnetotail of Uranus, *J. Geophys. Res.*, *92*, 15354-15366, 1987.
186. Cheng, A. F., R. E. Johnson, S. M. Krimigis, and L. J. Lanzerotti, Magnetosphere, exosphere and surface of Mercury, *Icarus*, *71*, 430-440, 1987.
187. Cheng, A. F., S. M. Krimigis, B. H. Mauk, E. P. Keath, C. G. MacLennan, L. J. Lanzerotti, M. T. Paonessa, and T. P. Armstrong, Energetic ion and electron phase space densities in the magnetosphere of Uranus, *J. Geophys. Res.*, *92*, 15315-15328, 1987.
188. Coroniti, F. V., W. S. Kurth, F. L. Scarf, S. M. Krimigis, C. F. Fennel, and D. A. Gurnett, Whistler mode emissions in the Uranian radiation belts, *J. Geophys. Res.*, *92*, 15234-15248, 1987.
189. Decker, R. B., S. M. Krimigis, and D. Venkatesan, Latitudinal gradient of energetic particles in the outer heliosphere during 1985-1986, *J. Geophys. Res.*, *92*, 3375-3379, 1987.
190. Krimigis, S. M., Highlights on "Active Diagnosis of the Geomagnetotail", in *Magnetotail Physics*, edited by A. T. Y. Lui, The Johns Hopkins University Press, Baltimore, MD, 363-364, 1987.
191. Krimigis, S. M., Observations of energetic ions and electrons at interplanetary shocks and upstream of planetary bow shocks by the Voyager spacecraft, *Proc. International Symposium on Collisionless Shocks*, Belatonfüred, Hungary, 3-18, 1987.
192. Lanzerotti, L. J., W. L. Brown, C. G. MacLennan, A. F. Cheng, S. M. Krimigis, and R. E. Johnson, Effects of charged particles on the surfaces of the satellites and rings of Uranus, *J. Geophys. Res.*, *92*, 14949-14957, 1987.
193. Lui, A. T. Y., R. W. McEntire, and S. M. Krimigis, Evolution of the ring current during two geomagnetic storms, *J. Geophys. Res.*, *92*, 7459-7470, 1987.
194. Lui, A. T. Y., R. W. McEntire, and S. M. Krimigis, Studies of storm-time ring current from the AMPTE/CCE MEPA measurements, *Physica Scripta*, *36*, 378-381, 1987.
195. Mauk, B. H. and S. M. Krimigis, Radial force balance within Jupiter's dayside magnetosphere, *J. Geophys. Res.*, *92*, 9931-9941, 1987.
196. Mauk, B. H., S. M. Krimigis, E. P. Keath, A. F. Cheng, T. P. Armstrong, L. J. Lanzerotti, G. Gloeckler, and D. C. Hamilton, The hot plasma and radiation environment of the Uranian magnetosphere, *J. Geophys. Res.*, *92*, 15283-15308, 1987.
197. Sarris, E. T., G. C. Anagnostopoulos, and S. M. Krimigis, Simultaneous measurements of energetic ion (≥ 50 keV) and electron (≥ 220 keV) activity upstream of Earth's bow shock and inside the plasma sheet: Magnetospheric source for the November 3 and December 3, 1977 upstream events, *J. Geophys. Res.*, *92*, 12083-12096, 1987.
198. Sibeck, D. G., R. W. McEntire, A. T. Y. Lui, and S. M. Krimigis, A statistical study of ion pitch-angle distributions, in *Magnetotail Physics*, edited by A. T. Y. Lui, Johns Hopkins University Press, Baltimore, MD, 225-229, 1987.

199. Sibeck, D. G., R. W. McEntire, A. T. Y. Lui, R. E. Lopez, and S. M. Krimigis, Magnetic field drift shell splitting: Cause of unusual dayside particle pitch angle distributions during storms and substorms, *J. Geophys. Res.*, *92*, 13485-13497, 1987.
200. Sibeck, D. G., R. W. McEntire, A. T. Y. Lui, S. M. Krimigis, L. J. Zanetti, and T. A. Potemra, The magnetosphere as a source of energetic magnetosheath ions, *Geophys. Res. Lett.*, *14*, 1011-1014, 1987.
201. Sibeck, D. G., R. W. McEntire, A. T. Y. Lui, R. E. Lopez, S. M. Krimigis, R. B. Decker, L. J. Lanzerotti, and T. A. Potemra, Energetic magnetospheric ions at the dayside magnetopause: Leakage or merging?, *J. Geophys. Res.*, *92*, 12097-12114, 1987.
202. Sittler, E. C., R. P. Lepping, B. H. Mauk, and S. M. Krimigis, Detection of a hot plasma component within the core regions of Jupiter's distant magnetotail, *J. Geophys. Res.*, *92*, 9943-9948, 1987.
203. Venkatesan, D., R. B. Decker, and S. M. Krimigis, Cosmic ray intensity gradients during 1984-86, *Proc. 20th International Cosmic Ray Conference, Moscow*, *2*, 385-388, 1987.

1988

204. Anagnostopoulos, G. C., E. T. Sarris, and S. M. Krimigis, Observational test of shock drift and Fermi acceleration on a seed population upstream of the Earth's bow shock, *J. Geophys. Res.*, *93*, 5541-5546, 1988.
205. Baker, D. N., R. D. Belian, T. A. Fritz, P. R. Higbie, S. M. Krimigis, D. G. Sibeck, and R.D. Zwickl, Simultaneous energetic particle observations at geostationary orbit and in the upstream solar wind: Evidence for leakage during the magnetospheric compression event of November 1984, *J. Geophys. Res.*, *93*, 14317-14327, 1988.
206. Gold, R. E., R. B. Decker, S. M. Krimigis, L. J. Lanzerotti, and C. G. MacLennan, The latitude and radial dependence of shock acceleration in the heliosphere, *J. Geophys. Res.*, *93*, 991-996, 1988.
207. Krimigis, S. M., The sun and the sun-Earth connection, *Journal of the British Interplanetary Society*, *41*, 1, 63-80, 1988.
208. Krimigis, S. M. and D. Venkatesan, *In situ* acceleration of charged particles in the outer solar system observed by the Voyager spacecraft, *Astrophysical and Space Science*, *144*, 463-486, 1988.
209. Krimigis, S. M., E. P. Keath, B. H. Mauk, A. F. Cheng, L. J. Lanzerotti, R. P. Lepping, and N.F. Ness, Observations of energetic ion enhancements and fast neutrals upstream and downstream of Uranus' bow shock by the Voyager 2 spacecraft, *Planet. Space Sci.*, *36*, 311-328, 1988.
210. Lopez, R. E., A. T. Y. Lui, D. G. Sibeck, R. W. McEntire, L. J. Zanetti, T. A. Potemra, and S. M. Krimigis, The longitudinal and radial distribution of magnetic reconfigurations in the near-Earth magnetotail as observed by AMPTE/CCE, *J. Geophys. Res.*, *93*, 997-1001, 1988.
211. Lopez, R. E., D. N. Baker, A. T. Y. Lui, D. G. Sibeck, R. D. Belian, R. W. McEntire, T. A. Potemra, and S. M. Krimigis, The radial and longitudinal propagation characteristics of substorm injections, *Adv. Space Res.*, *8*, (9)91-(9)95, 1988.
212. Lui, A. T. Y., R. E. Lopez, S. M. Krimigis, R. W. McEntire, L. J. Zanetti, and T. A. Potemra, A case study of magnetotail current sheet disruption and diversion, *Geophys. Res. Lett.*, *15*, 721-724, 1988.
213. Sarris, E. T. and S. M. Krimigis, Upstream energetic ions under radial IMF: A critical test of the Fermi model, *Geophys. Res. Lett.*, *15*, 233-236, 1988.
214. Sibeck, D. G., R. W. McEntire, S. M. Krimigis, and D. N. Baker, The magnetosphere as a sufficient source for upstream ions on November 1, 1984, *J. Geophys. Res.*, *93*, 14328-14342, 1988.

1989

215. Cheng, A. F. and S. M. Krimigis, Energetic neutral particle imaging of Saturn's magnetosphere, in *Outstanding Problems in Solar System Plasma Physics: Theory and Instrumentation*, edited by J. H. Waite and R. Moore, AGU Monograph, 253-260, 1989.
216. Cheng, A. F. and S. M. Krimigis, A model global convection in Jupiter's magnetosphere, *J. Geophys. Res.*, *94*, 12003-12008, 1989.
217. Keath, E. P., G. B. Andrews, A. F. Cheng, S. M. Krimigis, B. H. Mauk, D. G. Mitchell, and D. J. Williams, Instrumentation for energetic neutral atom imaging of magnetospheres, in "Yosemite 1988 - Outstanding Problems in Solar System Plasma Physics" *Theory and Instrumentation*, edited by J. Waite, J. Burch and T. Moore, AGU Monograph 54, 165-170, 1989.

218. Krimigis, S. M., T. P. Armstrong, W. I. Axford, C. O. Bostrom, A. F. Cheng, G. Gloeckler, D. C. Hamilton, E. P. Keath, L. J. Lanzerotti, B. H. Mauk, and J. A. Van Allen, Hot plasma and energetic particles in Neptune's magnetosphere, *Science*, 246, 1483-1494, 1989.
219. Lopez, R. E., A. T. Y. Lui, D. G. Sibeck, K. Takahashi, R. W. McEntire, L. J. Zanetti, and S. M. Krimigis, On the relationship between energetic particle flux morphology and the change in the magnetic field magnitude during substorms, *J. Geophys. Res.*, 94, 17105-17119, 1989.
220. Sarris, E. T. and S. M. Krimigis, Reply-response to comment on "Upstream energetic ions under radial IMF: A critical test of the Fermi model", *Geophys. Res. Lett.*, 16, 113-116, 1989.

