

# **ACE Bibliography**

Papers Published Prior to 2003

## **Papers Published in Refereed Journals and Books**

### **2002**

- A. T. Bogdanov, B. Klecker, E. Mobius, M. Hilchenbach, M. A. Popecki, L. M. Kistler, D. Hovestadt, Observations of heavy ion charge spectra in CME driven gradual solar energetic particle events, *Advances in Space Research*, Vol 30, Num 1, pp 111-117 (2002).
- L.F. Burlaga, J.D. Richardson, C. Wang, Speed Fluctuations near 60 AU on scales from 1 day to 1 year: Observations and model, *Journal of Geophysical Research*, Vol 107, Num A10, pp 10.1029/2002JA009379 (2002).
- L.F. Burlaga, S.P. Plunkett, O.C. St. Cyr, Successive CMEs and Complex Ejecta, *Journal of Geophysical Research*, Vol 107, Num A10, pp 10.1029/2001JA000255 (2002).
- L.F. Burlaga, M.A. Forman, Large-Scale Speed Fluctuations at 1 AU on Scales from 1 hour to ~1 Year: 1999 and 1995, *Journal of Geophysical Research*, Vol 107, Num A11, pp 10.1029/2002JA009271 (2002).
- L.F. Burlaga, N.F. Ness, Y-M. Wang, N.R. Sheeley, Jr., Heliospheric Magnetic Field Strength and Polarity from 1 to 81 AU during the Ascending Phase of Solar Cycle 23, *Journal of Geophysical Research*, Vol 107, Num A11, pp 10.1029/2001JA009217 (2002).
- J. P. Eastwood, A. Balogh, M. W. Dunlop, C. W. Smith, Cluster Observations of the Heliospheric Current Sheet and an Associated Magnetic Flux Rope, and Comparison with ACE, *Journal of Geophysical Research*, Vol 107, Num A11, pp 1365 (2002).
- C.J. Farrugia, M. Popecki, E. Mobius, V.K. Jordanova, M.I. Desai, R.J. Fitzenreiter, K.W. Ogilvie, S. Lepri, T. Zurbuchen, G.M. Mason, G.R. Lawrence, L.F. Burlaga, R.P. Lepping, J.R. Dwyer, D. McComas, Wind and ACE Observations during the Great Flow of May 1 - 4, 1998: Relation to Solar Activity and Implications for the Magnetosphere, *Journal of Geophysical Research*, Vol 107, Num A9, pp 1240 (2002).
- J. Geiss, G. Gloeckler, C. Charbonel, Chemical Evolution in Our Galaxy During the Last 5 Gyr, *Astrophysical Journal*, Vol 578, Num 2, pp 862-867 (2002).
- N. Gopalswamy, S. Yashiro, G. Michalek, M. L. Kaiser, R. A. Howard, D. V. Reames, R. Leske, T. von Rosenvinge, Interacting Coronal Mass Ejections And Solar Energetic Particles, *Astrophysical Journal*, Vol 572, pp L103-107 (2002).
- J.T. Gosling, R. M. Skoug, W. C. Feldman, D.J. McComas, Symmetric Suprathermal Electron Depletions on Closed Field Lines in the Solar Wind, *Geophysical Research Letters*, Vol 29, Num 12 (2002).
- D.K. Haggerty, E.C. Roelof, Impulsive Near-relativistic Solar Electron Events: Delayed Injection with Respect to Solar Electromagnetic Emission, *Astrophysical Journal*, Vol 579, Num 2, pp 841-853 (2002).
- M. W. Liemohn, J. U. Kozyra, M. R. Hairston, D. R. Weimer, G. Lu, A. J. Ridley, T. H.

- Zurbuchen, R. M Skoug, Consequences of a Saturated Convection Electric Field on the Ring Current , *Geophysical Research Letters*, Vol 29, pp 1348 (2002).
- O.E. Malandraki, E.T. Sarris, L.J. Lanzerotti, P. Trochoutsos, G. Tsiropoula, M. Pick, Solar Energetic Particles Inside a CME Event Observed with the ACE Spacecraft, *Journal of Atmospheric and Solar -Terrestrial Physics*, Vol 64, Num 5-6, pp 517-525 (2002).
- G.M. Mason, 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, *Astrophysical Journal*, Vol 574, Num 2, pp 1039-1058 (2002).
- G.M. Mason, J.E. Mazur, J.R. Dwyer, A New Heavy Ion Abundance Enrichment Pattern in 3He-rich Solar Particle Events, *Astrophysical Journal Letters*, Vol 565, Num 1, pp L51-L54 (2002).
- R. A. Mewaldt, C.M.S. Cohen, R. A. Leske, E. R. Christian, A. C. Cummings, E. C. Stone, T. T. von Roseninge, M. E. Wiedenbeck, Fractionation of Solar Energetic Particles and Solar Wind According to First Ionization Potential, *Advances in Space Research*, Vol 30, Num 1, pp 79-84 (2002).
- E. Mobius, M.A. Popecki, B. Klecker, L.M. Kistler, A.T. Bogdanov, A.B. Galvin, D. Heirtzler, D. Hovestadt, D. Morris, Ionic Charge-States of Solar Energetic Particles from Solar Flare Events During the Current Rise of Solar Activity as Observed with ACE SEPICA, *Advances in Space Research*, Vol 29, Num 10, pp 1501-1512 (2002).
- E. Mobius, D. Morris, M. Popecki, B. Klecker, L.M. Kistler, A.B. Galvin, Charge States of Energetic  $\sim 0.5$  MeV/n Ions Obtained in Corotation Interaction Regions at 1AU and Implications on Source Populations, *Geophysical Research Letters*, Vol 29, Num 2, pp 1-4 (2002).
- M. Neugebauer, P. C. Liewer, E. J. Smith, R. M. Skoug, T. H. Zurbuchen, Sources of the Solar Wind at Solar Activity Maximum, *Journal of Geophysical Research*, Vol 107, Num A12, pp 1488 (2002).
- G.S. Poletto, S.T. Suess, D.A. Biasecker, R.Esser, G.Gloeckler, Y.K. Ko, T.H. Zurbuchen, Low-Latitude Solar Wind During the Fall 1998 SOHO-Ulysses Quadrature, *Journal of Geophysical Research*, Vol 107, Num A10, pp 10.1029/2001JA000275 (2002).
- M. A. Popecki, E. Mobius, B. Klecker, A. B. Galvin, L. M. Kistler, A. T. Bogdanov, Ionic charge state measurements in solar energetic particle events, *Advances in Space Research*, Vol 30, Num 1, pp 33-43 (2002).
- A. Posner, N.A. Schwadron, T.H. Zurbuchen, J.U. Kozyra, M.W. Liemohn, G.Gloeckler, , Association of Low-Charge-State Heavy Ions far Upstream of the Earth's Bow Shock with Geomagnetic Disturbances, *Geophysical Research Letters*, Vol 29, Num 7, pp 10.1029/2001GL013449 (2002).
- I.M. Robinson, G.M. Simnett, The Release of Near-Relativistic Electrons from the Sun, *Journal of Geophysical Research*, Vol 107, Num A8, pp 10.1029/2001JA000305 (2002).
- G.M. Simnett, E.C. Roelof, D.K. Haggerty, The Acceleration and Release of Near-

relativistic Electrons by Coronal Mass Ejections, *Astrophysical Journal*, Vol 579, Num 2, pp 854-862 (2002).

- G.M. Simnett, E.C. Roelof, D.K. Haggerty, The Phase of Energetic Particle Acceleration for Events Associated with Coronal Mass Ejections, *Proceedings of the 2nd Solar Cycle and Space Weather Euroconference*, pp 19-26 (2002).
- P.L. Slocum, M.E. Wiedenbeck, E.R. Christian, C.M.S. Cohen, A.C. Cummings, R.A. Leske, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, Energetic Particle Composition at 1 AU During Periods of Moderate Interplanetary Particle Fluxes, *Advances in Space Research*, Vol 30, Num 1, pp 97-104 (2002).
- A.J. Tylka, P.R. Boberg, C.M.S. Cohen, W.F. Dietrich, C.G. MacLennan, G.M. Mason, C.K. Ng, D.V. Reames, Flare- and Shock-accelerated Energetic Particles in the Solar Events of 2001 April 14 and 15, *Astrophysical Journal Letters*, Vol 581, Num 2, pp L119-L23 (2002).
- D.R. Weimer, D. Ober, N.C. Maynard, W.J. Burke, M.R. Collier, D.J. McComas, N.F. Ness, C.W. Smith, Variable Time Delays in the Propagation of the Interplanetary Magnetic Field, *Journal of Geophysical Research*, Vol 107, Num A8, pp 10.1029/2001JA009102 (2002).
- R. F. Wimmer-Schweingruber, The Composition of the Solar Wind, *Advances in Space Research*, Vol 30, Num 1, pp 23-32 (2002).
- G.N. Zastenker, et al., Method and Results of Direct Measurement of the Interstellar Neutral Helium Abundance and Isotopic Composition, *Cosmic Res.*, Vol 40, pp 347-357 (2002).
- T.H. Zurbuchen, L.A. Fisk, G. Gloeckler, R. von Steiger, , The Solar Wind Composition Throughout the Solar Cycle: a Continuum of Dynamic States, *Geophysical Research Letters*, Vol 29, Num 9, pp 10.1029/2001GL013946 (2002).

## 2001

- M.R. Aellig, A.J. Lazarus, J.T. Steinberg, The Solar Wind Helium Abundance: Variation with Wind Speed and Solar Cycle, *Solar and Galactic Composition, AIP Conference Proceedings*, Vol 598, pp 89-94 (2001).
- W.R. Binns, M.E. Wiedenbeck, E.R. Christian, A.C. Cummings, J.S. George, P.L. Hink, M.H. Israel, J. Klarmann, R.A. Leske, M. Lijowski, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, N.E. Yanasak, Galactic cosmic ray neon isotopic abundances measured by the cosmic ray isotope spectrometer (cris) on ace, *Advances in Space Research*, Vol 27, Num 4, pp 767-772 (2001).
- W.R. Binns, M.E. Wiedenbeck, E.R. Christian, A.C. Cummings, J.S. George, M.H. Israel, R.A. Leske, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, N.E. Yanasak, GCR Neon Isotopic Abundances: Comparison with Wolf-Rayet Star Models and Meteoritic Abundances, *Solar and Galactic Composition, AIP Conference Proceedings*, Vol 598, pp 257-262 (2001).
- P. Bochsler, R.F. Wimmer-Schweingruber, P. Wurz, Sun, solar wind, meteorites, and interstellar medium: What are the compositional relations?, *Solar and Galactic Composition, AIP Conference Proceedings*, Vol 598, pp 381-386 (2001).

