

References

- Abada-Simon, M., Étude de Spectrographes Acousto-Optiques pour l'observation des étoiles à éruptions, Rapport de stage de DEA "Astronomie et Techniques Spatiales", Observatoire de Paris-Meudon/Université P. & M. Curie, Paris VI, 1990.
- Abada-Simon, M., Comparison of the observational data on flare stars, solar and planetary radio emissions, *Planet. Space Sci.*, **44**, 501–507, 1996.
- Acuña, M. H., and N. F. Ness, Results from the GSFC fluxgate magnetometer on Pioneer 11, in *Jupiter*, edited by T. Gehrels, University of Arizona Press, 830, 1976a.
- Acuña, M. H., and N. F. Ness, The main magnetic field of Jupiter, *J. Geophys. Res.*, **81**, 2917–2922, 1976b.
- Acuña, M. H., F. M. Neubauer, and N. F. Ness, Standing Alfvén wave current system at Io: Voyager 1 observations, *J. Geophys. Res.*, **86**, 8513–8522, 1981.
- Acuña, M. H., K. W. Ogilvie, D. N. Baker, S. A. Curtis, D. H. Fairfield, and W. H. Mish, The Global Geospace Science program and its investigations, *Space Sci. Rev.*, **71**, 5–21, 1995.
- Aleksic, Z., Computation in inhomogeneous cellular automata, in *Complex systems: from biology to computation*, edited by D. Green and T. Bossomaier, IOS Press, Amsterdam, 1993.
- Alexander, J. K., T. D. Carr, J. R. Thieman, J. J. Schauble, and A. C. Riddle, Synoptic observations of Jupiter's radio emissions: Average statistical properties observed by Voyager, *J. Geophys. Res.*, **86**, 8529, 1981.
- Alexander, J. K., and M. D. Desch, Voyager observations of Jovian millisecond radio bursts, *J. Geophys. Res.*, **89**, 2689–2697, 1984.
- Alfvén, H., Collision between a non-magnetized gas and a magnetized plasma, *Rev. Mod. Phys.*, **32**, 710, 1960.
- Ansher, J. A., W. S. Kurth, D. A. Gurnett, and C. K. Goertz, High Resolution measurements of density structures in the Jovian plasma sheet, *Geophys. Res. Lett.*, **19**, 2281–2284, 1992.
- Arkhipov, A. V., Refraction of Jovian decametric radio emission. I. Distortion of the S-radiation pattern, *Kinematika i Fizika Nebesnyh Tel*, **5**(5), 68–74, 1989 (in Russian).
- Arkhipov, A. V., Refraction of Jovian decametric radio emission. II. Distortion of the L-radiation pattern, *Kinematika i Fizika Nebesnyh Tel*, **7**(5), 11–19, 1991 (in Russian).
- Aschwanden, M. J., Theory of radio pulsations in coronal loops, *Solar Phys.*, **111**, 113, 1987.
- Aschwanden, M. J., and R. A. Treumann, Coronal and interplanetary particle beams, Lecture Notes in Physics (LNP) Vol.483, 108-134, 1997.

- Aubier, M. G., W. Calvert, and F. Genova, Source localization of Jupiter's Io dependent radio emissions, in *Planetary Radio Emissions II*, edited by H. O. Rucker, S. J. Bauer, and B. M. Pedersen, Austrian Academy of Sciences Press, Vienna, 113–126, 1988.
- Auraß, H., Radio observations of coronal and interplanetary type II bursts, *Ann. Geophys.*, **10**, 359, 1992.
- Axford, W. I., Viscous interaction between the solar wind and the Earth's magnetosphere, *Planet. Space Sci.*, **12**, 45, 1964.
- Azrilyant, P. A., and M. G. Belkina, Chislennyye Rezultaty Teorii Difrakcii Radiovoln Vokrug Zemnoi Poverhnosti, *Sovietskoje Radio*, 10–14, Moscow, 1957 (in Russian).
- Baars, J. W. M., R. Genzel, I. I. K. Pauliny-Toth, and A. Witzel, The absolute spectrum of Cas A; An accurate flux density scale and a set of secondary calibrators, *Astron. Astrophys.*, **61**, 99–106, 1977.