1990

221. Decker, R. B., S. M. Krimigis, and D. Venkatesan, Onset of cosmic ray modulation observed at Voyagers 1 and 2 during the early phase of solar cycle 22, *Proc. 21st Cosmic Ray Conference*, 6, 152-155, 1990.
222. Feldman, W. C., J. Anderson, J. D. Bohlin, L. F. Burlaga, R. Farquhar, G. Gloeckler, B. E. Goldstein, J. W. Harvey, T. E. Holzer, W. V. Jones, P. J. Kellogg, S. M. Krimigis, M. R. Kundu, A. J. Lazarus, M. M. Mellott, E. N. Parker, R. Rosner, G. J. Rottman, J. A. Slavin, S. T. Suess, B. T. Tsurutani, R. T. Woo, and R. D. Zwickl, The solar probe mission, Particle Astrophysics, *AIP Conference Proceedings*, 203, 101-110, 1990.
223. Krimigis, S. M., The encounter of Voyager 2 with Neptune's magnetosphere, in *Magnetospheric Physics: Achievements and Prospects*, edited by B. Hultqvist and C.-G. Fälthammar, Plenum Press, New York, NY, 41-59, 1990.
224. Krimigis, S. M., Questions and Answers, *The Planetary Report*, X(4), 29, 1990.
225. Krimigis, S. M., B. H. Mauk, A. F. Cheng, E. P. Keath, M. Kane, T. P. Armstrong, G. Gloeckler, and L. J. Lanzerotti, Hot plasma parameters in Neptune's magnetosphere, *Geophys. Res. Lett.*, 17, 1685-1688, 1990.
226. Lopez, R. E., D. G. Sibeck, R. W. McEntire, and S. M. Krimigis, The energetic ion substorm injection boundary, *J. Geophys. Res.*, 95, 109-117, 1990.
227. Lopez, R. E., A. T. Y. Lui, R. W. McEntire, T. A. Potemra, and S. M. Krimigis, A statistical study of magnetic field magnitude changes during substorms in the near-Earth tail, *Adv. Space Res.*, 10, Supplement (S)37-(S)41, 1990.
228. Lui, A. T. Y., R. W. McEntire, D. G. Sibeck, and S. M. Krimigis, Recent findings on angular distributions of dayside ring current energetic ions, *J. Geophys. Res.*, 95, 20839-20851, 1990.
229. Mauk, B. H., E. P. Keath, and S. M. Krimigis, The Voyager program at APL, *JHU/APL Tech. Dig.*, 11 (1&2), 63-71, 1990.
230. Mauk, B. H., M. Kane, E. P. Keath, A. F. Cheng, S. M. Krimigis, T. P. Armstrong, and N. F. Ness, Energetic charged particle angular distributions near ($r < 2 R_N$) and over the pole of Neptune, *Geophys. Res. Lett.*, 17, 1701-1704, 1990.
231. Paranicas, C. P., A. F. Cheng, B. H. Mauk, S. M. Krimigis, and T. P. Armstrong, Ion phase space densities in the Jovian magnetosphere, *J. Geophys. Res.*, 95, 20833-20838, 1990.
232. Sarris, E. T., S. M. Krimigis, and N. Paschalidis, Comment on "Multispacecraft observations of energetic ions upstream and downstream of the bow shock" by M. Scholer, E. Möbius, L. M. Kistler, B. Klecker, and F. M. Ipavich, *Geophys. Res. Lett.*, 17, 1165-1168, 1990.
233. Stone, E. C., L. F. Burlaga, A. C. Cummings, W. C. Feldman, W. E. Frain, J. Geiss, G. Gloeckler, R. E. Gold, D. Hovestadt, S. M. Krimigis, G. M. Mason, D. McComas, R. A. Mewaldt, J. A. Simpson, T. T. von Roseninge, and M. Wiedenbeck, The Advanced Composition Explorer, Particle Astrophysics, *AIP Conference Proceedings*, 203, 48-57, 1990.
234. Venkatesan, D. and S. M. Krimigis, Into the night between the stars, *Astronomy Magazine*, 18, 42-47, February 1990.
235. Venkatesan, D. and S. M. Krimigis, Probing the heliomagnetosphere, *EOS Trans. American Geophysical Union*, 71, 1755-1756, 1990.
236. Venkatesan, D. F., R. B. Decker, S. M. Krimigis, T. Mathews, and E. T. Sarris, The great Forbush decrease of March 1989 and the interplanetary energetic particle environment, *Proc. 21st International Cosmic Ray Conference*, 6, 247-249, 1990.

1991

237. Cheng, A. F., S. M. Krimigis, and L. J. Lanzerotti, Energetic particles at Uranus, *Uranus*, edited by J. T. Bergstrahl, E. D. Miner, and M. S. Matthews, The University of Arizona Press, 831-893, 1991.
238. Decker, R. B., R. E. Gold, and S. M. Krimigis, Distributions of 30-4000 keV ions associated with an interplanetary shock at Voyager 2 (30 AU) and Voyager 1 (38 AU) in 1989, *Proc. 22nd International Cosmic Ray Conference*, 3, 296-299, 1991.
239. Gold, R. E., R. B. Decker, S. M. Krimigis, and L. J. Lanzerotti, The extent and symmetry of shocks in the outer heliosphere, *Proc. 22nd International Cosmic Ray Conference*, 3, 605-608, 1991.
240. Gurnett, D. A. and S. M. Krimigis, Guest Editorial, In Memoriam: Stanley D. Shawhan, *J. Geophys. Res.*, 96, 3439-3440, 1991.
241. Kane, M., B. H. Mauk, E. P. Keath, and S. M. Krimigis, Structure and dynamics of the Uranian magnetotail: Results from hot plasma and magnetic field observations, *J. Geophys. Res.*, 96, 11485-11499, 1991.
242. Krimigis, S. M., Space Physics, *Report of the 2nd Pacific ISY Conference*, 51-56, 1991.
243. Lanzerotti, L. J., C. G. MacLennan, P. J. White, R. E. Gold, E. C. Roelof, G. M. Simnett, S. E. Hawkins, K. A. Anderson, T. P. Armstrong, R. P. Lin, S. M. Krimigis, M. Pick and E. T. Sarris, Low energy ion and electron measurements of the March-April 1991 solar events by Ulysses, *Proc. 22nd International Cosmic Ray Conference*, 3, 181-184, 1991.
244. Lanzerotti, L. J., R. E. Gold, D. J. Thomson, R. E. Decker, C. G. MacLennan, and S. M. Krimigis, Statistical properties of shock-accelerated ions in the outer heliosphere, *Astrophys. J.*, 380, L93-L96, 1991.
245. Mauk, B. H., E. P. Keath, M. Kane, S. M. Krimigis, A. F. Cheng, M. H. Acuña, T. P. Armstrong, and N. F. Ness, The magnetosphere of Neptune: Hot plasma and energetic particles, *J. Geophys. Res.*, 96, 19061-19084, 1991.
246. Paranicas, C. P., B. H. Mauk, and S. M. Krimigis, Pressure anisotropy and radial stress balance in the Jovian neutral sheet, *J. Geophys. Res.*, 96, 21135-21140, 1991.
247. Paschalidis, N. P., S. M. Krimigis, E. T. Sarris, D. G. Sibeck, R. W. McEntire, S. P. Christon, and L. J. Zanetti, Ion burst event in the Earth's dayside magnetosheath, *Geophys. Res. Lett.*, 18, 377-380, 1991.
248. Williams, D. J., R. W. McEntire, S. M. Krimigis, E. C. Roelof, S. Jaskulek, B. E. Tossman, B. Wilken, W. Stüdemann, T. P. Armstrong, T. A. Fritz, L. J. Lanzerotti, and J. G. Roederer, Energetic particles at Venus: Galileo results, *Science*, 253, 1525-1528, 1991.

1992

249. Cheng, A. F., C. G. MacLennan, B. H. Mauk, S. M. Krimigis, and L. J. Lanzerotti, Energetic ion phase space densities in Neptune's magnetosphere, *ICARUS*, 99, 420-429, 1992.
250. Kane, M., B. H. Mauk, E. P. Keath, and S. M. Krimigis, A convected K distribution model for hot ions in the Jovian magnetodisc, *Geophys. Res. Lett.*, 19, 1435-1438, 1992.
251. Krimigis, S. M., Particles and fields measurements at Neptune with Voyager-2, *Advances in Space Research*, 12(11), 55-70, 1992.
252. Krimigis, S. M., Voyager energetic particle observations at interplanetary shocks and upstream of planetary bow shocks: 1977-1990, *Space Sci. Rev.*, 59, 167-201, 1992.
253. Krimigis, S. M., Interplanetary medium, solar cosmic rays, *The Astronomy and Astrophysics Encyclopedia*, S. P. Maran, ed., Van Nostrand Reinhold, New York, 332-336, 1992.
254. Krimigis, S. M., The magnetosphere of Neptune, *The Planetary Report*, 12 (2), 10-13, 1992.
255. Lanzerotti, L. J., R. E. Gold, K. A. Anderson, T. P. Armstrong, R. P. Lin, S. M. Krimigis, M. Pick, E. C. Roelof, E. T. Sarris, G. M. Simnett, and W. E. Frain, Heliosphere instrument for spectra, composition and anisotropy at low energies, *Astronomy & Astrophysics Supplement Series*, 92, 349-363, 1992.
256. Lanzerotti, L. J., T. P. Armstrong, R. E. Gold, K. A. Anderson, S. M. Krimigis, R. P. Lin, M. Pick, E. C. Roelof, E. T. Sarris, G. M. Simnett, C. G. MacLennan, T. H. Choo, and S. J. Tappin, Hot plasma environment at Jupiter: Ulysses results, *Science*, 257, 1518-1524, 1992.
257. Lepping, R. P., L. F. Burlaga, A. J. Lazarus, V. M. Vasyliunas, A. Szabo, J. Steinberg, N. F. Ness, and S. M. Krimigis, Neptune's polar cusp region: Observations and magnetic field analysis, *J. Geophys. Res.*, 97, 8135-8144, 1992.
258. Paschalidis, N. P., G. C. Anagnostopoulos, E. T. Sarris, and S. M. Krimigis, The magnetosphere as a source of magnetosheath energetic ions, *Proceedings of the First Panhellenic Astronomical Meeting*, Athens, Greece, 339-343, 1992.