- L.F. Burlaga, R.M. Skoug, C.W. Smith, D. Webb, T.H. Zurbuchen, A. Reinard, Fast Ejecta During the Ascending Phase of Solar Cycle 23: ACE Observations, 1998 - 1999, *Journal of Geophysical Research*, Vol 106, Num A10, pp 20957-20977 (2001).
- H. Busemann, K. Altwegg, W.R. Binns, C. Chiappini, G. Gloeckler, P. Hoppe, D. Kirilova, R.A. Leske, O.K. Manuel, R.A. Mewaldt, E. Mobius, S.T. Suess, R. Wieler, R.C. Wiens, R.F. Wimmer-Schweingruber, N.E. Yanasak, Applications of abundance data and requirements for cosmochemical modeling, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 357-380 (2001).
- C.M.S. Cohen, A. C. Cummings, R. A. Leske, R. A. Mewaldt, E. C. Stone, M. E. Wiedenbeck, E. R. Christian, T. T. von Roseninge, Forecasting the Arrival of Shock-accelerated Solar Energetic Particles at Earth, *Journal of Geophysical Research*, Vol 106, Num A10, pp 20979-20984 (2001).
- C.M.S. Cohen, R.A. Mewaldt, E.R. Christian, A.C. Cummings, R.A. Leske, P.L. Slocum, E.C. Stone, T.T. von Roseninge, M.E. Wiedenbeck, Solar Coronal Abundances of Rare Elements Based on Solar Energetic Particles, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 107-112 (2001).
- M.R. Collier, Moore, Thomas E., Ogilvie, Keith W., Chornay, Dennis, Keller, J. W., Boardsen, S., Burch, James, El Marji, B., Fok, M.-C., Fuselier, S. A., Ghielmetti, A. G., Giles, B. L., Hamilton, D. C., Peko, B. L., Quinn, J. M., Roelof, E. C., Stephen, T. M., Wilson, G. R., Wurz, P., Observations of neutral atoms from the solar wind, *Journal of Geophysical Research*, Volume 106, Issue A11, p. 24893-24906 (2001).
- J.J. Connell, A. Decourchelle, R. A. Mewaldt, D. Muller, S. Reynolds, A. Strong, H. Volk, M. E. Wiedenbeck, Key Measurements in the Future, *Space Science Reviews*, Vol 99, Num 1, pp 353-374 (2001).
- A. J. Davis, R. A. Mewaldt, C.M.S. Cohen, A. C. Cummings, J. S. George, R. A. Leske, E. C. Stone, M. E. Wiedenbeck, N. E. Yanasak, E. R. Christian, T. T. von Roseninge, W. R. Binns, P. L. Hink, Solar Minimum Spectra of Galactic Cosmic Rays and their Implications for Models of the Near-Earth Radiation Environment, *Journal of Geophysical Research*, Vol 106, Num A12, pp 29,979-29,987 (2001).
- M.I. Desai, G.M. Mason, J.R. Dwyer, J.E. Mazur, C.W. Smith, R.M. Skoug, Acceleration of  $^3\text{He}$  nuclei at interplanetary shocks, *Astrophysical Journal Letters*, Vol 553, Num 1, pp L89-L92 (2001).
- J.R. Dwyer, G.M. Mason, J.E. Mazur, R.E. Gold, S.M. Krimigis, E. Mobius, M. Popecki, Isotopic Composition of Solar Energetic Particle Events Measured by ACE/ULEIS, *Astrophysical Journal*, Vol 563, pp 403-409 (2001).
- L.A. Fisk, N.A. Schwadron, The behavior of the open magnetic field of the Sun, *Astrophysical Journal*, Vol 560, Num 1, pp 425-438 (2001).
- L.A. Fisk, On the global structure of the heliospheric magnetic field, *Journal of Geophysical Research*, Vol 106, Num A8, pp 15849-15858 (2001).
- L.A. Fisk, N.A. Schwadron, Origin of the Solar Wind: Theory, *Space Science Reviews*, Vol 97, pp 21-33 (2001).
- S.P. Gary, R.M. Skoug, J. Steinberg, C.W. Smith, Proton Temperature Anisotropy Constraint in the Solar Wind: ACE Observations, *Geophysical Research Letters*, Vol 28, Num 14, pp 2759-2782 (2001).

- J.S. George, M.E. Wiedenbeck, A.F. Barghouty, W.R. Binns, E.R. Christian, A.C. Cummings, P.L. Hink, R.A. Leske, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, N.E. Yanasak, Distinguishing Galactic Cosmic-Ray Source Models with First Ionization Potential and Volatility, *Advances in Space Research*, Vol 27, Num 4, pp 779-784 (2001).
- J.S. George, M.E. Wiedenbeck, W.R. Binns, E.R. Christian, A.C. Cummings, P.L. Hink, R.A. Leske, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, N.E. Yanasak, The Phosphorus/Sulfur Abundance Ratio as a Test of Galactic Cosmic-Ray Source Models, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 263-268 (2001).
- J. Giacalone, The Latitudinal Transport of Energetic Particles Associated with Corotating Interaction Regions, *Journal of Geophysical Research*, Vol 106, Num A8, pp 15881-15887 (2001).
- J. Giacalone, J.R. Jokipii, J. Kota, Non-Shock Diffusive Acceleration in Regions of Solar-Wind Compression, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 339-342 (2001).
- G. Gloeckler, J. Geiss, Composition of the local interstellar cloud from observations of interstellar pickup ions, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 281-290 (2001).
- G. Gloeckler, J. Geiss, Heliospheric and Interstellar Phenomena Deduced From Pickup ion Observations, *Space Science Reviews*, Vol 97, pp 169-181 (2001).
- J.T. Gosling, R. M. Skoug, W. C. Feldman, Solar Wind Electron Halo Depletions at 90 degree Pitch Angle, *Geophysical Research Letters*, Vol 28, pp 4155-4158 (2001).
- D.K. Haggerty, E.C. Roelof, M.L. Kaiser, Relative Timing of Impulsive Solar Electron Injections and Solar Electromagnetic Emissions, *Planetary Radio Emissions V*, Austrian Academy of Sciences, pp 437-444 (2001).
- B. Heber, A.C. Cummings, Anomalous Cosmic Ray Observations In The Inner And Outer Heliosphere, *COSPAR Colloquia Series: The Outer Heliosphere: The Next Frontiers*, Vol 11, pp 173-182 (2001).
- G. C. Ho, E. C. Roelof, E. Hawkins, R. E. Gold, G. M. Mason, J. R. Dwyer, J. E. Mazur, Energetic Electrons in 3He Enhanced Solar Energetic Particle Events, *Astrophysical Journal*, Vol 552, Num 2, pp 863-870 (2001).
- G.C. Ho, G.M. Mason, R.E. Gold, J.R. Dwyer, J.E. Mazur, Propagation of Impulsive Solar Energetic Particle Events, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 353-354 (2001).
- S.E. Hawkins, III, E.C. Roelof, R.B. Decker, G.C. Ho, D. Lario, Comparison of  $>40$  keV Electron Events at High and Low Heliolatitudes: Ulysses/HI-SCALE and ACE/EPAM, *Space Science Reviews*, Vol 97, pp 269-272 (2001).
- S.E. Hawkins, III, R.E. Gold, M. Pick, D. Maia, Origins of Anisotropic 40-300 keV Electron Events Observed at Low and High Latitudes, *Space Science Reviews*, Vol 97, Num 1, pp 285-288 (2001).
- J.R. Jokipii, Latitudinal Heliospheric Magnetic Field: Stochastic and Causal Components, *Journal of Geophysical Research*, Vol 106, Num A8, pp 15841-15847

(2001).