- Bagenal, F., Alfvén wave propagation in the Io plasma torus, *J. Geophys. Res.*, **88**, 3013–3025, 1983.
- Bagenal, F., Empirical model of the Io plasma torus: Voyager measurements, *J. Geophys. Res.*, **99**, 11043–11062, 1994.
- Bagenal, F., and J. D. Sullivan, Direct plasma measurements in the Io torus and inner magnetosphere of Jupiter, *J. Geophys. Res.*, **86**, 8447–8466, 1981.
- Bagenal, F., F. Crary, I. F. Stewart, M. Taylor, D. Gurnett, W. Kurth, L. A. Frank, and W. R. Paterson, Comparison of Io torus plasma densities measured by Galileo plasma wave subsystem with previous in situ remote measurements, *Geophys. Res. Lett.*, **24**, 2111, 1997.
- Bahnsen, A., B. M. Pedersen, M. Jespersen, E. Ungstrup, L. Eliasson, J. S. Murphree, D. Elphinstone, L. Blomberg, G. Holmgren, and L. J. Zanetti, Viking observations at the source of the AKR, *J. Geophys. Res.*, **94**, 6643, 1989.
- Baker, D. N., Statistical analysis in the study of solar wind-magnetosphere coupling, in *Solar Wind-Magnetosphere Coupling*, edited by Y. Kamide and J. A. Slavin, Reidel, Dordrecht, 17, 1986.
- Baliunas, S., G. W. Henry, R. A. Donahue, F. C. Fekel, and W. H. Soon, Properties of sun-like stars with planets. II. ρ Cnc, τ Boo and v And, *Astrophys. J. Lett.*, **474**, L119, 1997.
- Bame, S. J., B. L. Barraclough, W. C. Feldman, G. R. Gislser, J. T. Gosling, D. J. McComas, J. L. Phillips, M. F. Thomsen, B. E. Goldstein, and M. Neugebauer, Jupiter's magnetosphere: plasma description from the Ulysses flyby, *Science*, **257**, 1539, 1992.
- Baranov, V. B., and Yu. G. Malama, Model of the solar wind interaction with the local interstellar medium: Numerical solution of self-consistent problem, *J. Geophys. Res.*, **98**, 15157, 1993.

- Baranov, V. B., and Yu. G. Malama, Axisymmetric self-consistent model of the solar wind interaction with the LISM: Basic results and possible ways of development, *Space Sci. Rev.*, **78**, 305, 1996.
- Barbosa, D. D., Fermi-Compton scattering due to magnetopause surface fluctuations in Jupiter's magnetospheric cavity, *Astrophys. J.*, **243**, 1076, 1981.
- Barbosa, D. D., D. A. Gurnett, W. S. Kurth, and F. L. Scarf, Structure and properties of Jupiter's magnetoplasma disc, *Geophys. Res. Lett.*, **6**, 785, 1979.
- Bargatze, L. F., D. N. Baker, R. L. McPherron, and E. W. Hones Jr., Magnetospheric input response for many levels of geomagnetic activity, *J. Geophys. Res.*, **90**, 6387, 1985.
- Barrow, C. H., Latitudinal beaming and local time effects in the decametre-wave radiation from Jupiter observed at the Earth and from Voyager, *Astron. Astrophys.*, **101**, 142–149, 1981.
- Barrow, C. H., M. D. Desch, and F. Genova, Solar wind control of Jupiter's decametric radio emission, *Astron. Astrophys.*, **165**, 244, 1986.
- Barrow, C. H., Y. Leblanc, and M. D. Desch, The solar wind control of Jupiter's broadband kilometric radio emission, *Astron. Astrophys.*, **192**, 354, 1988.
- Barrow, C. H., and A. Lecacheux, Problems concerning the radio emission from Jupiter observed by Ulysses after encounter, *Astron. Astrophys.*, **301**, 903, 1995.
- Belcher, J. W., C. K. Goertz, J. D. Sullivan, and M. H. Acuña, Plasma observations of the Alfvén wave generated by Io, *J. Geophys. Res.*, **86**, 8508–8512, 1981.