259. Sarris, E. T., G. C. Anagnostopoulos, and S. M. Krimigis, Absence of upstream energetic ions under turbulent radial IMF, *J. Geophys. Res.*, *97*, 8231-8237, 1992.
260. Paschalidis, N. P., G. C. Anagnostopoulos, E. T. Sarris, and S. M. Krimigis, The magnetosphere as a source of magnetosheath energetic ions, *Proc. 1st Panhellenic Astronomical Meeting*, Athens, Greece, 339-344, 1992.

1993

261. Cheng, A. F., E. P. Keath, S. M. Krimigis, B. H. Mauk, R. W. McEntire, D. G. Mitchell, E. C. Roelof, and D. J. Williams, Imaging neutral particle detector, *Remote Sensing Reviews*, **8**, 101-145, 1993.
262. Decker, R. B. and S. M. Krimigis, Two unusual shock events observed at the Voyagers in 1991, *Proc. 23rd International Cosmic Ray Conference*, *3*, 310-313, 1993.
263. Decker, R. B., S. M. Krimigis, and D. Venkatesan, A survey of energetic particle activity in the heliosphere in 1991-1992, *Proc. 23rd International Cosmic Ray Conference*, **3**, 481-484, 1993.
264. Desai, M. I., G. M. Simnett, S. J. Tappin, L. J. Lanzerotti, S. M. Krimigis, T. P. Armstrong, and E. T. Sarris, The spectral form and evolution of interplanetary ion events from Jupiter, *Proc. 23rd International Cosmic Ray Conference*, 342-345, 1993.
265. Kane, M., R. B. Decker, B. H. Mauk, and S. M. Krimigis, Shock conditions and hot ion anisotropies during the Voyager 2 encounter with a 1989 interplanetary shock at 29 AU, *Proc. 23rd International Cosmic Ray Conference*, *3*, 302-305, 1993.
266. Krimigis, S. M., Executive Summary, *Proc. Workshop on Advanced Technologies for Planetary Instruments, LPI Technical Report Number 93-02, Part 2*, 9-14, 1993.
267. Krimigis, S. M., Energetic particle instruments, *Proc. Small Instruments Workshop for Space Physics*, B. T. Tsurutani (ed.), 4-1 to 4-2, 1993.
268. Krimigis, S. M., The future of space utilization in the post cold war world, *Proc. The Third Olympiad of the Mind*, STEPS Foundation, III, 12-31, 1993.
269. Lanzerotti, L. J., T. P. Armstrong, C. G. MacLennan, G. M. Simnett, A. F. Cheng, R. E. Gold, D. J. Thompson, K. A. Anderson, S. E. Hawkins, III, E. T. Sarris, S. M. Krimigis, M. Pick, E. C. Roelof, and S. J. Tappin, Measurements of hot plasmas in the magnetosphere of Jupiter, *Planet. Space Sci.*, **41**, 893-917, 1993.
270. Mitchell, D. G., A. F. Cheng, S. M. Krimigis, E. P. Keath, S. E. Jaskulek, B. H. Mauk, R. W. McEntire, E. C. Roelof, D. J. Williams, K. C. Hsieh, and V. A. Drake, INCA: The ion neutral camera for energetic neutral atom imaging of the Saturn magnetosphere, *Optical Engineering*, **32**, 3096-3101, 1993.
271. Paschalidis, N. P., A. G. Andreou, E. T. Sarris, and S. M. Krimigis, Application specific integrated circuits (ASICs) for particle measurement in space using solid state detectors, *Proc. Small Instrument Workshop*, 4-42 to 4-49, 1993.

1994

272. Armstrong, T. P., D. Haggerty, L. J. Lanzerotti, C. G. MacLennan, E. C. Roelof, M. Pick, G. M. Simnett, R. E. Gold, S. M. Krimigis, K. A. Anderson, R. P. Lin, E. T. Sarris, R. Forsyth, and A. Balogh, Observation by Ulysses of hot (~270 keV) coronal particles at 32° south heliolatitude and 4.6 AU, *Geophys. Res. Lett.*, *21*, 1747-1750, 1994.
273. Mauk, B. H., E. P. Keath, and S. M. Krimigis, Unusual satellite-electron signature within the Uranian magnetosphere and its implications regarding whistler-electron loss processes, *J. Geophys. Res.*, *99*, 19441-19450, 1994.
274. Mauk, B. H., S. M. Krimigis, and M. H. Acuña, Neptune's inner magnetosphere and aurora: Energetic particle constraints, *J. Geophys. Res.*, *99*, 14781-14788, 1994.
275. Paschalidis, N. P., E. T. Sarris, S. M. Krimigis, R. W. McEntire, M. D. Levine, I. A. Daglis, and G. C. Anagnostopoulos, Energetic ion distributions on both sides of the Earth's magnetopause, *J. Geophys. Res.*, *99*, 8687-8703, 1994.

1995

276. Decker, R. B., S. M. Krimigis, R. L. McNutt, Jr., D. C. Hamilton, and M. R. Collier, Latitude-associated differences in the low energy charged particle activity at Voyagers 1 and 2 during 1991 to early 1994, *The High Latitude Heliosphere*, R. G. Marsden (ed.), *Space Sci. Rev.*, 72, 347-352, 1995.
277. Kane, M., R. B. Decker, B. H. Mauk, and S. M. Krimigis, Latitudinal and radial variation of shock associated ≥ 30 keV ion spectra and anisotropies at Voyagers 1 and 2, *The High Latitude Heliosphere*, R. G. Marsden (ed.), *Space Sci. Rev.*, 72, 353-358, 1995.
278. Lanzerotti, L. J., C. G. MacLennan, R. E. Gold, T. P. Armstrong, E. C. Roelof, S. M. Krimigis, G. M. Simnett, E. T. Sarris, D. A. Anderson, M. Pick, and R. P. Lin, Measurement of anomalous cosmic ray oxygen at heliolatitudes -25° to -64° , *Geophys. Res. Lett.*, 22, 333-336, 1995.
279. McNutt, Jr., R. L., S. M. Krimigis, A. F. Cheng, R. E. Gold, R. W. Farquhar, E. C. Roelof, T. B. Coughlin, A. G. Santo, R. S. Bokulic, E. L. Reynolds, B. D. Williams, and C. E. Willey, Mission to the Sun: The Solar Pioneer, *Acta Astron.*, 35, Supplement, 247-255, 1995.
280. Angelopoulos, V., D. G. Mitchell, D. J. Williams, R. W. McEntire, A. T. Y. Lui, R. B. Decker, S. M. Krimigis, E. C. Roelof, S. P. Christon, S. Kokubun, T. Yamamoto, W. J. Hughes, J. C. Samson, E. Friis-Christensen, and K. Hayashi, Growth and evolution of a plasmoid associated with a small, isolated substorm: IMP 8 and Geotail measurements in the magnetotail, *Geophys. Res. Lett.*, 22, 3011-3014, 1995.
281. Decker, R. B., S. M. Krimigis, R. L. McNutt, Jr., and M. Kane, Spatial gradients, energy spectra, and anisotropies of ions >30 keV at CIR shocks from 1 to 50 AU, *Proc. 24th International Cosmic Ray Conference (XXIV ICRC Rome)*, 4, 421-425, 1995.
282. Decker, R. B., S. M. Krimigis, R. L. McNutt, Jr., and L. F. Burlaga, Pressure and energy carried by superthermal ions during the September 1991 GMIR at Voyagers 1 and 2, *Proc. 24th International Cosmic Ray Conference (XXIV ICRC Rome)*, 4, 425-429, 1995.
283. Kane, M., B. H. Mauk, E. P. Keath, and S. M. Krimigis, Hot ions in Jupiter's magnetodisc: A model for Voyager 2 low-energy charged particle measurements, *J. Geophys. Res.* 100, 19473-19486, 1995.
284. Krimigis, S. M. and J. Veverka, Foreword: Genesis of discovery, Special Issue on the Near Earth Asteroid Rendezvous Mission, *J. Astronautical Sciences*, 43, 4, 345-347, 1995.
285. Krimigis, S. M., R. B. Decker, R. L. McNutt, Jr., D. Venkatesan, D. C. Hamilton, and M. R. Collier, Energetic particle activity in the heliosphere, 1991-1995, *Proc. 24th International Cosmic Ray Conference (XXIV ICRC Rome)*, 4, 401-405, 1995.
286. Krupp, N., R. B. Decker, R. E. Gold, S. M. Krimigis, L. J. Lanzerotti, and E. Keppler, Comparison of recurrent ion events using Ulysses HI-SCALE and EPAC and Voyager LECPC data, *Proc. 24th International Cosmic Ray Conference (XXIV ICRC Rome)*, 4, 431-435, 1995.
287. Lanzerotti, L. J., T. P. Armstrong, R. E. Gold, C. G. MacLennan, E. C. Roelof, G. M. Simnett, D. J. Thomson, K. A. Anderson, S. E. Hawkins, III, S. M. Krimigis, R. P. Lin, M. Pick, E. T. Sarris, and S. J. Tappin, Over the southern solar pole: Low-energy interplanetary charged particles, *Science*, 268, 1010-1013, 1995.
288. Mauk, B. H., S. M. Krimigis, A. F. Cheng, and R. S. Selesnick, Energetic particles and hot plasmas of Neptune, *Neptune and Triton*, D. P. Cruikshank (ed.), The University of Arizona Press, 169-232, 1995.

