

- diffusion in an electrostatic impulse model for stormtime ring current formation, *Geophys. Res. Lett.*, 19, 621-624, 1992.
- Chen, M. W., M. Schulz, L. R. Lyons, and D. J. Gorney, Stormtime transport of ring current and radiation belt ions, *J. Geophys. Res.*, 98, 3835-3849, 1993.
- Cornwall, J. M., Diffusion processes influenced by conjugate-point wave phenomena, *Radio Sci.*, 3, 740-744, 1968.
- Cornwall, J. M., Radial diffusion of ionized helium and protons: A probe for magnetospheric dynamics, *J. Geophys. Res.*, 77, 1756-1770, 1972.
- de la Vega, M., and S. Duhau, A comparison between the experimentally and theoretically determined equatorial electrojet electric field, *J. Geophys. Res.*, 94, 12,061-12,067, 1989.
- Earle, G. D., and M. C. Kelley, Spectral studies of the sources of ionospheric electric fields, *J. Geophys. Res.*, 92, 213-224, 1987.
- Fälthammer, C.-G., Effects of time-dependent electric fields on geomagnetically trapped radiation, *J. Geophys. Res.*, 70, 2503-2516, 1965.
- Fälthammer, C.-G., On the transport of trapped particles in the outer magnetosphere, *J. Geophys. Res.*, 71, 1487-1491, 1966.
- Farrugia, C. J., D. T. Young, J. Geiss, and H. Balsiger, The composition, temperature, and density structure of cold ions in the quiet terrestrial plasmasphere: GEOS 1 results, *J. Geophys. Res.*, 94, 11,865-11,891, 1989.
- Fejer, B. G., Equatorial ionospheric electric fields associated with magnetospheric disturbances, in *Solar Wind-Magnetosphere Coupling*, edited by Y. Kamide and J. A. Slavin, pp. 519-545. Terra Scientific, Tokyo, 1986.
- Fejer, B. G., et al., Low- and mid-latitude ionospheric electric fields during the January 1984 GISMOS campaign, *J. Geophys. Res.*, 95, 2367-2377, 1990a.
- Fejer, B. G., R. W. Spiro, R. A. Wolf, and J. C. Foster, Latitudinal variation of perturbation electric fields during magnetically disturbed periods: 1986 SUNDIAL observations and model results, *Ann. Geophys.*, 8, 441-454, 1990b.
- Fesen, C. G., G. Crowley, and R. G. Roble, Ionospheric effects at low latitudes during the March 22, 1979, geomagnetic storm, *J. Geophys. Res.*, 94, 5405-5417, 1989.
- Gloeckler, G., and D. C. Hamilton, AMPTE ion composition results, *Phys. Scr.*, T18, 73-84, 1987.
- Gloeckler, G., et al., The charge-energy-mass (CHEM) spectrometer for 0.3-300 keV/e ions on the AMPTE/CCE, *IEEE Trans. Geosci. Remote Sens.*, 23, 234-240, 1985.
- Gonzales, C. A., M. C. Kelley, R. A. Behnke, J. F. Vickrey, R. Wand, and J. Holt, On the latitudinal variations of the ionospheric electric field during magnetospheric disturbances, *J. Geophys. Res.*, 88, 9135-9144, 1983.
- Hanuise, C., C. Mazaudier, P. Vila, M. Blanc, and M. Crochet, Global dynamo simulation of ionospheric currents and their connection with the equatorial electrojet and counter electrojet: a case study, *J. Geophys. Res.*, 88, 253-270, 1983.
- Harrold, B. G., J. C. Samson, J. M. Ruohoniemi, and R. A. Greenwald, Observations of cavity modes in the magnetosphere, *Eos Trans. AGU*, 72(17), Spring meeting suppl., 254, 1991.
- Holzworth, R. H., and F. S. Mozer, Direct evaluation of the radial diffusion coefficient near  $L=6$  due to electric field fluctuations, *J. Geophys. Res.*, 84, 2559-2566, 1979.
- Jordan, C. E., J. N. Bass, M. S. Gussenhoven, H. J. Singer, and R. V. Hilmer, Comparison of magnetospheric magnetic field models with CRRES observations during the August 26, 1990, storm, *J. Geophys. Res.*, 97, 16,907-16,920, 1992.
- Junginger, H., G. Geiger, G. Haerendel, F. Melzner, E. Amata, and B. Higel, A statistical study of dayside magnetospheric electric field fluctuations with periods between 150 and 600 s, *J. Geophys. Res.*, 89, 5495-5505, 1984.