- Benson, R. F., and S. I. Akasofu, Auroral kilometric radiation/aurora correlation, *Radio Sci.*, **19**, 527, 1984.
- Benson, R. F., M. D. Desch, R. D. Hunsucker, and G. J. Romick, Ground-level detection of low- and medium-frequency auroral radio emissions, *J. Geophys. Res.*, **93**, 277, 1988a.
- Benson, R. F., M. M. Mellott, R. L. Huff, and D. A. Gurnett, Ordinary mode auroral kilometric radiation fine structure observed by DE-1, *J. Geophys. Res.*, **93**, 7515, 1988b.
- Benson, R. F., and M. D. Desch, Wideband noise observed at ground level in the auroral region, *Radio Sci.*, **26**, 943, 1991.
- Benz, A. O., Radio spikes and the fragmentation of flare energy release, *Solar Phys.*, **96**, 357, 1985.
- Benz, A. O., and J. Kuijpers, Type IV dm bursts: onset and sudden reductions, *Solar Phys.*, **46**, 275, 1976.
- Benz, A. O., P. Zlobec, and M. Taeggi, Fine structure near the starting frequency of solar type III radio bursts, *Astron. and Astrophys.*, **109**, 1982.

- Benz, A. O., and G. Thejappa, Radio emission of coronal shock waves, *Astron. Astrophys.*, **202**, 267, 1988.
- Benz, A. O., A. Magun, W. Stehling, and H. Su, Electron beams in the low corona, *Solar Phys.*, **141**, 335, 1992.
- Berge, G. L., The position and Stokes parameters in the integrated 21-centimeter radio emission of Jupiter and their variation with epoch and central meridian longitude, *Astrophys. J.*, **191**, 775–784, 1974.
- Berge, G. L., and S. Gulkis, Earth-based radio observations of Jupiter: Millimeter to meter wavelengths, in *Jupiter*, edited by T. Gehrels, Univ. Arizona Press, Tucson, 621–692, 1976.
- Berman, R. H., D. J. Tetreault, and T. H. Dupree, Simulation of phase space hole growth and development of intermittent plasma turbulence, *Phys. Fluids*, **28**, 155, 1985.
- Berney, M., and A. O. Benz, Plasma instabilities of trapped particles in solar magnetic fields, *Astron. Astrophys.*, **65**, 369, 1978.
- Bernold, T. E. X., and R. A. Treumann, The fiber fine structure during solar type IV radio burst: observations and theory of radiation in presence of localized whistler turbulence, *Astrophys. J.*, **264**, 677, 1983.
- Bespalov, P. A., V. V. Zaitsev, and A. V. Stepanov, Consequence of strong pitch-angle diffusion of particles in solar flares, *Astrophys. J.*, **374**, 369, 1991.
- Bigg, E. K., Influence of the satellite Io on Jupiter's decametric emission, *Nature*, **203**, 1008–1010, 1964.
- Bigg, E. K., Periodicities in Jupiter's decametric radiation, *Planet. Space Sci.*, **14**(8), 741–758, 1966.
- Bird, M. K., O. Funke, J. Neidhöfer, and I. de Pater, Evolution of Jupiter's radio brightness during and after the SL9 impacts, Poster III-1 presented at *International Conference on the SL9-Jupiter collision*, July 3–5, Meudon, France, 1996.
- Birmingham, T., W. Hess, T. Northrop, R. Baxter, and M. Lojko, The electron diffusion coefficient in Jupiter's magnetosphere, *J. Geophys. Res.*, **79**, 87, 1974.
- Birmingham, T. J., J. K. Alexander, M. D. Desch, R. F. Hubbard, and B. M. Pedersen, Observations of electron gyroharmonic waves and the structure of Io torus, *J. Geophys. Res.*, **86**, 8497–8507, 1981.
- Boev, A. G., and M. Yu. Luk'yanov, Theory of the decameter S radio emission of Jupiter, *Sov. Astron.*, **35**(4), 422–427, 1991a.
- Boev, A. G., and M. Yu. Luk'yanov, To the theory of decameter S-emission of Jupiter, *Astronomicheskij Zhurnal*, **68**(4), 853–862, 1991b (in Russian).