1996

289. Lui, A. T. Y., D. J. Williams, R. W. McEntire, C. Jacquy, V. Angelopoulos, E. C. Roelof, S. M. Krimigis, C.-I. Meng, S. P. Christon, F. M. Ipavich, G. Gloeckler, T. P. Armstrong, L. J. Lanzerotti, E. T. Sarris, S. Kokubun, L. A. Frank, K. L. Ackerson, W. R. Paterson, T. Yamamoto, T. Mukai, and K. Tsuruda, Initial investigation of energetic particle phenomena in the distant magnetotail from Geotail/EPIC, *Adv. Space Res.*, 18, (8)17-(8)26, 1996.
290. Mauk, B. H., S. A. Gary, M. Kane, E. P. Keath, S. M. Krimigis, and T. P. Armstrong, Hot plasma parameters of Jupiter's inner magnetosphere, *J. Geophys. Res.*, 101, 7685-7695, 1996.
291. Sarris, E. T., V. Angelopoulos, R. W. McEntire, D. J. Williams, S. M. Krimigis, A. T. Y. Lui, E. C. Roelof, and S. Kokubun, Detailed observations of a burst of energetic particles in the deep magnetotail by Geotail, *J. Geomag. Geoelectr.*, 48, 649-656, 1996.
292. Paschalidis, N. P., E. P. Keath, R. L. McNutt, Jr., D. G. Mitchell, R. W. McEntire, S. Jaskulek, C. Schlemm, B. E. Tossman, S. M. Krimigis, N. Stamatopoulos, K. Karadamoglou, and E. T. Sarris, Electronics miniaturization of spacecraft instruments and subsystems, *Proc. 2nd IAA International Conference on Low-Cost Planetary Missions*, Paper IAA-L-0914, 1996.
293. Angelopoulos, V., D. G. Mitchell, R. W. McEntire, D. J. Williams, A. T. Y. Lui, S. M. Krimigis, R. B.

- Decker, S. P. Christon, S. Kokubun, T. Yamamoto, Y. Saito, T. Mukai, F. S. Mozer, K. Tsuruda, G. D. Reeves, W. J. Hughes, E. Friis-Christensen, and O. Troshichev, Tailward progression of magnetotail acceleration centers: Relationship to substorm current wedge, *J. Geophys. Res.*, *101*, A11, 24599-24619, 1996.
294. Krimigis, S. M., The new solar system: Solar activity and the solar wind interaction with the planets, *Proc. Israel Institute of Advanced Studies at Tel Aviv University*, Raymond and Beverly Sackler Distinguished Lectures in Geophysics and Planetary Sciences, 28, May 27-June 7, 1996.
295. Mitchell, D. G., S. M. Krimigis, A. F. Cheng, S. E. Jaskulek, E. P. Keath, B. H. Mauk, R. W. McEntire, E. C. Roelof, C. E. Schlemm, B. E. Tossman, and D. J. Williams, The Imaging Neutral Camera (INCA) for the NASA Cassini Mission to Saturn and Titan, and possibilities for the future, *Proc SPIE International Symposium, Optical Science, Engineering, and Instrumentation - Mission to the Sun*, 2803, 154-161, 1996.
296. Williams, D. J., B. H. Mauk, R. W. McEntire, E. C. Roelof, T. P. Armstrong, B. Wilken, J. G. Roederer, S. M. Krimigis, T. A. Fritz, and L. J. Lanzerotti, Electron beams and ion composition measured at Io and in its torus, *Science*, *274*, 401-403, 1996.
297. McNutt, Jr., R. L., R. E. Gold, E. P. Keath, D. M. Rust, S. M. Krimigis, L. J. Zanetti, C. E. Willey, B. D. Williams, W. S. Kurth, D. A. Gurnett, M. H. Acuña, L. F. Burlaga, G. Gloeckler, F. M. Ipavich, A. J. Lazarus, J. T. Steinberg, G. Brueckner, D. Socker, T. E. Holzer, P. A. Bochsler, R. Kallenbach, and A. Roux, An ADvanced SOLar Probe Experiment Module (AD SOLEM), *Proc. SPIE Conference 2804, Missions to the Sun*, 1-13, 1996.
298. Santo, A. G., S. M. Krimigis, R. E. Jenkins, E. L. Reynolds, and T. B. Coughlin, Lessons for the future: The NEAR mission in NASA's Discovery program, *Proc. 47th International Astronautical Congress*, Paper IAF-96-U.2.04, 1996.
299. Santo, A. G., S. M. Krimigis, and T. B. Coughlin, The NEAR mission to the asteroid Eros, *Proc. 47th International Astronautical Congress*, Paper IAA-96-IAA.11.2.06, 1996.
300. MacLennan, C. G., L. J. Lanzerotti, R. B. Decker, S. M. Krimigis, M. L. Collier, and D. C. Hamilton, Helioradius dependence of interplanetary carbon and oxygen abundances during 1991 solar activity, *Astrophys. J.*, *468*, L123-L126, 1996.
301. Lanzerotti, L. J., R. E. Gold, K. A. Anderson, T. P. Armstrong, S. E. Hawkins, S. M. Krimigis, R. P. Lin, C. G. MacLennan, M. Pick, E. C. Roelof, E. T. Sarris, and D. J. Thomson, Low-energy interplanetary charged particles: Solar South Pole to solar North Pole and high helioaltitudes, *Proc. 24th International Cosmic-Ray Conference, 19C*, 6, 927-933, 1996.

1997

302. Giacalone, J., J. R. Jokipii, R. B. Decker, S. M. Krimigis, M. Scholer, and H. Kucharek, Preacceleration of anomalous cosmic rays in the inner heliosphere, *Astrophys. J.*, *486*, 471-476, 1997.
303. Paranicas, C. P., A. F. Cheng, B. H. Mauk, E. P. Keath, and S. M. Krimigis, Evidence of a source of energetic ions at Saturn, *J. Geophys. Res.*, *102*, 17459-17466, 1997.
304. Williams, D. J., B. H. Mauk, R. E. McEntire, E. C. Roelof, T. P. Armstrong, B. Wilken, J. G. Roederer, S. M. Krimigis, T. A. Fritz, L. J. Lanzerotti, and N. Murphy, Energetic particle signatures at Ganymede: Implications for Ganymede's magnetic field, *Geophys. Res. Lett.*, *24*, 17, 2163-2166, June 1997.
305. Lanzerotti, L. J., C. G. MacLennan, R. E. Gold, S. M. Krimigis, T. P. Armstrong, and M. Pick, Low energy interplanetary particles at northern solar latitudes, *Proc. 25th International Cosmic Ray Conference, SH 2.5.1, (XXIV ICRC, Durban, South Africa), I, Sessions 1-3*, 325-328, 1997.
306. Krimigis, S. M., R. B. Decker, D. C. Hamilton, and M. E. Hill, Energetic ions in the outer heliosphere, 1992-1997, *Proc. 25th International Cosmic Ray Conference, SH 3.3.4 (XXIV ICRC, Durban, South Africa), I, Sessions 1-3*, 393-396, 1997.
307. Hamilton, D. C., M. E. Hill, R. B. Decker, and S. M. Krimigis, Temporal and spatial variations in the spectra of low energy ions in the outer heliosphere, *Proc. 25th International Cosmic Ray Conf.*, *2*, 261-264, 1997.
308. Roelof, E. C., G. M. Simnett, R. B. Decker, L. J. Lanzerotti, C. G. MacLennan, T. P. Armstrong, R. E. Gold, and S. M. Krimigis, Reappearance of recurrent low energy particle events at Ulysses/HI-SCALE in the northern hemisphere, *J. Geophys. Res.*, *102*, 11251-11262, 1997.

1998

309. Kane, M., R. B. Decker, B. H. Mauk, R. L. McNutt, and S. M. Krimigis, The solar wind velocity determined from Voyager 1 and 2 low energy charged particle measurements in the outer heliosphere, *J. Geophys. Res.*, *103*, A1, 267-276, 1998.
310. Mauk, B. H., R. W. McEntire, D. J. Williams, E. C. Roelof, S. M. Krimigis, T. P. Armstrong, T. A. Fritz, L. J. Lanzerotti, J. G. Roederer, and B. Wilken, Galileo observed depletion of near-Io ring current plasmas since the Voyager epoch, *J. Geophys. Res.*, *103*, A3, 4715-4722, 1998.
311. Mauk, B. H., S. M. Krimigis, D. G. Mitchell, and E. C. Roelof, Energetic neutral atom imaging of Jupiter's magnetosphere using the Cassini MIMI instrument, *Adv. Space Res.*, *21*, 11, 1483-1486, 1998.
312. Anagnostopoulos, G. C., A. G. Rigas, E. T. Sarris, and S. M. Krimigis, Characteristics of upstream energetic ($E \geq 50$ keV) ion events during intense geomagnetic activity, *J. Geophys. Res.*, *103*, A5, 9521-9533, 1998.
313. Gold, R. E., S. M. Krimigis, S. E. Hawkins III, D. K. Haggerty, D. A. Lohr, E. Fiore, T. P. Armstrong, G. Holland, and L. J. Lanzerotti, Electron, proton, and alpha monitor on the Advanced Composition Explorer spacecraft, *Space Sci. Rev.*, *86*, 1998.
314. Mauk, B. H., S. M. Krimigis, D. G. Mitchell, E. C. Roelof, E. P. Keath, and J. Dandouras, Imaging Saturn's dust rings using energetic neutral atoms, *Planetary and Space Science*, *46*, 1349, 1998.
315. Mason, G. E., R. E. Gold, S. M. Krimigis, J. E. Mazur, G. B. Andrews, K. A. Daley, J. R. Dwyer, K. F. Heuerman, T. L. James, M. J. Kennedy, T. LeFevre, H. Malcolm, B. Tossman, and P. H. Walpole, The Ultra-Low Energy Isotope Spectrometer (ULEIS) for the ACE spacecraft, *Space Sci. Rev.*, *86*, 407-446, 1998.