- V.K. Jordanova, R.M. Thorne, C.J. Farrugia, Y. Dotan, J.F. Fennell, M.F. Thomsen, G.D. Reeves, D.J. McComas, Ring Current Dynamics During the 13-18 July 2000 Storm Period, *Solar Physics*, Vol 204, pp 361-375 (2001).
- H. Kahn, S.W.H. Crowley, E. Kolesnikova, M. Lester, M.J. Brittnacher, T.J. Hughes, W.S. Kurth, D.J. McComas, L. Newitt, C.J. Owen, G.D. Reeves, H.J. Singer, C.W. Smith, D.J. Lockwood, J.F. Watermann, Observations of Two Complete Substorm Cycles During the Cassini Earth Swing-By: Cassini Magnetometer Data in a Global Context, *Journal of Geophysical Research*, Vol 106, pp 30141-30175 (2001).
- K. Kauristie, T. I. Pulkkinen, O. Amm, A. Viljanen, M. Syrjasuo, P. Janhunen, S. Massetti, S. Orsini, M. Candidi, J. Watermann, E. Donovan, P. Prikryl, I. R. Mann, P. Eglitis, C. Smith, W. F. Denig, H. J. Opgenoorth, M. Lockwood, M. Dunlop, A. Vaivads, M. Andre, Ground-Based and Satellite Observations of High-Latitude Auroral Activity in the Dusk Sector of the Auroral Oval, *Annales Geophysicae*, Vol 19, pp 1683-1696 (2001).
- B. Klecker, V. Bothmer, A.C. Cummings, J.S. George, J.W. Keller, E. Salerno, U.J. Sofia, E.C. Stone, F.-K. Thielemann, M.E. Wiedenbeck, F. Buclin, E.R. Christian, E.O. Fluckiger, M.Y. Hofer, F.C. Jones, D. Kirilova, H. Kunow, M. Laming, C. Tranquille, K.-P. Wenzel, Galactic Abundances: Report of Working Group 3, Solar and Galactic Composition, *AIP Conference Proceedings*, Vol 598, pp 207-220 (2001).
- B. Klecker, E. Mobius, M.A. Popecki, M.A. Lee, A.T. Bogdanov, On the Energy Dependence of Ionic Charge States in Solar Energetic Particle Events, *Solar and Galactic Composition, AIP Conference Proceedings*, Vol 598, pp 317-322 (2001).
- Y.-K. Ko, T. Zurbuchen, L. Strachan, P. Riley, J.C. Raymond, A Solar Wind Coronal Origin Study from SOHO/UVCS and ACE/SWICS Joint Analysis, *Solar and Galactic Composition, AIP Conference Proceedings*, Vol 598, pp 133-138 (2001).
- A. Lagg, Krupp, N., Livi, S., Woch, J., Krimigis, S. M., Dougherty, M. K., Energetic particle measurements during the earth swing-by of the Cassini spacecraft in August 1999, *Journal of Geophysical Research*, Volume 106, Issue A12, p. 30209-30222 (2001).
- L.J. Lanzerotti, S.M. Krimigis, R.B. Decker, S.E. Hawkins, R.E. Gold, E.C. Roelof, T.P. Armstrong, Low Energy Particles in the Global Heliosphere 2001-2004: 1 to 90 AU, *Space Science Reviews*, Vol 97, pp 243-248 (2001).
- D. Lario, D.K. Haggerty, E.C. Roelof, S.J. Tappin, R.J. Forsyth, J.T. Gosling, Joint Ulysses and ACE observations of a magnetic cloud and the associated solar energetic particle event, *Space Science Reviews*, Vol 97, pp 277-280 (2001).
- D. Lario, E.C. Roelof, R.J. Forsyth, J.T. Gosling, 26-day Analysis of Energetic Ion Observations at High and Low Heliolatitudes: Ulysses and ACE, *Space Science Reviews*, Vol 97, pp 249-252 (2001).
- D.H. Fairfield, Cairns, Iver H., Desch, M. D., Szabo, A., Lazarus, A. J., Aellig, M. R., The location of low Mach number bow shocks at Earth, *Journal of Geophysical Research*, Volume 106, Issue A11, p. 25361-25376 (2001).
- R. P. Lepping, D. B. Berdichevsky, L. F. Burlaga, A. J. Lazarus, J. Kasper, M. D. Desch,

- C.-C. Wu, D. V. Reames, H. J. Singer, C. W. Smith, K. L. Ackerson, The Bastille Day Magnetic Clouds and Upstream Shocks: Near Earth Interplanetary Observations, *Solar Physics*, Vol 204, pp 285-303 (2001).
- S.T. Lepri, T.H. Zurbuchen, L.A. Fisk, I.G. Richardson, H.V. Cane, G. Gloeckler, Iron charge distribution as an identifier of Interplanetary Coronal Mass Ejections, *Journal of Geophysical Research*, Vol 106, Num A12, pp 29231-29238 (2001).
- R.A. Leske, R.A. Mewaldt, C.M.S. Cohen, E.R. Christian, A.C. Cummings, P.L. Slocum, E.C. Stone, T.T. von Roseninge, M.E. Wiedenbeck, Isotopic Abundances in the Solar Corona as Inferred from ACE Measurements of Solar Energetic Particles, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 127-132 (2001).
- Y.E. Litvinenko, Acceleration in a Current Sheet and Heavy Ion Abundances in Impulsive Solar Flares, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 311-316 (2001).
- Y.E. Litvinenko, B.V. Somov, Aspects of the Global MHD Equilibria and Filament Eruptions in the Solar Corona, *Space Science Reviews*, Vol 95, Num 1-2, pp 67-77 (2001).
- J.Y. Lu, G.P. Zank, G.M. Webb, Numerical solution of the time-dependent kinetic equation for anisotropic pitch-angle scattering, *Astrophysical Journal*, Vol 550, Num 1, pp 34-51 (2001).
- J.Y. Lu, G.P. Zank, The transport of interstellar pickup ions, *Journal of Geophysical Research*, Vol 106, pp 5709-5720 (2001).
- D. Maia, M. Pick, S.E. Hawkins, III, S. Krucker, Solar Origin of a Series of Well-collimated Electron Events, *Astrophysical Journal*, Vol 560, pp 1059-1064 (2001).
- D.M. Maia, M. Pick, S.E. Hawkins, III, K. Jiricka, V.V. Fomichev, 14 July 2000, a Near-global Coronal Event and its Association with Energetic Electron Events Detected in the Interplanetary Medium, *Solar Physics*, Vol 204, pp 197-212 (2001).
- G.M. Mason, Heliospheric Lessons for Galactic Cosmic Ray Acceleration, *Space Science Reviews*, Vol 99, pp 119-133 (2001).
- R.A. Mewaldt, 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, T.H. Zurbuchen, Long-Term fluences of energetic particles in the heliosphere, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 165-170 (2001).
- R.A. Mewaldt, R.C. Ogliore, G. Gloeckler, G.M. Mason, A New Look at Neon-C and SEP-neon, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 393-398 (2001).
- R. A. Mewaldt, N. E. Yanasak, M. E. Wiedenbeck, W. R. Binns, E. R. Christian, A. C. Cummings, A. J. Davis, P. L. Hink, R. A. Leske, S.M. Niebur, E. C. Stone, T. T. von Roseninge, Radioactive Clocks and Cosmic Ray Transport in the Galaxy, *Space Science Reviews*, Vol 99, Num 1, pp 27-39 (2001).
- D. Morris, E. Mobius, M.A. Lee, M.A. Popecki, B. Klecker, L.M. Kistler, A.B. Galvin, Implications for Source Populations of Energetic Ions in Co-Rotating Interaction

Regions from Ionic Charge States, Solar and Galactic Composition, AIP Conference Proceedings, Vol 598, pp 195-200 (2001).

- S. M. Niebur, Reacceleration of Galactic Cosmic Rays: Secondary Electron Capture Isotopes Measured by the Cosmic Ray Isotope Spectrometer, Astrophysical Sources of High Energy Particles and Radiation, Vol 44, pp 305 (2001).
- G.A. de Nolfo, N.E. Yanasak, W.R. Binns, A.C. Cummings, E.R. Christian, J.S. George, P.L. Hink, M.H. Israel, R.A. Leske, M. Lijowski, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, M.E. Wiedenbeck, Measurements of the Isotopes of Lithium, Beryllium, and Boron from ACE/CRIS, Solar and Galactic Composition, AIP Conference Proceedings, Vol 598, pp 251-256 (2001).
- M. Pick, D. Maia, S.E. Hawkins, III, Solar Origin of Anisotropic Electron Events observed by Ulysses and ACE, Space Science Reviews, Vol 97, pp 273-276 (2001).
- C.J. Pollock, Asamura, K., Balkey, M. M., Burch, J. L., Funsten, H. O., Grande, M., Gruntman, M., Henderson, M., Jahn, J.-M., Lampton, M., Liemohn, M. W., McComas, D. J., Mukai, T., Ritzau, S., Schattenburg, M. L., Scime, E., Skoug, R., Valek, P., Wüest, M, First medium energy neutral atom (MENA) images of Earth's magnetosphere during substorm and storm-time, Geophysical Research Letters, Volume 28, Issue 6, p. 1147-1150 (2001).
- A. Posner, T.H. Zurbuchen, N.A. Schwadron, L.A. Fisk, G. Gloeckler, A. Linkler, Z. Mikic, P. Riley, Nature of the Boundary Between Open and Closed Magnetic Field Line Regions at the Sun Revealed by Composition Data and Numerical Models, Journal of Geophysical Research, Vol A106, Num A8, pp 15869-15880 (2001).
- J.C. Raymond , J.E. Mazur, L. Abbo, F. Allegrini, E. Antonucci , G. Del Zanna, M.H. Den , M.I. Desai , S. Giordano, G. Ho , Y.-K. Ko , E. Landi , A. Lazarus, G. Mason , K.W. Ogilvie, S. Parenti, G. Poletto , A. Reinard, J. Rodriguez-Pacheco, D. Spadaro , L. Teriaca , P. Wurz , L. Zangrilli, F. Zuccarello , Coronal Abundances, Solar and Galactic Composition, AIP Conference Proceedings, Vol 598, pp 49-58 (2001).
- A.A. Reinard, T.H. Zurbuchen, L.A. Fisk, S.T. Lepri, R.M. Skoug, G. Gloeckler, Comparison between Average Charge States and Abundances of Ions in CMEs and the Slow Solar Wind, Solar and Galactic Composition, AIP Conference Proceedings, Vol 598, pp 139-144 (2001).
- W.K.M. Rice, G.P. Zank, J.A. le Roux, W.H. Matthaeus, The preacceleration of anomalous cosmic rays, Advances in Space Research, Vol 27, Num 4, pp 835-840 (2001).
- T.T. von Roseninge, C.M.S. Cohen , E.R. Christian, A.C. Cummings, R.A. Leske, R.A. Mewaldt, P.L. Slocum, O.C. St. Cyr, E.C. Stone, M.E. Wiedenbeck, Time Variations in Elemental Abundances in Solar Energetic Particle Events, Solar and Galactic Composition, AIP Conference Proceedings, Vol 598, pp 343-348 (2001).
- J.A. le Roux, H. Fichtner, G.P. Zank, V.S. Ptuskin, Self-consistent acceleration of pickup ions at the termination shock , COSPAR Colloquia Series: The Outer Heliosphere: The Next Frontiers, Vol 11, pp 215-218 (2001).
- J.A. le Roux, W.H. Matthaeus, G.P. Zank, Pickup ion acceleration by turbulent field-aligned electric fields in the slow low-latitude solar wind , Geophysical Research