- Boischot, A., and J. F. Denisse, Solar Radio Astronomy, *Adv. in Electronics and Electron Phys.*, **20**, 147, 1964.

- Boischot, A., A. C. Riddle, J. B. Pearce, and J. W. Warwick, Shock waves and type II radio bursts in the interplanetary medium, *Solar Phys.*, **65**, 397, 1980a.
- Boischot, A., C. Rosolen, M. G. Aubier, G. Daigne, F. Genova, Y. Leblanc, A. Lecacheux, J. de la Noë, and B. M. Pedersen, A new high-gain, broadband, steerable array to study Jovian decametric emissions, *Icarus*, **43**, 399–407, 1980b.
- Boischot, A., A. Lecacheux, M. L. Kaiser, M. D. Desch, J. K. Alexander, and J. W. Warwick, Radio Jupiter after Voyager: An overview of the Planetary Radio Astronomy observations, *J. Geophys. Res.*, **86**, 8213, 1981.
- Bolin, O., and N. Brenning, Electrodynamical interaction between Comet S-L 9 and Jupiter, *Geophys. Res. Lett.*, **21**, 1063–1066, 1994.
- Bolton, S. J., The Time Variability of Jupiter's Synchrotron Radiation, PhD Thesis, University of California, Berkeley, 1990.
- Bolton, S. J., Interpretation of the observed changes in Jupiter's synchrotron radiation during and after the impacts from comet Shoemaker-Levy 9, *Planet. Space Sci.*, **45**, 1359, 1997.
- Bolton, S. J., S. Gulikis, M. J. Klein, I. de Pater, and T. J. Thompson, Correlation studies between solar wind parameters and the decimetric radio emissions from Jupiter, *J. Geophys. Res.*, **94**, 121, 1989.
- Bolton, S. J., and R. M. Thorne, Assessment of mechanisms for Jovian synchrotron variability associated with comet SL-9, *Geophys. Res. Lett.*, **22**, 1813–1816, 1995.
- Booker, H. G., J. A. Ratcliffe, and D. H. Shinn, Diffraction from an irregular screen with applications to ionospheric problems, *Phil. Trans. R. Soc. A*, **242**, 579, 1950.
- Boudjada, M. Y., H. O. Rucker, H. P. Ladreiter, and B. P. Ryabov, Jovian millisecond bursts: the event of 4 January 1993, *Astron. Astrophys.*, **295**, 782–794, 1995.
- Boudjada, M. Y., P. Galopeau, and H. O. Rucker, Jovian S-bursts: A discussion on the S-burst drift model, *Astron. Astrophys.*, **306**, L9–L12, 1996.
- Bougeret, J.-L., Observations of shock formation and evolution in the solar atmosphere, in *Collisionless Shocks in the Heliosphere: Reviews of Current Research*, edited by B. S. Tsurutani and R. G. Stone, Geophys. Monogr. Ser. 35, Washington DC, 13, 1985.
- Bougeret, J.-L., M. L. Kaiser, P. J. Kellogg, R. Manning, K. Goetz, S. J. Monson, N. Monge, L. Friel, C. A. Meetre, C. Perche, L. Sitruk, and S. Hoang, Waves: The radio and plasma wave investigation on the Wind spacecraft, *Space Sci. Rev.*, **71**, 231–263, 1995.
- Bradley, P. A. (Ed.), PRIME (Prediction and Retrospective Ionospheric Modeling over Europe) Final Report (Advance Issue), *Commission of the European Communities, Directorate-General Telecommunications etc.*, L-2920 Luxembourg, 1995.
- Brandstater, A., and H. Swinney, Strange attractors in weakly turbulent Couette-Taylor flow, *Phys. Rev. A*, **35**, 2207, 1987.

- Braude, S. Ya., A. V. Megn, B. P. Ryabov, N. K. Sharykin, and I. N. Zhouck, Decametric survey of discrete sources in the northern sky: I. the UTR-2 radiotelescope. Experimental techniques and data processing, *Astrophys. Space Sci.*, **54**(1), 3–36, 1978.