1999

316. Mason, G. M., C. M. S. Cohen, J. R. Dwyer, R. E. Gold, S. M. Krimigis, R. L. Leske, J. E. Mazur, R. A. Mewaldt, E. Mobius, M. Popecki, D. V. Reames, E. C. Stone, and T. T. von Roseninge, Particle acceleration and sources in the November 1997 solar energetic particle events, *Geophys. Res. Lett.*, *26*, 141-144, 1999.
317. Haggerty, D. K., M. I. Desai, G. M. Mason, J. R. Dwyer, R. E. Gold, S. M. Krimigis, J. E. Mazur, and T. T. von Roseninge, Simultaneous observations of energetic (~ 150 keV) protons upstream of the Earth's bow shock at ACE and Wind, *Geophys. Res. Lett.*, *26*, 169-172, 1999.
318. Hamilton, D. C., M. E. Hill, R. B. Decker, and S. M. Krimigis, Cosmic Ray Spectra in the Outer Heliosphere: 1992-1998, *Proc. 26th International Cosmic Ray Conference*, *7*, 535-537, 1999.
319. Mason, G. M., J. R. Dwyer, J. E. Mazur, R. E. Gold, and S. M. Krimigis, Special forms in 3He-rich solar particle events, *Proc. 26th International Cosmic Ray Conference*, *6*, 103-107, 1999.
320. Mason, G. M., J. R. Dwyer, J. E. Mazur, R. E. Gold, and S. M. Krimigis, Particle acceleration and sources in the November 1997 solar energetic particle events, *Proc. 26th International Cosmic Ray Conference*, *6*, 115-119, 1999.
321. Christian, E. R., W. R. Binns, J. B. Blake, C. M. S. Cohen, A. C. Cummings, J. R. Dwyer, D. C. Hamilton, M. E. Hill, P. L. Hink, E. Keppler, S. M. Krimigis, R. A. Leske, M. D. Looper, R. G. Marsden, G. M. Mason, J. E. Mazur, R. A. Mewaldt, T. R. Sanderson, E. C. Stone, T. T. von Roseninge, M. E. Wiedenbeck, and N. Yanasak, Observations of the Solar Modulation of Galactic and Anomalous Cosmic Rays During Solar Minimum, *Proc. 26th International Cosmic Ray Conference*, *7*, 519-523, 1999.
322. McKibben, R. B., R. B. Decker, S. M. Krimigis, C. Lopate, J. A. Simpson, and M. Zhang, Propagation of the onset of Modulation in Cycle 23 from 1 to 72 AU, *Proc. 26th International Cosmic Ray Conference*, *7*, 95-99, 1999.
323. Decker, R. B., S. M. Krimigis, A. G. Ananth, D. C. Hamilton, and M. Hill, Small-Scale Variations in ACR Intensities at Voyagers 1 and 2 in 1992-1998, *Proc. 26th International Cosmic Ray Conference*, *7*, 512-516, 1999.
324. Dwyer, J. R., G. M. Mason, J. E. Mazur, R. E. Gold, and S. M. Krimigis, Isotopic Composition of SEP Neon as Measured by ACE/ULEIS, *Proc. 26th International Cosmic Ray Conference*, *6*, 147-151, 1999.

325. Stone, E. C., A. C. Cummings, D. C. Hamilton, M. E. Hill, and S. M. Krimigis, Voyager Observations of Anomalous and Galactic Cosmic Rays During 1998, *Proc. 26th International Cosmic Ray Conference*, 7, 551-555, 1999.
326. Decker, R. B., E. C. Roelof, and S. M. Krimigis, Solar Energetic articles from the April 1998 Activity: Observations for 1 to 72 AU, *proc. 26th International Cosmic Ray Conference*, 6, 328-331, 1999.
327. Krimigis, S. M., Applied Physics Laboratory Space Department After 40 Years: An Overview, *JHU/APL Tech. Dig.*, 20, 4, 467-476, 1999.

2000

328. Krimigis, S. M., T. B. Coughlin, and G. E. Cameron, Johns Hopkins APL Paradigm in Smallsat Management, *Acta Astronautica*, 46, 6, 187-197, 2000.
329. Krimigis, S. M., R. B. Decker, D. C. Hamilton, and G. Gloeckler, Observations of Pick-up Ions in the Outer Heliosphere by Voyagers 1 and 2, in *Acceleration and Transport of Energetic Particles in the Hemisphere*, AIP Conf. Proc. 528, R.A. Mewaldt et al (Edrs), 333-336, 2000.
330. Decker, R. B., E. C. Roelof, and S. M. Krimigis, Solar Energetic Particle Propagation in 1997-99: Observations from ACE, Ulysses, and Voyagers 1 and 2, in *Acceleration and Transport of Energetic Particles Observed in the Heliosphere*, AIP Conf. Proc. 528, R. A. Mewaldt et al (Edrs), 161-164, 2000.
331. Ho, G. C., E. C. Roelof, G. M. Mason, R. E. Gold, S. M. Krimigis, and J. R. Dwyer, Heavy Ions in ³He Enhanced Solar Energetic Particle Events, *Acceleration and Transport of Energetic Particles in the Heliosphere*, AIP Conf. Proc. 528, R.A. Mewaldt et al (Edrs), 99-102, 2000.

2001

332. Hill, M. E., D. C. Hamilton, and S. M. Krimigis, Periodicity of 151 Days in Outer-heliospheric Anomalous cosmic Ray Fluxes, *J. Geophys. Res.*, 106, A5, 8315-8322, 2001.
333. Solomon, S. C., et al, The MESSENGER Mission to Mercury: Scientific Objectives and Implementation, *Planet. and Space Sci.*, 49 (2001) 1445-1465.
334. Lagg, A., N. Krupp, S. Livi, J. Woch, S.M. Krimigis, and M.K. Dougherty, Energetic particle measurements during the Earth Swing-by of the Cassini spacecraft in August 1999, *J. Geophys. Res.*, 106, 30,209 – 30,222, 2002.
335. Dwyer, J. E., G. M. Mason, J. E. Mazur, R. E. Gold, S. M. Krimigis, E. Mobius, and M. Popecki, Isotopic Composition of Solar Energetic Particle Events Measured by ACE/ULEIS, *Ap. J.*, 563: 403-409, 2001.
336. Mazur, J. E., G. M. Mason, J. R. Dwyer, R. E. Gold, and S.M. Krimigis, Enrichments of trans-iron nuclei in solar energetic particles observed with ACE/ULEIS, *Proc. ICRC 2001*, Copernicus Gessellschaft 2001.
337. Hill, M. E., D. C. Hamilton, J. E. Mazur, and S. M. Krimigis, The 1992 - 2000 Recovery of Anomalous Cosmic Ray Oxygen Throughout the Heliosphere, *Proc. ICRC 2001*, Copernicus Gessellschaft 2001.
338. Krimigis, S.M.; R.B. Decker, D.C. Hamilton, M.E. Hill, and G. Gloeckler, Survey of Energetic Particles Observed at Voyagers 1 and 2 During 1999-2001, *Proc. ICRC 2001*, Copernicus Gessellschaft 2001.
339. Prockter, L., S. Murchie, A. Cheng, S.M. Krimigis, R. Farquhar, A. Santo, J. Trombka, The NEAR Shoemaker mission to asteroid 433 Eros, *Acta Astronautica*, 2001.
340. Mewaldt, R.A., G.M. Mason, G. Gloeckler, E.R. Christian, C.M.S. Cohen, A.C. Cummings, A.J. Davis, J.R. Dwyer, R.E. Gold, S.M. Krimigis, R.A. Leske, J.E. Mazur, E.C. Stone, T.T. von Roseninge, M.E. Wiedenbeck, and T.H. Zurbuchen, Long-Term Fluences of Energetic Particles, Joint SOHO/ACE workshop "Solar and Galactic Composition". Edited by Robert F. Wimmer-Schweingruber. AIP Conf. Proc. vol. 598 p.165, 2001.
341. Decker, R. B., C. Paranicas, S.M. Krimigis, K. I. Paulerena, and J. D. Richardson, Recurrent ion events and plasma disturbances at Voyager 2 in 5-50 AU, *The Outer Heliosphere: The Next Frontiers*, Edited by K. Scherer, H. Fichtner, H. J. Fahr, and E. Marsch, COSPAR Colloquia Series, 11. Amsterdam: Pergamon Press, p.321, 2001.
342. Solomon, S.C., R.L. McNutt, R.E. Gold, M.H. Acuña, D.N. Baker, W.V. Boynton, C.R. Chapman, A.F. Cheng, G. Gloeckler, J.W. Head, III; S.M Krimigis, and 10 coauthors, The MESSENGER mission to Mercury: scientific objectives and implementation, *Planet. Space Sci.*, 49, 1445-1465, 2001.

343. Lanzerotti, L.J., S.M. Krimigis, R.B. Decker, S.E. Hawkins, III; R.E. Gold, E.C. Roelof, T.P. Armstrong, Low Energy Particles in the Global Heliosphere 2001-2004: 1 to 90 AU, *Space Sci. Rev.*, **97**, p. 243-248, 2001.