- Letters, Vol 28, Num 20, pp 3831 (2001).
- E.J. Smith, Balogh A., Forsyth R. J., McComas D. J., Ulysses in the south polar cap at solar maximum: Heliospheric magnetic field, *Geophysical Research Letters*, Volume 28, Issue 22, p. 4159-4162 (2001).
- P.L. Slocum, E.R. Christian, C.M.S. Cohen, A.C. Cummings, R.A. Leske, R.A. Mewaldt, E.C. Stone, T.T. von Rosenvinge, M.E. Wiedenbeck, Measurements of Heavy Elements and Isotopes in Small Solar Energetic Particle Events, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 177-182 (2001).
- C.W. Smith, D.J. Mullan, N.F. Ness, R.M. Skoug, J. Steinberg, The Day the Solar Wind Almost Disappeared: Magnetic Field Fluctuations, Wave Refraction and Dissipation, *Journal of Geophysical Research*, Vol 106, Num A9, pp 18625-18634 (2001).
- C.W. Smith, N.G. Ness, L.F. Burlaga, R.M. Skoug, D.J. McComas, T.H. Zurbuchen, G.Gloeckler, D.K. Haggerty, R.E. Gold, M.I. Desai, G.M. Mason, J.E. Mazur, J.R. Dwyer, M.A. Popecki, E. Mobius, C.M.S. Cohen, R.A. Leske, ACE Observations of the Bastille Day 2000 Interplanetary Disturbances, *Solar Physics*, Vol 204, pp 227-252 (2001).
- P. Song, Kozyra, J. U., Chandler, M. O., Russell, C. T., Peterson, W. K., Trattner, K. J., Friedel, R. H. W., Shue, J.-H., Moore, T. E., Ogilvie, K. W., Lepping, R. P., McComas, D. J., Polar observations and model predictions during May 4, 1998, magnetopause, magnetosheath, and bow shock crossings, *Journal of Geophysical Research*, Volume 106, Issue A9, p. 18927-18942 (2001)
- R. von Steiger, J.-C. Vial, P. Bochsler, M. Chaussidon, C.M.S. Cohen, B. Fleck, V.S. Heber, H. Holweger, K. Issautier, A.J. Lazarus, K.W. Ogilvie, J.A. Paquette, D.B. Reisenfeld, L.Teriaca, K. Wilhelm, S. Yusainee, J.M. Laming, R.C. Wiens, Measuring Solar Abundances, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 13-22 (2001).
- R. von Steiger, T.H. Zurbuchen, J. Geiss, G. Gloeckler, L.A. Fisk, N.A. Schwadron, The 3-D Heliosphere from the Ulysses and ACE Solar Wind Ion Composition Experiments, *Space Science Reviews*, Vol 97, pp 123-127 (2001).
- A. Szabo, P. Lepping, J. Merka, C. W. Smith, R. M. Skoug, The Evolution of Interplanetary Shocks Driven by Magnetic Clouds, *Proceedings of Solar Encounter: The First Solar Orbiter Workshop*. ESA Publication SP-493, Noordwijk, The Netherlands, pp 383-387 (2001).
- C.H. Tsao, R. Silberberg, A.F. Barghouty, Cosmic-Ray Sources and Source Composition, *Astrophysical Journal*, Vol 549, pp 320-324 (2001).
- A.J. Tylka, C.M.S. Cohen, W.F. Dietrich, C.G. MacLennan, R.E. McGuire, C.K. Ng, D.V. Reames, Evidence for Remnant Flare suprathermals in the Source Population of Solar Energetic Particles in the 2000 Bastille Day Event, *Astrophysical Journal Letters*, Vol 558, Num 1, pp L59-L63 (2001).
- A.J. Tylka, New Insights on Solar Energetic Particles from Wind and ACE, *Journal of Geophysical Research*, Vol 106, Num A11, pp 25333-25352 (2001).
- W.R. Webber, Lockwood, J. A., Voyager and Pioneer spacecraft measurements of cosmic ray intensities in the outer heliosphere: Toward a new paradigm for understanding the global modulation process: 2. Maximum solar modulation (1990-

- 1991), *Journal of Geophysical Research*, Volume 106, Issue A12, p. 29333-29340 (2001).
- W.R. Webber, Lockwood, J. A., Voyager and Pioneer spacecraft measurements of cosmic ray intensities in the outer heliosphere: Toward a new paradigm for understanding the global solar modulation process: 1. Minimum solar modulation (1987 and 1997), *Journal of Geophysical Research*, Volume 106, Issue A12, p. 29323-29332 (2001).
- Y.C. Whang, L.F. Burlaga, N.G. Ness, C.W. Smith, The Bastille Day Shocks and Merged Interaction Region, *Solar Physics*, Vol 204, pp 253-263 (2001).
- M.E. Wiedenbeck, W.R. Binns, E.R. Christian, A.C. Cummings, A.J. Davis, J.S. George, P.L. Hink, M.H. Israel, R.A. Leske, M. Lijowski, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, N.E. Yanasak, The Isotopic Source Composition of Cosmic-Ray Iron, Cobalt, and Nickel, *Advances in Space Research*, Vol 27, Num 4, pp 773-778 (2001).
- M.E. Wiedenbeck, W.R. Binns, E.R. Christian, A.C. Cummings, A.J. Davis, J.S. George, P.L. Hink, M.H. Israel, R.A. Leske, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, N.E. Yanasak, Constraints on the Nucleosynthesis of Refractory Nuclides in Galactic Cosmic Rays, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 269-274 (2001).
- M. E. Wiedenbeck, N. E. Yanasak, A. C. Cummings, A. J. Davis, J. S. George, R. A. Leske, R. A. Mewaldt, E. C. Stone, W. R. Binns, P. L. Hink, M.H. Israel, M. Lijowski, E. R. Christian, T. T. von Roseninge, The Origin of Primary Cosmic Rays: Constraints from ACE Elemental and Isotopic Composition Observations, *Space Science Reviews*, Vol 99, Num 1, pp 15-26 (2001).
- R.F. Wimmer-Schweingruber, P. Bochsler, G. Gloeckler, The Isotopic Composition of Oxygen in the fast solar wind: ACE/SWIMS, *Geophysical Research Letters*, Vol 28, Num 14, pp 2763 (2001).
- R.F. Wimmer-Schweingruber, *Solar and Galactic Composition*, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 3-8 (2001).
- R.F. Wimmer-Schweingruber, P. Bochsler, Lunar Soils: A Long-Term Archive for the Galactic Environment of the Heliosphere?, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 399-404 (2001).
- P. Wurz, R.F. Wimmer-Schweingruber, K. Issautier, P. Bochsler, A.b. Galvin, J.A. Paquette, F.M. Ipavich, Composition of magnetic cloud plasmas during 1997 and 1998, *Solar and Galactic Composition*, AIP Conference Proceedings, Vol 598, pp 145-150 (2001).
- N.E. Yanasak, W.R. Binns, E.R. Christian, A.C. Cummings, J.S. George, P.L. Hink, M.H. Israel, J. Klarmann, R.A. Leske, M. Lijowski, R.A. Mewaldt, E.C. Stone, T.T. von Roseninge, M.E. Wiedenbeck, Cosmic-Ray Time Scales Using Radioactive Clocks, *Advances in Space Research*, Vol 27, Num 4, pp 727-736 (2001).
- N.E. Yanasak, M.E. Wiedenbeck, R.A. Mewaldt, A.J. Davis, A.C. Cummings, J.S. George, R.A. Leske, E.C. Stone, E.R. Christian, T.T. von Roseninge, W.R. Binns, P.L. Hink, M.H. Israel, Measurement of the Secondary Radionuclides of  $^{10}\text{Be}$ ,  $^{26}\text{Al}$ ,  $^{36}\text{Cl}$ ,  $^{54}\text{Mn}$ , and  $^{14}\text{C}$ , and Implications for the Galactic Cosmic-Ray Age,

- Astrophysical Journal, Vol 563, Num 2, pp 768-792 (2001).
- N.E. Yanasak, G.A. de Nolfo, W.R. Binns, E.R. Christian, A.C. Cummings, A.J. Davis, J.S. George, P.L. Hink, M.H. Israel, R.A. Leske, M. Lijowski, R.A. Mewaldt, E.C. Stone, T.T. von Rosenvinge, M.E. Wiedenbeck, The Cosmic-Ray Contribution to Galactic Abundances of the Light Elements: Interpretation of GCR LiBeB Abundance Measurements from ACE/CRIS, Solar and Galactic Composition, AIP Conference Proceedings, Vol 598, pp 245-250 (2001).
- G.P. Zank, W.K.M. Rice, J.A. le Roux, W.H. Matthaeus, The injection problem for anomalous cosmic rays, Astrophysical Journal, Vol 556, Num 1, pp 494-500 (2001).
- G.P. Zank, I.H. Cairns, Pickup ion turbulence: A stochastic growth model, COSPAR Colloquia Series: The Outer Heliosphere: The Next Frontiers, Vol 11, pp 125-128 (2001).
- G.P. Zank, W.K.M. Rice, J.A. le Roux, W.H. Matthaeus, The injection problem for anomalous cosmic rays, COSPAR Colloquia Series: The Outer Heliosphere: The Next Frontiers, Vol 11, pp 211-214 (2001).
- G.P. Zank, W.K.M. Rice, I.H. Cairns, J.W. Bieber, R.M. Skoug, C.W. Smith, Predicted Timing for the Turn-on of Radiation in the Outer Heliosphere due to the Bastille Day Shock, Journal of Geophysical Research, Vol 106, pp 29363-29372 (2001).
- G.P. Zank, W.K.M. Rice, J.A. le Roux, I.H. Cairns, G.M. Webb, The 'injection problem' for quasi-parallel Shocks, Physics of Plasmas, Vol 8, pp 4560-4576 (2001).
- T.H. Zurbuchen, S. Hefti, L.A. Fisk, G. Gloeckler, N.A. Schwadron, C.W. Smith, N.F. Ness, R.M. Skoug, D.J. McComas, L.F. Burlaga, On the Origin of Microscale Magnetic Holes in the Solar Wind, Journal of Geophysical Research, Vol A106, Num A8, pp 16001-16010 (2001).
- T.H. Zurbuchen, Foreward, Journal of Geophysical Research, Vol 106, Num A8, pp 15793 (2001).