- field between  $L=4$  and 10, *J. Geophys. Res.*, 86, 863-867, 1981.
- Kivelson, M. G., and D. J. Southwood, Approximations for study of drift boundaries in the magnetosphere, *J. Geophys. Res.*, 80, 3528-3534, 1975.
- Lanzerotti, L. J., and A. Wolfe, Particle diffusion in the magnetosphere: Comparison of estimates from measurements of magnetic and electric field fluctuations, *J. Geophys. Res.*, 85, 2346-2348, 1980.
- MacLennan, C. G., L. J. Lanzerotti, L. V. Medford, and J. S. Krause, Studies of  $S_q$  using parallel California-to-Hawaii cables, *Eos Trans. AGU*, 72(17), Spring meeting suppl., 214, 1991.
- Matsushita, S., Interactions between the ionosphere and the magnetosphere for  $S_q$  and  $L$  variations, *Radio Sci.*, 6, 279-288, 1971.
- Mauk, B. H., and C. I. Meng, Characterization of geostationary particle signatures based on the "injection boundary" model, *J. Geophys. Res.*, 88, 3055-3071, 1983.
- Maynard, N. C., and A. J. Chen, Isolated cold plasma regions: Observations and their relation to possible production mechanisms, *J. Geophys. Res.*, 80, 1009, 1975.
- Maynard, N. C., T. L. Aggson, and J. P. Heppner, The plasmaspheric electric field as measured by ISEE 1, *J. Geophys. Res.*, 88, 3983-3990, 1983.
- Maynard, N. C., T. L. Aggson, F. A. Herrero, and M. C. Liebrecht, Average low-latitude meridional electric fields from de 2 during the solar maximum, *J. Geophys. Res.*, 93, 4021-4037, 1988.
- Mozer, F. S., Electric field mapping in the ionosphere at the equatorial plane, *Planet. Space Sci.*, 18, 259-263, 1970.
- Mozer, F. S., Power spectra of the magnetospheric electric field, *J. Geophys. Res.*, 76, 3651-3667, 1971.
- Mozer, F. S., Electric fields and plasma convection in the plasmasphere, *Rev. Geophys. Space Phys.*, 11, 755-765, 1973.
- Nakada, M. P., and G. D. Mead, Diffusion of protons in the outer radiation belt, *J. Geophys. Res.*, 70, 4777-4791, 1965.
- Olson, W. P., K. A. Pfitzer, and G. J. Mroz, Modeling the magnetospheric magnetic field, in *Quantitative Modeling of Magnetospheric Processes*, *Geophys. Monogr. Ser.*, edited by W. P. Olson, vol. 21, pp. 77-85. AGU, Washington, D. C., 1979.
- Parker, E. N., Geomagnetic fluctuations and the form of the outer zone of the Van Allen radiation belt, *J. Geophys. Res.*, 65, 3131-3130, 1960.
- Rash, J., H. Hansen, and M. Scourfield, Electric field sources in the quiet plasmasphere from whistler observations, *J. Atmos. Terrest. Phys.*, 48, 399-414, 1986.
- Richmond, A. D., et al., An empirical model of quiet-day ionospheric electric fields at middle and low latitudes, *J. Geophys. Res.*, 85, 4658-4664, 1980.
- Richmond, A. D., E. C. Ridley, and R. G. Roble, A three-dimensional sphere/ionosphere general circulation model with coupled electrodynamics, *Geophys. Res. Lett.*, 19, 601-604, 1992.
- Riley, P., and R. A. Wolf, Comparison of diffusion and particle drift descriptions of radial transport in the Earth's inner magnetosphere, *J. Geophys. Res.*, 97, 16,865-16,876, 1992.
- Schulz, M., and L. J. Lanzerotti, *Particle Diffusion in the Radiation Belts*, Springer-Verlag, New York, 1974.
- Senior, C., and M. Blanc, On the control of magnetospheric convection by the spatial distribution of ionospheric conductivity, *J. Geophys. Res.*, 89, 261-284, 1984.
- Sheldon, R. B., Ion transport and loss in the quiet terrestrial radiation current, Ph.D. thesis, Univ. of Md, College Park, 1990.
- Sheldon, R. B., Particle tracing in the magnetosphere: New algorithms and results, *Geophys. Res. Lett.*, 20(9), 767-770, 1993.
- Sheldon, R. B., and D. C. Hamilton, Ion transport and loss