2002

344. Krimigis, S.M., Mitchell, D.G., Hamilton, D.C., et al, A nebula of gases from Io surrounding Jupiter, *Nature*, **415**, 994-996, 2002.
345. Mason G.M., M.E. Wiedenbeck, J.A. Miller, J.E. Mazur, E.R. Christian, C.M.S Cohen, A.C. Cummings, J.R. Dwyer, R.E. Gold, S.M. Krimigis, R.A. Leske, R.A. Mewaldt, P.L. Slocum, E.C. Stone, T.T. von Roseninge, Spectral Properties of He and Heavy Ions in ³He-Rich Solar Flares, Accepted *Ap. J.*, **574**, 1039-1058, 2001, February 2002.
346. Prockter, L. M., S. L. Murchie, A. F. Cheng, S. M. Krimigis, R. W. Farquhar, A. Santo, and J. Trombka, The NEAR Shoemaker mission to Asteroid 433 Eros, *Acta Astronautica*, **51**, 491-500, 2002.
347. Hill, M. E., D. C. Hamilton, and S. M. Krimigis, Evolution of anomalous cosmic-ray oxygen and helium energy spectra during the Solar Cycle 22 recovery phase in the outer heliosphere, *Ap. J.*, **572**, 2, L169-L172, June 2002.
348. Krupp, N., J. Woch, A. Lagg, S. A. Espinosa, S. Livi, S. M. Krimigis, D. G. Mitchell, D. J. Williams, A. F. Cheng, B. H. Mauk, R. W. McEntire, T. P. Armstrong, D. C. Hamilton, G. Gloeckler, J. Dandouras, and L. J. Lanzerotti, Leakage of energetic particles from Jupiter's dusk magnetosphere: Dual spacecraft observations, *Geophys. Res. Lett.*, **29**, 15, 1736, August 2002.
349. Blanc, M., S. Bolton, J. Bradley, M. Burton, T. E. Cravens, I. Dandouras, M. K., Dougherty, M. C. Festou, J. Feynman, R.E. Johnson, T.G. Gombosi, W.S. Kurth, P.C. Liewer, B.H. Mauk, S. Maurice, D. Mitchell, F.M. Neubauer, J.D. Richardson, D. E. Shemansky, E.C. Sittler, B.T. Tsurutani, Ph. Zarka, L.W. Esposito, E. Grün, D.A. Gurnett, A.J. Kliore, S.M. Krimigis, D. Southwood, J.H. Waite, D. T. Young; Magnetospheric and Plasma Science with Cassini-Huygens, *Space Sci. Rev.*, **223B**, 2002

2003

350. Mauk, B.H, D.G. Mitchell, S.M. Krimigis, E.C. Roelof, Energetic neutral atoms from a trans-Europa gas torus at Jupiter, *Nature*, **421**, 6926. 920-922, 2003.
351. Hill, M. E., D. C. Hamilton, J. E. Mazur, and S. M. Krimigis, Anomalous cosmic ray intensity variations in the inner and outer heliosphere during the solar cycle 22 recovery phase (1991-1999), *J. Geophys Res.* **108**, No. A10, 8037, 2003.
352. Desai, M. I., G. M. Mason, J. R. Dwyer, J. E. Mazur, R. E. Gold, S. M. Krimigis, R. M. Skoug, and C. W. Smith, Evidence for a suprathermal seed population of heavy ions accelerated by interplanetary shocks near 1 AU, *Astrophys. J.*, **588**, 1149-1162, May 2003.
353. Decker, R.B., S.M. Krimigis, Voyager observations of low-energy ions during solar cycle 23, *Adv. Space Res.*, **32**, Issue 4, pg 597-602. August 2003.
354. Decker, R.B., S.M. Krimigis, T.P. Armstrong, C.J. Mosley, D.C. Hamilton, G.Gloeckler, Observations of low energy oxygen at Voyagers 1 & 2, *Adv. Space Res.*, **32**, Issue 4, pgs 591-596. 2003.
355. Decker, R. B. S. M. Krimigis, E. C. Roelof, and M. E. Hill, Angular Distributions and Energy Spectra of Energetic Particles Observed by Voyager 1 at 85-88 AU., *Proc. ICRC 2003*, Copernicus Gessellschaft 2003
356. Krimigis, S. M., R. B. Decker, E. C. Roelof, and D. Lario, Energetic Particle Intensity Increases at Voyagers 1 and 2 during 2002-03., *Proc. ICRC 2003*, Copernicus Gessellschaft 2003
357. McComas, D. J., P. A. Bochsler, L. A. Fisk, H. O. Funsten, J. Geiss, G. Gloeckler, M. Gruntman, D. L. Judge, S. M. Krimigis, R. P. Lin, S. A. Livi, D. G. Mitchell, E. Moebius, E. C. Roelof, N. A. Schwadron, M. Witte, J. Woch, P. Wurz, and, T. H. Zurbuchen, Interstellar Pathfinder – A mission to the inner edge of the interstellar medium, *AIP, Proc. 10th International Conference on Solar Wind*, M. Velli, R. Bruno, F. Malara (eds.), **679**, 834-837,2003.
358. Wiedenbeck, M. E.; Mason, G. M.; Christian, E. R.; Cohen, C. M. S.; Cummings, A. C.; Dwyer, J. R.; Gold, R. E.; Krimigis, S. M.; Leske, R. A.; Mazur, J. E.; and 4 coauthors, How Common is Energetic 3He in the Inner Heliosphere?, *AIP, Proc. 10th International Conference on Solar Wind*, M. Velli, R. Bruno, F.

Malara (eds.), **679**, 652-655, 2003

359. S.M. Krimigis, R.B. Decker, M.E. Hill, E.C. Roelof, T.P. Armstrong, G. Gloecker, D.C. Hamilton, and L. J. Lanzerotti, Voyager 1 exited the solar wind at a distance of ~85 AU from the sun. *Nature*, **426**, pg 45-48, 2003.

2004

360. Mason, G. M., J. E. Mazur, J. R. Dwyer, J. R. Jokipii, R. E. Gold, and S. M. Krimigis, Abundances of Heavy and Ultra-Heavy Ions in 3He-Rich Solar Flares, *Astrophys. Journal*, (accepted), 2004.
361. Paranicas, C., R. B. Decker, B. H. Mauk, S. M. Krimigis, T. P. Armstrong, and S. Jurac, Energetic ion composition in Saturn's magnetosphere revisited, *Geophys. Res. Lett.*, **31**, L04810, doi:10.1029/2003GL018899, 2004.
362. Desai, M.I., G. M. Mason, J. E. Mazur, J. R. Dwyer, R. E. Gold, S. M. Krimigis, Q. Hu, C. W. Smith, and R. M. Skoug, Spectral Properties of Heavy Ions Accelerated by Interplanetary Shocks, *Ap. J.*, **611**, Issue 2, pp. 1156-1174, doi: 10.1086/422211, 2004.
363. Krimigis, S.M., R.B. Decker, E.C. Roelof, and M.E. Hill, Energetic Particle Observations Near the Termination Shock, *Physics of the Outer Heliosphere, AIP Conf. Proc. 4xx*, V. Florinski (ed.), 2004.
364. Decker, R. B., S. M. Krimigis, E. C. Roelof, L. F. Burlaga, and N. F. Ness, Pitch Angle Distributions of 0.6-1.8 MeV Protons Observed by Voyager 1 at 85-87 AU, *Physics of the Outer Heliosphere, AIP Conf. Proc. 4xx*, V. Florinski (ed.), 2004.
365. Krupp, N, J. Woch, A. Lagg, S. Livi, D.G. Mitchell, S.M. Krimigis, M.K Dougherty, T.P. Armstrong, S.A. Espinosa, Energetic particle observations in the vicinity of Jupiter: Cassini MIMI/LEMMS results, *J. Geophys. Res.*, **109**, A09S10, doi: 10.1029/2003JA010111, 2004.
366. Mauk, B. H., D. G. Mitchell, R. W. McEntire, C. P. Paranicas, E. C. Roelof, D. J. Williams, S. M. Krimigis, and A. Lagg, Energetic ion characteristics and neutral gas interactions in Jupiter's magnetosphere, *J. Geophys. Res.* **109**, A09S12, doi: 10.1029/2003JA010270, 2004.
367. Mitchell, D. G., C. Paranicas, B. H. Mauk, and S. M. Krimigis, Energetic neutral atom imaging of Jupiter with the Cassini Magnetospheric Imaging Instrument: Time dependence and composition *J. Geophys. Res.*, **109**, A09S11, doi: 10.1029/2003JA010120, 2004.
368. Krupp, N., V. M. Vasylunas, J. Woch, A. Lagg, K. K. Khurana, M. G. Kivelson, B. H. Mauk, E. C. Roelof, D. J. Williams, S. M. Krimigis, W. S. Kurth, L. A. Frank, and W. R. Paterson, The Dynamics of the Jovian magnetosphere, in: *Jupiter: The Planet, Satellites and Magnetosphere* (edited by F. Bagenal, T. Dowling, and W. McKinnon), chap. 25, pp. 617-638, Cambridge Planetary Science, Cambridge University Press, 2004
369. Krimigis, S. M., D. G. Mitchell, D. C. Hamilton, S. Livi, J. Dandouras, S. Jaskulek, T. P. Armstrong, A. F. Cheng, G. Gloeckler, K. C. Hsieh, W.-H. Ip, E. P. Keath, E. Kirsch, N. Krupp, L. J. Lanzerotti, B. H. Mauk, R. W. McEntire, E. C. Roelof, B. E. Tossman, B. Wilken, and D. J. Williams, Magnetosphere Imaging Instrument (MIMI) on the Cassini Mission to Saturn/Titan, *Space Sci. Rev.*, **114**(1-4), 233-329, doi: 10.1007/s11214-004-1410-8, 2004.