## 2000

- A. F. Barghouty, R. A. Mewaldt, Simulation of Charge-Equilibration and Acceleration of Solar Energetic Ions, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 71-78 (2000).
- A. F. Barghouty, J. R. Jokipii, R. A. Mewaldt, The Transition from Singly to Multiply-Charged Anomalous Cosmic Rays, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 337-340 (2000).
- A.F. Barghouty, Robust Estimates of Hydrogen-Impact Ionization Cross Sections Over a Wide Energy Range, Physical Review, Vol A61, pp 052702 (2000).
- W. R. Binns, M. E. Wiedenbeck, E. R. Christian, A. C. Cummings, J. S. George, P. L. Hink, J. Klarmann, R. A. Leske, M. Lijowski, S. M. Niebur, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, N. E. Yanasak, Galactic Cosmic Ray Neon Isotopic Abundances Measured on ACE, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 414-417 (2000).

- P. R. Boberg, A. J. Tylka, Variation in Solar Energetic Particle Elemental Composition Observed by ACE and Wind, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 115-118 (2000).
- A. T. Bogdanov, B. Klecker, E. Mobius, M. Hilchenbach, L. M. Kistler, M. A. Popecki, D. Hovestadt, J. Weygand, Energy Dependence of ion Charge States in CME Related Solar Energetic Particle Events Observed with ACE/SEPICA and SOHO/STOF, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 143-146 (2000).
- E. C. Christian, W. R. Binns, C. M. S. Cohen, A. C. Cummings, J. S. George, P. L. Hink, J. Klarmann, R. A. Leske, M. Lijowski, R. A. Mewaldt, P. L. Slocum, E. C. Stone, T. T. von Roseninge, M. E. Wiedenbeck, N. Yanasak, Time Variations of the Modulation of Anomalous and Galactic Cosmic Rays, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 353-356 (2000).
- E. W. Cliver, Solar Flare Photons and Energetic Particles in Space, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 21-31 (2000).
- C. M. S. Cohen, R. A. Leske, E. R. Christian, A. C. Cummings, R. A. Mewaldt, P. L. Slocum, E. C. Stone, T. T. von Roseninge, M. E. Wiedenbeck, The Isotopic Composition of Solar Energetic Particles, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 55-62 (2000).
- A. J. Davis, R. A. Mewaldt, W. R. Binns, E. R. Christian, A. C. Cummings, J. S. George, P. L. Hink, R. A. Leske, T. T. von Roseninge, M. E. Wiedenbeck, N. E. Yanasak, On the Low Energy Decrease in Galactic Cosmic Ray Secondary/Primary Ratios, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 422-425 (2000).
- R. B. Decker, E. C. Roelof, S. M. Krimigis, Solar Energetic Particle Propagation in 1997-99: Observations from ACE, Ulysses, and Voyagers 1 and 2, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 161-164 (2000).
- J.R. Dwyer, G.M. Mason, M.I. Desai, J.E. Mazur, T.T. von Roseninge, The Spatial Structure of Ion Events Measured far Upstream of the Earth's Bow Shock by ACE/ULEIS and WIND/STEP, Geophysical Research Letters, Vol 27, Num 1, pp 65-68 (2000).
- L. A. Fisk, G. Gloeckler, T. H. Zurbuchen, N. A. Schwadron, Ubiquitous Statistical Acceleration in the Solar Wind, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 229-233 (2000).
- A. B. Galvin, E. Mobius, M. A. Popecki, L. M. Kistler, D. Morris, D. Heirtzler, D. Hovestadt, B. Klecker, A. T. Bogdanov, B. Thompson, Abundance Variations and Fractionation Effects in a Gradual SEP Event, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol

528, pp 127-130 (2000).

- J. S. George, M. E. Wiedenbeck, A. F. Barghouty, W. R. Binns, E. R. Christian, A. C. Cummings, P. L. Hink, J. Klarmann, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, N. E. Yanasak, Cosmic Ray Source Abundances and the Acceleration of Cosmic Rays, *Acceleration and Transport of Energetic Particles Observed in the Heliosphere*, AIP Conference Proceedings, Vol 528, pp 437-440 (2000).
- J. Giacalone, J. R. Jokipii, J. E. Mazur, Solar Energetic Particles vs Global Cosmic-Ray Diffusion, *Acceleration and Transport of Energetic Particles Observed in the Heliosphere*, AIP Conference Proceedings, Vol 528, pp 157-160 (2000).
- J. Giacalone, Particle Transport, Composition, and Acceleration in the Heliosphere, *Acceleration and Transport of Energetic Particles Observed in the Heliosphere*, AIP Conference Proceedings, Vol 528, pp 258-265 (2000).
- J. Giacalone, J. R. Jokipii, J. E. Mazur, Small-Scale Gradients and Large-Scale Diffusion of Charged Particles in the Heliospheric Magnetic Field, *Astrophysical Journal Letters*, Vol 532, pp L75-L78 (2000).
- J. Giacalone, D.C. Ellison, Three-dimensional numerical simulations of particle injection and acceleration at quasi-perpendicular shocks, *Journal of Geophysical Research*, Volume 105, Issue A6, p. 12541-12556 (2000).
- G. Gloeckler, L. A. Fisk, T. H. Zurbuchen, N. A. Schwadron, Sources, Injection and Acceleration of Heliospheric Ion Populations, *Acceleration and Transport of Energetic Particles Observed in the Heliosphere*, AIP Conference Proceedings, Vol 528, pp 221-228 (2000).
- G. Gloeckler, L.A. Fisk, J. Geiss, N.A. Schwadron, T.H. Zurbuchen, Elemental Composition of Inner Source Pickup Ions, *Journal of Geophysical Research*, Vol 105, Num A4, pp 7459-7463 (2000).
- J. T. Gosling, Electron Heating and Acceleration at Collisionless Shocks in the Solar Wind, *Acceleration and Transport of Energetic Particles Observed in the Heliosphere*, AIP Conference Proceedings, Vol 528, pp 207-214 (2000).
- D. K. Haggerty, E. C. Roelof, C. W. Smith, N. F. Ness, R. M. Skoug, R. L. Tokar, Two Distinct Plasma and Energetic Ion Distributions within the June 1998 Magnetic Cloud, *Acceleration and Transport of Energetic Particles Observed in the Heliosphere*, AIP Conference Proceedings, Vol 528, pp 266-269 (2000).
- D.K. Haggerty, E.C. Roelof, C.W. Smith, N.F. Ness, R.L. Tokar, R.M. Skoug, Interplanetary Magnetic Field Connection to the L1 Lagrangian Orbit During Upstream Energetic Ion Events, *Journal of Geophysical Research*, Vol 105, pp 25123-25132 (2000).
- J. C. Higdon, R. E. Lingenfelter, Cosmic Ray Path Length Distributions from Superbubble/Giant HII Regions, *Acceleration and Transport of Energetic Particles Observed in the Heliosphere*, AIP Conference Proceedings, Vol 528, pp 430-433 (2000).
- G. C. Ho, E. C. Roelof, G. M. Mason, R. E. Gold, S. M. Krimigis, J. R. Dwyer, Heavy Ions in 3HE Enhanced Solar Energetic Particle Events, *Acceleration and Transport of Energetic Particles Observed in the Heliosphere*, AIP Conference Proceedings,

Vol 528, pp 99-102 (2000).

- S. E. Hawkins III, E. C. Roelof, R. E. Gold, D. K. Haggerty, G. C. Ho, A Survey of 40-300 keV Electron Events with Beam-Like Anisotropies, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 95-98 (2000).
- J. R. Jokipii, Acceleration, Transport and Fractionation of Anomalous Cosmic Rays, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 309-316 (2000).
- Y. Kasaba, Terasawa, T., Tsubouchi, K., Mukai, T., Saito, Y., Matsumoto, H., Kojima, H., Steinberg, J., McComas, D., Skoug, R., Matsui, H., Hoshino, M., Magnetosheath electrons in anomalously low density solar wind observed by GEOTAIL , Geophysical Research Letters, Vol 27, Num 20, pp 3253-3256 (2000).
- B. Klecker, A. T. Bogdanov, M. Popecki, R. F. Wimmer-Schweingruber, E. Mobius, R. Schaerer, L. M. Kistler, A. B. Galvin, D. Heirtzler, D. Morris, D. Hovestadt, G. Gloeckler, Comparison of Ionic Charge States of Energetic Particles with Solar Wind Charge States in CME Related Events, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 135-138 (2000).
- L.J. Lanzerotti, MacLennan, C. G., Low-Energy Anomalous Cosmic Rays in the Ecliptic Plane: 1-5 AU, The Astrophysical Journal, Volume 534, Issue 1, pp. L109-L112 (2000)
- M.A. Lee, Acceleration of Energetic Particles on the Sun, in the Heliosphere, and in the Galaxy, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 3-18 (2000).
- R. A. Leske, R. A. Mewaldt, E. R. Christian, C. M. S. Cohen, A. C. Cummings, P. L. Slocum, E. C. Stone, T. T. von Rosenvinge, M. E. Wiedenbeck, Observations of Anomalous Cosmic Rays at 1 AU, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 293-300 (2000).
- P. C. Liewer, M. Velli, B.E. Goldstein, Hybrid Simulations of Preferential Heating of Heavy Ions in the Solar Wind, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 274-277 (2000).
- R. E. Lingenfelter, J. C. Higdon, R. Ramaty, Cosmic Ray Acceleration in Superbubbles and the Composition of Cosmic Rays, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 375-383 (2000).
- Y.E. Litveninko, Particle Acceleration in Reconnecting Current Sheets in Impulsive Electron-Rich Solar Flares, Solar Physics, Vol 194, Num 2, pp 327-343 (2000).
- Y.E. Litvinenko, Particle Acceleration at Sites of Magnetic Reconnection, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 39-46 (2000).
- Y.E. Litvinenko, I.J.D. Craig, Flare Energy Release by Flux Pile-up Magnetic Reconnection in a Turbulent Current Sheet, Astrophysical Journal, Vol 544, Num 2,

pp 1101-1107 (2000).