2005

370. Krimigis, S. M., D. G. Mitchell, D. C. Hamilton, N. Krupp, S. Livi, E. C. Roelof, J. Dandouras, T. P. Armstrong, B. H. Mauk, C. Paranicas, P. C. Brandt, S. J. Bolton, A. F. Cheng, T. Choo, G. Gloeckler, J. Hayes, K. C. Hsieh, W.-H. Ip, S. Jaskulek, E. P. Keath, E. Kirsch, M. Kusterer, A. Lagg, L. J. Lanzerotti, D. LaVallee, J. Manweiler, R. W. McEntire, W. Rasmuss, J. Saur, F. S. Turner, D. J. Williams, and J. Woch, Dynamics of Saturn's Magnetosphere From the Magnetospheric Imaging Instrument During Cassini's Orbital Insertion, *Science*, **307**, 1270-1273, doi:10.1126/science.1105978, 2005.
371. Mitchell, D. G., P. C. Brandt, E. C. Roelof, J. Dandouras, S. M. Krimigis, B. H. Mauk, C. P. Paranicas, N. Krupp, D. C. Hamilton, W. S. Kurth, P. Zarka, M. K. Dougherty, E. J. Bunce, and D. E. Shemansky, Energetic ion acceleration in Saturn's magnetotail: Substorms at Saturn?, *Geophys. Res. Lett.*, **32**, L20S01, doi:10.1029/2005GL022647, 2005.
372. Mauk, B. H., J. Saur, D. G. Mitchell, E. C. Roelof, P. C. Brandt, T. P. Armstrong, D. C. Hamilton, S. M.

- Krimigis, N. Krupp, S. A. Livi, J. W. Manweiler, and C. P. Paranicas, Energetic particle injections in Saturn's magnetosphere, *Geophys. Res. Lett.*, **32**, L14S05, doi:[10.1029/2005GL022485](https://doi.org/10.1029/2005GL022485), 2005.
373. Krupp, N.; Lagg, A.; Woch, J.; Krimigis, S. M.; Livi, S.; Mitchell, D. G.; Roelof, E. C.; Paranicas, C.; Mauk, B. H.; Hamilton, D. C.; Armstrong, T. P.; Dougherty, M. K. The Saturnian plasma sheet as revealed by energetic particle measurements, *Geophys. Res. Lett.*, 32, Issue 20, CiteID L20S03, 2005.
374. Mitchell, D. G.; Brandt, P. C.; Roelof, E. C.; Dandouras, J.; Krimigis, S. M.; Mauk, B. H., Energetic Neutral Atom Emissions from Titan Interaction with Saturn's Magnetosphere, *Science*, **308**, Issue 5724, pp. 989-992, 2005.
375. Lario, D., R. B. Decker, S. Livi, S. M. Krimigis, E. C. Roelof, C. T. Russell, R. B. McKibben, and C. D. Fry, Heliospheric Energetic Particle Observations during the October-November 2003 Events, *J. Geophys. Res.*, **110**, A09S11, doi:10.1029/2004JA010940, 2005.
376. Decker, R. B., S. M. Krimigis, E. C. Roelof, M. E. Hill, T. P. Armstrong, G. Gloeckler, D. C. Hamilton, and L. J. Lanzerotti, Voyager 1 in the Foreshock, Termination Shock and Heliosheath, *Science*, **309**, 2020-2024, 2005.
377. Krimigis, S. M., R. B. Decker, E. C. Roelof, and M. E. Hill, Voyager's Discovery of Region of Energetic Particles Associated with the Termination Shock (TS), in Proceedings of Solar Wind 11/SOHO 16 Meeting: *Connecting Sun and Heliosphere*, ESA SP-592, B. Fleck and T. H. Zurbuchen (eds), pp 15-22, 2005.
378. Paranicas, C., D. G. Mitchell, S. Livi, S. M. Krimigis, E. Roussos, N. Krupp, J. Woch, A. Lagg, J. Saur, and F. S. Turner, Enceladus and Tethys microsignatures, *Geophys. Res. Lett.*, Vol. 32, No. 20, L20101 [10.1029/2005GL024072](https://doi.org/10.1029/2005GL024072)
379. Paranicas, C., D. G. Mitchell, E. C. Roelof, P. C. Brandt, D. J. Williams, S. M. Krimigis, and B. H. Mauk, Periodic intensity variations in global ENA images of Saturn, *Geophys. Res. Lett.*, 32, L21101, doi:10.1029/2005GL023656, 2005.
380. Roussos, E., N. Krupp, J. Woch, A. Lagg, G.H. Jones, C. Paranicas, D.G. Mitchell, S. Livi, S.M. Krimigis, M.K. Dougherty, T. Armstrong, W.-H. Ip, and U. Motschmann, Low energy electron microsignatures at the orbit of Tethys: Cassini MIMI/LEMMS observations, *Geophys. Res. Lett.* 32, L24107, doi:10.1029/2005GL024084, 2005.
381. Anagnostopoulos, G. C., D. Efthymiadis, E. T. Sarris, and S. M. Krimigis, Evidence and features of magnetospheric particle leakage on days 30–36, 1995: Wind, Geotail, and IMP 8 observations compared, *J. Geophys. Res.*, **110**, , doi:10.1029/2004JA010827, 2005.
382. McNutt, Ralph L., Jr., James C. Leary, Robert E. Gold, Stamatios M. Krimigis, Edmond C. Roelof, et al, Innovative Interstellar Explorer: Radioisotope Propulsion to the Interstellar Medium, AIAA 2005-4272 41st AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit, 10-13 July 2005, Tucson, Arizona
383. Brandt, P. C., D. G. Mitchell, E. C. Roelof, S. M. Krimigis, C. P. Paranicas, B. H. Mauk, J. Saur, and R. DeMajistre, ENA Imaging – seeing the invisible, *APL Tech Digest*, 26, Number 2, 143-155, 2005.
384. Krimigis, Stamatios M., Introductory Remarks, in *Proc. 6th IAA International Conference on Low-Cost Planetary Missions*, p. 3, Kyoto, Japan, 2005.

2006

385. Slavin, J. A., S.M. Krimigis, M.H. Acuña, B. J. Anderson, D.N. Baker, P.L. Koehn, H. Korth, S. Livi, B.H. Mauk, and T.H. Zurbuchen, MESSENGER: Exploring Mercury's Magnetosphere, *Space Sci. Rev.*, accepted, 2006
386. Saur, J., B.H. Mauk, D. G. Mitchell, N. Krupp, K.K. Khurana, S. Livi, S.M.Krimigis, P.C. Brandt, A. Lagg, E. Roussos, M.K. Dougherty, Electron beams in Saturn's magnetosphere probe source regions of the aurora, *Nature*, Vol 439|9 February 2006|doi: 10.1038/nature04401.
387. Jones, G. H., E. Roussos, N. Krupp, C. Paranicas, J. Woch, A. Lagg, D. G. Mitchell, S. M. Krimigis, and M. K. Dougherty, Enceladus's varying imprint on the magnetosphere of Saturn, *Science* (in press), 2005
388. Desai, M., G. M. Mason, R. E. Gold, S. M. Krimigis, C. M. S. Cohen, R. A. Mewaldt, J.E. Mazur, and J. R. Dwyer, The Origin of Mass-Per-Charge Dependent Fractionation of Heavy Ion Elemental Abundances in Large Solar Energetic Particle Events, *J. Geophys. Res.* (submitted), 2005.
389. Brandt, P. C., J. Saur, C. Paranicas, D. G. Mitchell, E. C. Roelof, S. M. Krimigis, B. H. Mauk, N. Krupp,

- Saturn's global neutral gas and energetic ion distribution from Energetic Neutral Atom emissions, *Geophys. Res. Lett.*, (submitted), 2005.
390. Hill, M.E., R.B. Decker, E.C. Roelof, S.M. Krimigis, and G. Gloeckler, Heliosheath Particles, Anomalous Cosmic Rays and a Possible "Third Source" of Energetic Ions PHYSICS OF THE INNER HELIOSHEATH: Voyager Observations, Theory, and Future Prospects; 5th Annual IGPP International Astrophysics Conference. AIP Conference Proceedings, Volume 858, pp. 98-103, 2006.
391. Decker, R. B. E. C. Roelof, S. M. Krimigis, and M. E. Hill, Low-energy Ions near the Termination Shock, *PHYSICS OF THE INNER HELIOSHEATH: Voyager Observations, Theory, and Future Prospects; 5th Annual IGPP International Astrophysics Conference. AIP Conference Proceedings, Volume 858, pp. 73-78 2006.*
392. Lario, D., M-B. Kallenrode, R. B. Decker, S. M. Krimigis, E. C. Roelof, A. Aran, and B. Sanahuja, Radial and Longitudinal dependence of solar 4-13 Mev and 23-27 Mev proton peak intensities and fluences: Helios and IMP-8 observations, *Astrophysical Journal*, Volume 653, Issue 2, pp. 1531-1544, 2006.
393. Krimigis, S.M., Biography of J.A. Van Allen, *Encyclopedia of Astronomers*, T. Hockey (Ed) (in press) 2006.
394. Andre, N., E. C. Sittler Jr., M. F. Thomsen, A. M. Rymer, M. Blanc, J. L. Burch, A. J. Coates, F. J. Crary, J. Goldstein, K. K. Khurana, N. Krupp, W. S. Kurth, J. S. Leisner, P. Louarn, B. H. Mauk, A. M. Persoon, C. T. Russell, M. K. Dougherty, D. A. Gurnett, S. M. Krimigis, D. G. Mitchell, D. T. Young, Plasma Transport Signatures at Saturn Observed During Cassini Inbound Orbit Insertion, *J. Geophys. Res.* (submitted), 2006.
395. Paranicas, C. P., D. G. Mitchell, E. C. Roelof, B. H. Mauk, S. M. Krimigis, P. C. Brandt, M. Kusterer, F. S. Turner, J. Vandegriff, D. C. Hamilton, and N. Krupp, Energetic electrons injected into Saturn's neutral gas cloud, *J. Geophys. Res.*, (submitted), 2006.
396. Desai, M. I., G. M. Mason, R. E. Gold, S. M. Krimigis, C. M. S. Cohen, R. A. Mewaldt, J. E. Mazure, and J. R. Dwyer, heavy-ion elemental abundances in large solar energetic particle events and their implications for the seed population, *The Astrophysical Journal*, 649:470–489, 2006,
397. Κριμιζής, Σταμάτιος, Η ΗΛΙΟΣΦΑΙΡΑ ΚΑΙ Η ΣΥΓΚΡΟΥΣΗ ΤΗΣ ΜΕ ΤΟ ΜΕΣΟΑΣΤΡΙΚΟ ΥΛΙΚΟ, *Πρακτικά της Ακαδημίας Αθηνών*, σελ. 177-196, 2006.
398. Jones, G. H.; Krupp, N.; Krüger, H.; Roussos, E.; Ip, W.-H.; Mitchell, D. G.; Krimigis, S. M.; Woch, J.; Lagg, A.; Fränz, M.; Dougherty, M. K.; Arridge, C. S.; McAndrews, H. J. , Formation of Saturn's ring spokes by lightning-induced electron beams, *Geophys. Res. Lett.*, Volume 33, Issue 21, CiteID L2120, doi:10.1029/2006GL028146, 2006.
399. McNutt, Ralph L.; Gold, Robert E.; Krimigis, Tom; Roelof, Edmond C.; Gruntman, Mike; Gloeckler, George; Koehn, Patrick L.; Kurth, William S.; Oleson, Steven R.; Fiehler, Douglas I.; Horanyi, Mihaly; Mewaldt, Richard A.; Leary, James C.; Anderson, Brian J., Innovative interstellar explorer, PHYSICS OF THE INNER HELIOSHEATH: Voyager Observations, Theory, and Future Prospects; 5th Annual IGPP International Astrophysics Conference. AIP Conference Proceedings, Volume 858, pp. 341-347, 2006.
400. Krimigis, Stamatios M., James A. Van Allen (1914-2006)—'Father of Space Science', *Space Research Today*, Number 167, 104-107, December 2006.