- C.G. MacLennan, L.J. Lanzerotti, L. A. Fisk, R.E. Gold, Charged Particle Composition in the Inner Heliosphere During the Rise to Maximum of Solar Cycle 23, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 169-172 (2000).
- D. Maia, M. Pick, S. E. Hawkins III, E. C. Roelof, A Coronal Origin of Particle Events Detected by EPAM: Multi-Instrument Observations, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 91-94 (2000).
- G. M. Mason, Composition and Energy Spectra of Ions Accelerated in Corotating Interaction Regions, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 234-241 (2000).
- G.M. Mason, J.R. Dwyer, J.E. Mazur, New Properties of  $^3\text{He}$ -rich Solar Flares Deduced from Low-Energy Particle Spectra, Astrophysical Journal Letters, Vol 545, Num 2, pp L157-L160 (2000).
- J.E. Mazur, G.M. Mason, J. R. Dwyer, J. Giacalone, J. R. Jokipii, E. C. Stone, The Mixing of Interplanetary Magnetic Field Lines: A Significant Transport Effect in Studies of the Energy Spectra of Impulsive Flares, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 47-54 (2000).
- J.E. Mazur, G.M. Mason, J.R. Dwyer, J. Giacalone, J.R. Jokipii, E.C. Stone, Interplanetary Magnetic Field Line Mixing Deduced from Impulsive Solar Flare Particles, Astrophysical Journal Letters, Vol 532, pp L79-L82 (2000).
- R. A. Mewaldt, C. M. S. Cohen, R. A. Leske, E. R. Christian, A. C. Cummings, P. L. Slocum, E. C. Stone, T. T. von Rosenvinge, M. E. Wiedenbeck, , Variable Fractionation of Solar Energetic Particles According to First Ionization Potential, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 123-126 (2000).
- E. Mobius, B. Klecker, M. A. Popecki, D. Morris, G. M. Mason, E. C. Stone, A. T. Bogdanov, J. R. Dwyer, A. B. Galvin, D. Heitzler, D. Hovestadt, L. M. Kistler, C. Siren, Survey of ionic Charge States of Solar Energetic Particle Events During the First Year of ACE, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 131-134 (2000).
- S. M. Niebur, W. R. Binns, E. R. Christian, A. C. Cummings, J. S. George, P. L. Hink, M. H. Israel, J. Klarmann, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, M. E. Wiedenbeck, N. E. Yanasak, Secondary Electron-Capture-Decay Isotopes and Implications for the Propagation of Galactic Cosmic Rays, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 407-410 (2000).
- C.H. Perry, M. Grande, T.H. Zurbuchen, S. Hefti, G. Gloeckler, J.F. Fennel, B. Wilken, T. Fritz, Use of Fe Charge State Changes as a Tracers for Solar Wind Entry to the Magnetosphere, Geophysical Research Letters, Vol 27, pp 2441 (2000).
- M.A. Popecki, E. Mobius, B. Klecker, A. B. Galvin, A.L. M. Kistler, A. T. Bogdanov, Ionic Charge State Measurements in Solar Energetic Particle Events, Acceleration

and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 63-70 (2000).

- M. A. Popecki, T. H. Zurbuchen, R. M. Skoug, C. W. Smith, A. B. Galvin, M. Lee, E. Mobius, A. T. Bogdanov, G. Gloeckler, S. Hefti, L. M. Kistler, B. Klecker, N. A. Schwadron, Simultaneous High Fe Charge State Measurements by Solar Energetic Particle and Solar Wind Instruments, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 139-142 (2000).
- W. K. M. Rice, G. P. Zank, Particle Acceleration at Coronal Mass Ejection Driven Shocks, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 153-156 (2000).
- W.K.M. Rice, G.P. Zank, J.D. Richardson, R.B. Decker, Ion injection and shock acceleration in the outer hemisphere, Geophysical Research Letters, Vol 27, Num 4, pp 509-512 (2000).
- W.K.M. Rice, G.P. Zank, J.A. le Roux, An injection mechanism for shock waves of arbitrary obliquity, Geophysical Research Letters, Vol 27, Num 23, pp 3793-3796 (2000).
- W.K.M. Rice, G.P. Zank, Shock propagation in the outer heliosphere. 3. Pickup ions, MHD and cosmic rays, Journal of Geophysical Research, Vol 105, pp 5157-5166 (2000).
- E. C. Roelof, High Latitude Observations of Corotating Interaction Regions: Remote Sensing Using Energetic Particles, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 242-249 (2000).
- T. T. von Rosenvinge, C. M. S. Cohen, E. R. Christian, A. C. Cummings, R. A. Leske, R. A. Mewaldt, P. L. Slocum, E. C. Stone, M. E. Wiedenbeck, The Solar Energetic Particle Event of 6 May 1998, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 111-114 (2000).
- J. A. le Roux, H. Fichtner, G. P. Zank, V. S. Ptuskin, A Self-consistent, Unified Model of Pickup Ion and Anomalous Cosmic Ray Transport, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 314-344 (2000).
- J.A. le Roux, H. Fichtner, G.P. Zank, V.S. Ptuskin, Self-consistent acceleration of multiply reflected pickup ions at a quasi-perpendicular solar wind termination shock: A fluid approach, Journal of Geophysical Research, Vol 105, Num A11, pp 12557-12578 (2000).
- C.T. Russell, Y.L. Wang, J. Roeder, R.L. Tokar, C.W. Smith, K.W. Ogilvie, A.J. Lazarus, R.P. Lepping, A. Szabo, H. Kawano, T. Mukai, S. Savin, Yu Yermolaev, X.Y. Zhou, B. Tsurutani, The Interplanetary Shock of September 24, 1998: Arrival at Earth, Journal of Geophysical Research, Vol 105, Num A11, pp 25143-25154 (2000).
- N.A. Schwadron, T.E. Cravens, Implications of Solar Wind Composition for Cometary X-rays, Astrophysical Journal, Vol 544, Num 1, pp 558-566 (2000).



- N.A. Schwadron, J. Geiss, On The Processing of Inner Source Hydrogen, *Journal of Geophysical Research*, Vol 105, Num A4, pp 7473 (2000).
- N.A. Schwadron, J. Geiss, L.A. Fisk, G. Gloeckler, T.H. Zurbuchen, R. von Steiger, Inner Source Distributions: Theoretical Interpretation, Implications, and Evidence for Inner Source Protons, *Journal of Geophysical Research*, Vol 105, Num A4, pp 7465-7472 (2000).
- R.S. Selesnick, Cummings, A. C., Leske, R. A., Mewaldt, R. A., Stone, E. C., Cummings, J. R., Solar cycle dependence of the geomagnetically trapped anomalous cosmic rays, *Geophysical Research Letters*, Volume 27, Issue 15, p. 2349-2352 (2000)
- R.M. Skoug, W.C. Feldman, S.P. Gary, J.T. Gosling, D.J. McComas, C.W. Smith, Solar Wind Electron Characteristics Inside and Outside Coronal Mass Ejections, *Journal of Geophysical Research*, Vol 105, Num A10, pp 23069-23084 (2000).
- R.M. Skoug, W.C. Feldman, J.T. Gosling, D.J. McComas, D.B. Reisenfeld, C.W. Smith, R.P. Lepping, A. Balogh, Radial Variation of Solar Wind Electrons Inside a Magnetic Cloud Observed at 1 and 5 AU, *Journal of Geophysical Research*, Vol 105, Num A12, pp 27269-27275 (2000).
- P. L. Slocum, M. E. Wiedenbeck, C. M. S. Cohen, E. R. Christian, A. C. Cummings, R. A. Leske, R. A. Mewaldt, E. C. Stone, T. T. von Roseninge, Measurements of Heavy Elements in 3He-rich SEP Events, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, *AIP Conference Proceedings*, Vol 528, pp 103-106 (2000).
- K. Szego, Glassmeier, K., Bingham, R., Bogdanov, A., Fischer, C., Haerendel, G., Brinca, A., Cravens, T., Dubinin, E., Sauer, K., Fisk, L.A., Gombosi, T., Schwadron, N.A., Isenberg, P., Lee, Martin; Mazelle, C., Möbius, E., Motschmann, U., Shapiro, V.D., Tsurutani, B., Zank, G., Physics of mass loaded plasmas, *Space Science Reviews*, Vol 94, pp 429 (2000).
- T. Terasawa, Kasaba, Y., Tsubouchi, K., Mukai, T., Saito, Y., Frank, L. A., Paterson, W. R., Ackerson, K., Matsumoto, H., Kojima, H., Matsui, H., Larson, D., Lin, R., Phan, T., Steinberg, J., McComas, D., Skoug, R., Fujimoto, M., Hoshino, M., Nishida, A., GEOTAIL observations of anomalously low density plasma in the magnetosheath, *Geophysical Research Letters*, Vol 27, Num 23, pp 3781-3784 (2000).
- D. J. Thomson, L. J. Lanzerotti, C. G. MacLennan, , Coherent Frequency Variations in Electron Fluxes at 1 and 5 AU in the Inner Heliosphere, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, *AIP Conference Proceedings*, Vol 528, pp 278-281 (2000).
- R.L. Tokar, S.P. Gary, J.T. Gosling, D.J. McComas, R.M. Skoug, C.W. Smith, N.F. Ness, D. Haggerty, Suprathermal Ions and MHD Turbulence Observed Upstream of an Interplanetary Shock by Advanced Composition Explorer, *Journal of Geophysical Research*, Vol 105, Num A4, pp 7521-7531 (2000).
- A. J. Tylka, P. R. Boberg, R. E. McGuire, C. K. Ng, D. V. Reames, Temporal Evolution in the Spectra of Gradual Solar Energetic Particle Events, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, *AIP Conference*