2007

401. Garnier, P., I. Dandouras, D. Toublanc, P.C. Brandt, E.C. Roelof, D.G. Mitchell, S.M. Krimigis, N. Krupp, D.C. Hamilton, H. Waite, The exosphere of Titan and its interaction with the kronian magnetosphere: MIMI observations and modeling, *Planetary and Space Science* 55, 165–173, 2007.
402. C. Paranicas, D. G. Mitchell, E. C. Roelof, B. H. Mauk, S. M. Krimigis, P. C. Brandt, M. Kusterer, F. S. Turner, J. Vandegriff, and N. Krupp, Energetic electrons injected into Saturn's neutral gas cloud, *Geophys. Research Lett.*, 34, L02109, doi:10.1029/2006GL028676, 2007
403. *Carbary, J. F. Mitchell, D. G. Krimigis, S. M.; and Krupp, N.*, Electron periodicities in Saturn's outer magnetosphere, *J. Geophys. Res.*, Vol. 112, No. A3, A03206, 2007, 10.1029/2006JA012077
404. N. Sergis S.M. Krimigis, D.G. Mitchell, D.C. Hamilton, N. Krupp, B. M. Mauk, E. C. Roelof, and M. Dougherty, Ring Current at Saturn: Energetic Particle Pressure in Saturn's Equatorial

- Magnetosphere Measured with Cassini/MIMI, *Geophys. Res. Lett.*, 34, L09102, doi:10.1029/2006GL029223, 2007.
405. Garnier, P., I. Dandouras, D. Toublanc, E.C. Roelof, P.C. Brandt, D.G. Mitchell, S.M. Krimigis, N. Krupp, D.C. Hamilton, O. Dutuit, The lower exosphere of Titan: energetic neutral atoms absorption and imaging, *Geophys. Res. Lett.*, (submitted), 2007.
406. Hill, M.E., R.B. Decker, E.C. Roelof, S.M. Krimigis, and G. Gloeckler, *Heliosheath Particles, Anomalous Cosmic Rays and a Possible "Third Source" of Energetic Ions*, in **Turbulence and Nonlinear Processes in Astrophysical Plasmas** 6th Annual International Astrophysics Conference, *AIP Conference Proceedings, Volume...*, 2007.
407. R. B. Decker, S. M. Krimigis, E. C. Roelof, and M. E. Hill, *Foreshock, Termination Shock, and Heliosheath: Voyager 1/2 Observations of Structure and Turbulence*, in **Turbulence and Nonlinear Processes in Astrophysical Plasmas** 6th Annual International Astrophysics Conference, *AIP Conference Proceedings, Volume...*, 2007.
408. Carbary, J. F., D.G. Mitchell, S.M. Krimigis, and N. Krupp (2007), Evidence for spiral pattern in Saturn's magnetosphere using the new SKR longitudes, *Geophys. Res. Lett.*, 34, L13105, doi:10.1029/2007GL030167.
409. Roussos, E., G.H. Jones, N. Krupp, C. Paranicas, D.G. Mitchell, A. Lagg, J. Woch, S.M. Krimigis, U. Motschmann, M.K. Dougherty, Electron microdiffusion in the Saturnian radiation belts: Cassini/LEMMS observations of energetic electron absorption by the icy moons, *J. Geophys. Res.*, 112, A06214, doi: 10.1029/2006JA012027.
410. Roussos, E., G. H. Jones, N. Krupp, C. Paranicas, D. G. Mitchell, S. M. Krimigis, J. Woch, A. Lagg, K. Khurana (2007), Energetic electron signatures of Saturn's smaller moons: evidence of an arc of material at Methone, *Icarus*, doi: 10.1016/j.icarus.2007.03.034
411. McNutt, R. L.; Haggerty, D. K.; Hill, M. E.; Krimigis, S. M.; Livi, S.; Ho, G. C.; Gurnee, R. S.; Mauk, B. H.; Mitchell, D. G.; Roelof, E. C.; McComas, D. J.; Bagenal, F.; Elliott, H. A.; Brown, L. E.; Kusterer, M.; Vandegriff, J.; Stern, S. A.; Weaver, H. A.; Spencer, J. R.; Moore, J. M. (2007), Energetic Particles in the Jovian Magnetotail, *Science*, 318, 220-222, 10.1126/science.1148025
412. Carbary, J. F.; Mitchell, D. G.; Krimigis, S. M.; Hamilton, D. C.; Krupp, N., (2007), Spin-period effects in magnetospheres with no axial tilt, *Geophys. Res. Lett.*, 34, LD1807, doi:10.1029/2007GL030483.
413. Carbary, J. F.; Mitchell, D. G.; Krimigis, S. M.; Hamilton, D. C.; Krupp, N., (2007), Charged particle periodicities in Saturn's outer magnetosphere, *Journal of Geophys. Res.*, 112, Issue A6, CiteID A06246, doi:10.1029/2007JA012351
414. Cravens, T. E. , I. P. Robertson, S. A. Ledvina, D. Mitchell, S. M. Krimigis, J. H. Waite, Jr, (2007), Energetic Ion Precipitation at Titan, *Geophys. Res. Lett.*, (submitted)
415. McNutt, Ralph L.; Jr.; Livi, Stefano A.; Gurnee, Reid S.; Hill, Matthew E.; Cooper, Kim A.; Andrews, G. Bruce; Keath, Edwin P.; Krimigis, Stamatios M.; Mitchell, Donald G.; Tossman, Barry; Bagenal, Fran; Boldt, John D.; Bradley, Walter; Devereux, William S.; Ho, George C.; Jaskulek, Stephen E.; LeFevre, Thomas W.; Malcom, Horace; Marcus, Geoffrey A.; Hayes, John R.; Moore, G. Ty; Williams, Bruce D.; Wilson, Paul, IV; Brown, L. E.; Kusterer, M.; Vandegriff, J., (2007) The Pluto Energetic Particle Spectrometer Science Investigation (PEPSSI) on the New Horizons Mission, *Space Science Reviews*, (in press).
416. Kane, M. , D. G. Mitchell, J. F. Carbary, S. M. Krimigis, and F. J. Crary, (2007) Ion convective anisotropies detected by the Cassini INCA experiment in Saturn's magnetosphere, *Geophys. Res. Lett.* (submitted)
417. Jones, G. H. , E. Roussos, N. Krupp, U. Beckmann, A. J. Coates, F. Crary, I. Dandouras, V. Dikarev, M. K. Dougherty, P. Garnier, C. J. Hansen, A. R. Hendrix, G. B. Hospodarsky, R. E. Johnson, S. Kempf, K. Khurana, S. M. Krimigis, H. Kruenger, W. S. Kurth, A. Lagg, H. J. McAndrews, D. G. Mitchell, C. Paranicas, F. Postberg, C. T. Russell, J. Saur, M. Seiß, F. Spahn, R. Srama, D. F. Strobel, R. Tokar, J. E. Wahlund, R. J. Wilson, J. Woch, D. Young, (2007), The dust halo of Saturn's largest icy moon: Evidence of material orbiting Rhea, *Science*, (submitted).
418. Krimigis, Stamatios M., Years of remarkable achievements, in *Space: The First Step*, edited by V. Kornilenko, Space Research Institute of Russian Academy of Sciences (Publishers), 2007, pp. 190-194.
419. Krimigis, S. M., N. Sergis, D. G. Mitchell, D. C. Hamilton, and N. Krupp, (2007), A dynamic, rotating ring current around Saturn, *Nature*, (in press).

420. Carbary, J.F., D.G. Mitchell, P. Brandt, E.C. Roelof, and S.M. Krimigis, (2007), Statistical Morphology of ENA Emissions at Saturn, *J. Geophys. Res.*, (submitted).
421. Gurnett, D. A., and S. M. Krimigis, The Life and Accomplishments of James A. Van Allen (1924-2006), *IEEE Transactions in Plasma Science*, (in prees), 2007.
422. G. M. Mason, R. A. Leske, M. I. Desai, C. M. S. Cohen, J. R. Dwyer, J. E. Mazur, R. A. Mewaldt, R. E. Gold, and S. M. Krimigis, abundances and energy spectra of corotating interaction region heavy ions observed during solar cycle 23, *Astrophysical Journal*, (submitted), 2007