- Proceedings, Vol 528, pp 147-152 (2000).
- G.M. Webb, M. Pantazopoulou, G.P. Zank, Multiple Scattering and the BGK Boltzmann Equation, *Journal of Physics A: Mathematics and General*, Vol 33, pp 3137-3160 (2000).
- W. R. Webber, The Diffusion of Cosmic Rays in the Galaxy—A Monte Carlo Approach, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, *AIP Conference Proceedings*, Vol 528, pp 397-402 (2000).
- W. R. Webber, Reacceleration in a Monte Carlo Diffusion Model for the Propagation of Galactic Cosmic Rays, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, *AIP Conference Proceedings*, Vol 528, pp 411-413 (2000).
- M. E. Wiedenbeck, E. R. Christian, C. M. S. Cohen, E. R. Christian, A. C. Cummings, R. A. Leske, R. A. Mewaldt, P. L. Slocum, E. C. Stone, T. T. von Rosenvinge, Enhanced Abundances of  $^3\text{He}$  in Large Solar Energetic Particle Events, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, *AIP Conference Proceedings*, Vol 528, pp 107-110 (2000).
- M. E. Wiedenbeck, W. R. Binns, E. R. Christian, A. C. Cummings, J. S. George, P. L. Hink, J. Klarmann, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, N. E. Yanasak, Constraints on Cosmic-Ray Acceleration and Transport from Isotope Observations, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, *AIP Conference Proceedings*, Vol 528, pp 363-370 (2000).
- R. F. Wimmer-Schweingruber, P. Bochsler, Is There a Record of Interstellar Pick-up Ions in Lunar Soils?, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, *AIP Conference Proceedings*, Vol 528, pp 270-273 (2000).
- N. E. Yanasak, W. R. Binns, E. R. Christian, A. C. Cummings, A. J. Davis, J. S. George, P. L. Hink, J. Klarmann, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, T. T. von Rosenvinge, M. E. Wiedenbeck, Abundances of the Cosmic Ray Beta-Decay Secondaries and Implications for Cosmic Ray Transport, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, *AIP Conference Proceedings*, Vol 528, pp 403-406 (2000).
- G. P. Zank, W. K. M. Rice, J. A. le Roux, Y. Y. Lu, H. R. Muller, The Injection Problem for Anomalous Cosmic Rays, Acceleration and Transport of Energetic Particles Observed in the Heliosphere, *AIP Conference Proceedings*, Vol 528, pp 317-324 (2000).
- G.P. Zank, I.H. Cairns, Turbulence in the outer heliosphere: A stochastic wave growth model, *Astrophysical Journal*, Vol 541, pp 489 (2000).
- G. P. Zank, W. K. M. Rice, C.C. Wu, , Particle Acceleration at Coronal Mass Ejection Driven Shocks: A Theoretical Model, *Journal of Geophysical Research* , Vol 105, Num A11, pp 25,079-25,095 (2000).
- G.P. Zank, J.Y. Lu, W.K.M. Rice, G.M. Webb, The transport of energetic charged particles in a radial magnetic field. I. Large-angle scattering, *Journal of Plasma Physics*, Vol 64, pp 507-541 (2000).
- T. H. Zurbuchen, L.A. Fisk, N. A. Schwadron, G. Gloeckler, Observations of Non-Thermal Properties of Heavy Ions in the Solar Wind, Acceleration and Transport of

Energetic Particles Observed in the Heliosphere, AIP Conference Proceedings, Vol 528, pp 215-220 (2000).

T.H. Zurbuchen, S. Hefti, L.A. Fisk, G. Gloeckler, N. A. Schwadron, Magnetic structure of the slow solar wind: Constraints from composition data, *Journal of Geophysical Research*, Vol 105, pp 18327 (2000).

## 1999

A.F. Barghouty, R.A. Mewaldt, Charge States of Solar Energetic Iron: Non equilibrium Calculation with Shock-induced Acceleration, *Astrophysical Journal Letters*, Vol 520, Num 2, pp L127-L130 (1999).

C. M. S. Cohen, A. C. Cummings, R. A. Leske, R. A. Mewaldt, E. C. Stone, B. L. Dougherty, M. E. Wiedenbeck, E. R. Christian, T. T. von Roseninge, Inferred Charge States of High Energy Solar Particles from the Solar Isotope Spectrometer on ACE, *Geophysical Research Letters*, Vol 26, Num 2, pp 149 (1999).

C.M.S. Cohen, R. A. Mewaldt, R. A. Leske, A. C. Cummings, E. C. Stone, M. E. Wiedenbeck, E. R. Christian, T. T. von Roseninge, New Observations of Heavy-Ion-Rich Solar Particle Events from ACE, *Geophysical Research Letters*, Vol 26, Num 17, pp 2697 (1999).

J.R. Dwyer, G.M. Mason, J.E. Mazur, R.E. Gold, S.M. Krimigis, Isotopic Composition of Neon in Solar Energetic Particle Events Measured by ACE/ULEIS, *Geophysical Research Letters*, submitted (1999).

W.C. Feldman, R.M. Skoug, J.T. Gosling, D.J. McComas, R.L. Tokar, L.F. Burlaga, N.F. Ness, C.W. Smith, Shapes of Solar Wind Suprathermal Electron Velocity Distributions During the 4-5 Feb., 1998 Interplanetary Coronal Mass Ejection, *Geophysical Research Letters*, Vol 26, pp 2613-2616 (1999).

W.C. Feldman, R.M. Skoug, J.T. Gosling, D.J. McComas, R.L. Tokar, L.F. Burlaga, N.F. Ness, C.W. Smith, Observations of Suprathermal Electron Conics in an Interplanetary Coronal Mass Ejection, *Geophysical Research Letters*, Vol 26, pp 2613 (1999).

L.A. Fisk, An overview of the transport of galactic and anomalous cosmic rays in the heliosphere: Theory, *Advances in Space Research*, Vol 23, pp 415 (1999).

L.A. Fisk, T.H. Zurbuchen, N.A. Schwadron, On the Coronal Magnetic Field: Consequences of large-scale motions, *Astrophysical Journal*, Vol 521, pp 868 (1999).

L.A. Fisk, N.A. Schwadron, T.H. Zurbuchen, Acceleration of the Fast Solar Wind by the Emergence of New Magnetic Flux, *Journal of Geophysical Research*, Vol 104, pp 19765 (1999).

L.A. Fisk, T.H. Zurbuchen, N. A. Schwadron, Coronal hole boundaries and their interactions with adjacent regions, *Space Science Reviews*, Vol 87, pp 43 (1999).

L.A. Fisk, J.R. Jokipii, Mechanisms for latitude transport of energetic particles in the heliosphere, *Space Science Reviews*, Vol 89, pp 115 (1999).

G. Gloeckler, L.A. Fisk, S. Hefti, N. Schwadron, T.H. Zurbuchen, F.M. Ipavich, J. Geiss, P. Bochsler, R.F. Wimmer-Schweingruber, Unusual Composition of the Solar Wind

in the May 2-3 1998 CME Observed with SWICS on ACE, *Geophysical Research Letters*, Vol 26, Num 2, pp 157 (1999).

- G. Gloeckler, Observation of Injection and Pre-acceleration Processes in the Slow Solar Wind, *Space Science Reviews*, Vol 89, Num 1, pp 91-104 (1999).
- D.K. Haggerty, M.I. Desai, G.M. Mason, J.P. Dwyer, R.E. Gold, S.M. Krimigis, J.E. Mazur, T.T. von Roseninge, Simultaneous Observations of Energetic (~150 keV) Protons Upstream of the Earth's Bow Shock at ACE and WIND, *Geophysical Research Letters*, Vol 26, Num 2, pp 169 (1999).
- S. Hefti, T. Zurbuchen, L.A. Fisk, G. Gloeckler, D. Larson, R.P. Lin, The Transition from Fast to Slow Wind: Charge State Composition and Electron Observations, *Solar Wind 9*, AIP Conference Proceedings, Vol 471, pp 495 (1999).
- R. A. Leske, C. M. S. Cohen, A. C. Cummings, R. A. Mewaldt, E. C. Stone, B. L. Dougherty, M. E. Wiedenbeck, E. R. Christian, T. T. von Roseninge, Unusual Isotopic Composition of Solar Energetic Particles Observed in the November 6, 1997 Event, *Geophysical Research Letters*, Vol 26, Num 2, pp 153 (1999).
- R. A. Leske, R. A. Mewaldt, C.M.S. Cohen, A. C. Cummings, E. C. Stone, M. E. Wiedenbeck, E. R. Christian, T. T. von Roseninge, Event-to Event Variations in the Isotopic Composition of Neon in Solar Energetic Particle Events, *Geophysical Research Letters*, Vol 26, Num 17, pp 2693 (1999).
- G.M. Mason, J.E. Mazur, J.R. Dwyer, <sup>3</sup>He Enhancements in Large Solar Energetic Particle Events, *Astrophysical Journal Letters*, Vol 525, pp L133-L136 (1999).
- G. M. Mason, C. M. S. Cohen, A. C. Cummings, J. R. Dwyer, R. E. Gold, S. M. Krimigis, R. A. Leske, J. E. Mazur, R. A. Mewaldt, E. Mobius, M. Popecki, E. C. Stone, T. T. von Roseninge, M. E. Wiedenbeck, Particle acceleration and sources in the November 1997 solar energetic particle events, *Geophysical Research Letters*, Vol 26, Num 2, pp 141-144 (1999).
- E. Mobius, M.A. Popecki, B. Klecker, L.M. Kistler, A. Bogdanov, A.B. Galvin, D. Heirtzler, D. Hovestadt, E.J. Lund, D. Morris, W.K.H. Smidt, Energy Dependence of the Ionic Charge State Distribution during the 1997 Solar Energetic Particle Event, *Geophysical Research Letters*, Vol 26, Num 2, pp 145 - 148 (1999).
- H. Moraal, C.D. Steenberg, G.P. Zank, Simulations of galactic and anomalous cosmic ray transport in the heliosphere, *Advances in Space Research*, Vol 23, pp 425 (1999).
- W.K.M. Rice, G.P. Zank, Shock propagation in the outer heliosphere. 2. Pickup ions and MHD, *Journal of Geophysical Research*, Vol 104, pp 12563-12575 (1999).
- J.A. le Roux, G.P. Zank, V.S. Ptuskin, An evaluation of perpendicular diffusion models regarding cosmic ray modulation on the basis of a hydromagnetic description for solar wind turbulence, *Journal of Geophysical Research*, Vol 104, pp 24845 (1999).
- N.A. Schwadron, L.A. Fisk, T.H. Zurbuchen, Elemental Fractionation in the Slow Solar Wind, *Astrophysical Journal*, Vol 521, pp 859 (1999).
- R.M. Skoug, S.J. Bame, W.C. Feldman, J.T. Gosling, D.J. McComas, J.T. Steinberg, R.L. Tokar, P. Riley, L.F. Burlaga, N.F. Ness, C. Smith, A Prolonged He<sup>+</sup> Enhancement Within a Coronal mass Ejection in the Solar Wind, *Geophysical Research Letters*, Vol 26, Num 2, pp 161 (1999).

- C.W. Smith, Solar-Cycle, Radial and Latitudinal Variations of Magnetic Helicity: IMF Observations, Magnetic Helicity in Space and Laboratory Plasmas, AGU Geophysical Monograph Series, Vol 111, pp 239-245 (1999).
- C.H. Tsao, R. Silberberg, A.F. Barghouty, Nuclear Cross Sections and the Composition, Transport, and Origin of Galactic Cosmic Rays, in Topics in Cosmic-Ray Astrophysics, Nova Science Publishers, New York (1999).
- M.E. Wiedenbeck, W.R. Binns, E.R. Christian, A.C. Cummings, B.L. Dougherty, P.L. Hink, J. Klarmann, R.A. Leske, M. Lijowski, R.A. Mewaldt, E.C. Stone, M.R. Thayer, T.T. von Roseninge, N.E. Yanasak, Constraints on the Time Delay Between Nucleosynthesis and Cosmic Ray Acceleration from Observations of  $^{59}\text{Ni}$  and  $^{59}\text{Co}$ , Astrophysical Journal Letters, Vol 523, pp L61-L64 (1999).
- R.F. Wimmer-Schweingruber, P. Bochsler, G. Gloeckler, F.M. Ipavich, J. Geiss, R. Kallenbach, L.A. Fisk, S. Hefti, T.H. Zurbuchen, On the Bulk Isotopic Composition of Magnesium and Silicon During the May 1998 CME: ACE/SWIMS, Geophysical Research Letters, Vol 26, Num 2, pp 165 (1999).
- R.F. Wimmer-Schweingruber, P. Bochsler, G. Gloeckler, F.M. Ipavich, J. Geiss, R. Kallenbach, L.A. Fisk, S. Hefti, T. Zurbuchen, Isotopes in the Solar Wind: New Results from ACE, SOHO and WIND, Solar Wind 9, AIP Conference Proceedings, Vol 471, pp 174-152 (1999).
- T.H. Zurbuchen, L.A. Fisk, S. Hefti, N.A. Schwadron, The New Heliospheric Magnetic Field: Observational Implications, Solar Wind 9, AIP Conference Proceedings, Vol 471, pp 87 (1999).
- T.H. Zurbuchen, S. Hefti, L.A. Fisk, G. Gloeckler, R. von Steiger, The Transition Between Fast and Slow Solar Wind from Composition Data, Space Science Reviews, Vol 87, pp 353 (1999).

## 1998

- M.C. Chiu, U.I. Von-Mehlem, C.E. Willey, T.M. Betenbaugh, J.J. Maynard, J.A. Krein, R.F. Conde, W.T. Gray, J.W. Hunt Jr, L.E. Mosher, M.G. McCullough, P.E. Panneton, J.P. Staiger, E.H. Rodberg, ACE Spacecraft, Space Science Reviews, Vol 86, pp 255 (1998).
- L.A. Fisk, N. A. Schwadron, T. H. Zurbuchen, On the Slow Solar Wind, Space Science Reviews, Vol 86, pp 51 (1998).
- L.A. Fisk, K.-P. Wenzel, et al., Global processes that determine cosmic ray modulation: Report of Working Group 1, Space Science Reviews, Vol 83, pp 179 (1998).
- T.L. Garrard, J.S. Hammond, A.J. Davis, S.R. Sears, The ACE Science Center, Space Science Reviews, Vol 86, pp 649 (1998).
- G. Gloeckler, P. Bedini, P. Bochsler, L.A. Fisk, J. Geiss, F.M. Ipavich, J. Cani, J. Fischer, R. Kallenbach, J. Miller, O. Tums, R. Winner, Investigation of the Composition of Solar and Interstellar Matter Using Solar Wind and Pickup Ion Measurements with SWICS and SWIMS on the ACE Spacecraft, Space Science Reviews, Vol 86, pp 495 (1998).
- R.E. Gold, S.M. Krimigis, S.E. Hawkins III, D.K. Haggerty, D.A. Lohr, E. Fiore, T.P.

Armstrong, G. Holland, L.J. Lanzerotti, Electron, Proton and Alpha Monitor on the Advanced Composition Explorer Spacecraft, *Space Science Reviews*, Vol 86, pp 539 (1998).

- J.C. Higdon, R.E. Lingenfelter, R. Ramaty, Cosmic Ray Acceleration from Supernova Ejecta in Superbubbles, *Astrophysical Journal letters*, Vol 509, pp L33 (1998).
- G.M. Mason, R.E. Gold, S.M. Krimigis, J.E. Mazur, G.B. Andres, K.A. Daley, J.R. Dwyer, K.F. Heurman, T.L. James, M.J. Kennedy, T. LeFevre, H. Malcolm, B. Tossman, P.H. Walpole, The Ultra Low Energy Isotope Spectrometer (ULEIS) for the ACE Spacecraft, *Space Science Reviews*, Vol 86, pp 409-448 (1998).
- D.J. McComas, S.J. Barne, P.L. Barker, D.M. Delapp, W.C. Feldman, J.T. Gosling, E. Santiago, R.M. Skoug, R.L. Tokar, P. Riley, J.L. Phillips, J.W. Griffee, An unusual coronal mass ejection: First Solar Wind Electron, Proton, Alpha Monitor (SWEPAM) results from the Advanced Composition Explorer, *Geophysical Research Letters*, Vol 25, Num 23, pp 4289 (1998).
- D.J. McComas, S.J. Blame, P. Barker, W.C. Feldman, J.L. Phillips, P. Riley, J.W. Griffee, Solar Wind Electron Proton Alpha Monitor (SWEPAM) for the Advanced Composition Explorer, *Space Science Reviews*, Vol 86, pp 563-612 (1998).
- E. Mobius, D. Hovestadt, B. Klecker, L.M. Kistler, M.A. Popecki, K.N. Crocker, F. Gliem, M. Granoff, S. Turco, A. Anderson, H. Arbinger, S. Battell, J. Cravens, P. Demain, J. Distelbrink, I. Dors, P. Dunphy, S. Ellis, J. Gaidos, J. Googins, A. Harasim, R. Hayes, G. Humphrey, H. Kastle, E. Kunneth, L. Lavoisier, E.J. Lund, R. Miller, G. Murphy, K. Pfeiffermann, K.U. Reiche, E. Sartori, J. Schimpfle, E. Seidenschwang, M. Shappirio, K. Stockner, S.C. Taylor, P. Vachon, M. Vosbury, Wiewesiek, V. Ye, The Solar Energetic Particle Ionic Charge Analyzer (SEPICA) and the Data Processing Unit (S3DPU) for SWICS, SWIMS, and SEPICA, *Space Science Reviews*, Vol 86, pp 447 (1998).
- N.A. Schwadron, , A model of pickup ion transport in the heliosphere in the limit of uniform hemispheric distributions, *Journal of Geophysical Research*, Vol 103, pp 20643 (1998).
- J.A. Simpson, Challenges for the Experiments on the Advanced Composition Explorer, *Space Science Reviews*, Vol 86, pp 23 (1998).
- C.W. Smith, M.H. Acuna, L.F. Burlaga, J. L'Heureux, N.F. Ness, J. Scheifele, The ACE Magnetic Fields Experiment, *Space Science Reviews*, Vol 86, pp 611 (1998).
- E.C. Stone, C.M.S. Cohen, W.R. Cook, A.C. Cummings, B.W. Gauld, B. Kecman, R.A. Leske, R.A. Mewaldt, M.R. Thayer, B.L. Dougherty, R.L. Grumm, B.D. Milliken, R.G. Radocinski, M.E. Wiedenbeck, E.R. Christian, S. Shuman, H. Trexel, T.T. von Roseninge, W.R. Binns, P. Dowkontt, J. Epstein, P.L. Hink, J. Klarmann, M. Lijowski, M.A. Olevitch, The Cosmic Ray Isotope Spectrometer for the Advanced Composition Explorer, *Space Science Reviews*, Vol 86, pp 283 (1998).
- E.C. Stone, C.M.S. Cohen, W.R. Cook, A.C. Cummings, B.W. Gauld, B. Kecman, R.A. Leske, R.A. Mewaldt, M.R. Thayer, B.L. Dougherty, R.L. Grumm, B.D. Milliken, R.G. Radocinski, M.E. Wiedenbeck, E.R. Christian, S. Shuman, T.T. von Roseninge, The Solar Isotope Spectrometer for the Advanced Composition Explorer, *Space Science Reviews*, Vol 86, pp 355 (1998).

- E.C. Stone, A.M. Frandsen, R.A. Mewaldt, E.R. Christian, D. Margolies, J.F. Ormes, F. Snow, The Advanced Composition Explorer, Space Science Reviews, Vol 86, pp 1 (1998).
- T.H. Zurbuchen, L.A. Fisk, G. Gloeckler, N. A. Schwadron, Element and Isotopic Fractionation in Closed Magnetic Structures, Space Science Reviews, Vol 85, pp 397 (1998).
- R.D. Zwickl, K. Doggett, S. Sahm, B. Barrett, R. Grubb, T. Detman, V. Raben, C.W. Smith, P. Riley, R. Gold, R.A. Mewaldt, T. Maruyama, The NOAA Real-Time Solar-Wind (RTSW) System Using ACE Data , Space Science Reviews, Vol 86, pp 633 (1998).

### **Pre-1998**

- E.C. Stone, L.F. Burlaga, A.C. Cummings, W.C. Feldman, W.E. Frain, J. Geiss, G. Gloeckler, R. Gold, D. Hovestadt, S.M. Krimigis, G.M. Mason, D. McComas, R.A. Mewaldt, J.A. Simpson, T.T. Rosenvinge, M.E. Wiedenbeck, The Advanced Composition Explorer, Particle Astrophysics; AIP Conference Proceedings, Vol 203, pp 48 (1989).