- Brecht, S. H., M. E. Pesses, I. de Pater, N. T. Gladd, and J. G. Lyon, The role of shock acceleration on synchrotron radiation following SL-9 impacts, *Geophys. Res. Lett.*, **22**, 1809–1812, 1995a.
- Brecht, S. H., M. E. Pesses, J. G. Lyon, N. T. Gladd, and S. W. McDonald, An explanation of synchrotron radiation enhancement following the impact of Shoemaker-Levy 9 with Jupiter, *Geophys. Res. Lett.*, **22**, 1805–1808, 1995b.
- Brenning, N., Review of the CIV phenomenon, *Space Sci. Rev.*, **59**, 209, 1992.
- Brillinger, D. R., Time series data analysis and theory, Holden-Day, 1981.
- Brinton, H. C., J. M. Grebowsky, and L. H. Brace, The high latitude winter *F* region at 300 km: Thermal plasma observations from AE-C, *J. Geophys. Res.*, **83**, 4767, 1978.
- Brown, L. W., Spectral behavior of Jupiter near 1 MHz, *Astrophys. J.*, **194**, L159, 1974.
- Brown, R. A., C. B. Pilcher, and D. F. Strobel, Spectrophotometric studies of the Io torus, in *Physics of the Jovian magnetosphere*, edited by A. J. Dessler, Cambridge University Press, Cambridge, 197, 1983.
- Burgess, W. C., and U. S. Inan, The role of ducted whistlers in the precipitation loss and equilibrium flux of radiation belt electrons, *J. Geophys. Res.*, **98**, 15463, 1993.
- Burke, B. F., Prospects for the study of planetary radio emission, in *Planetary Radio Emissions III*, edited by H. O. Rucker, S. J. Bauer, and M. L. Kaiser, Austrian Academy of Sciences Press, Vienna, 485–488, 1992.
- Burke, B. F., and K. L. Franklin, Observations of a variable radio source associated with planet Jupiter, *J. Geophys. Res.*, **60**, 213–217, 1955.
- Cairns, I. H., New waves at multiples of the plasma frequency upstream of the Earth's bow shock, *J. Geophys. Res.*, **91**, 2975, 1986.
- Cairns, I. H., Correction to new waves at multiples of the plasma frequency upstream of the Earth's bow shock, *J. Geophys. Res.*, **92**, 2577, 1987.
- Cairns, I. H., Fine structure of plasma waves and radiation near the plasma frequency in Earth's foreshock, *J. Geophys. Res.*, **99**, 23505, 1994.
- Cairns, I. H., and R. D. Robinson, Herringbone bursts associated with type II solar radio bursts, *Solar Phys.*, **111**, 365, 1987.
- Cairns, I. H., and P. A. Robinson, Inconsistency of Ulysses millisecond Langmuir spikes with wave collapse in type III radio sources, *Geophys. Res. Lett.*, **22**, 3437, 1995.
- Calvert, W., The auroral plasma cavity, *Geophys. Res. Lett.*, **8**, 919, 1981a.

- Calvert, W., The stimulation of auroral kilometric radiation by type III solar radio bursts, *Geophys. Res. Lett.*, **8**, 1091, 1981b.
- Calvert, W., A feedback model for the source of auroral kilometric radiation, *J. Geophys. Res.*, **87**, 8199, 1982.
- Calvert, W., Auroral kilometric radiation triggered by type II solar radio bursts, *Geophys. Res. Lett.*, **12**, 377, 1985.
- Calvert, W., An explanation for auroral structure and the triggering of auroral kilometric radiation, *J. Geophys. Res.*, **100**, 14887, 1995.
- Calvert, W., Y. Leblanc, and G. R. A. Ellis, Natural radio lasing at Jupiter, *Astrophys. J.*, **335**, 976–985, 1988.
- Cane, H. V., R. G. Stone, G. Fainberg, J. L. Steinberg, and S. Hoang, Type II solar radio events observed in the interplanetary medium, *Solar Phys.*, **78**, 187, 1982.
- Cane, H. V., N. R. Sheeley Jr., and R. A. Howard, Energetic interplanetary shocks, radio emission, and coronal mass ejections, *J. Geophys. Res.*, **92**, 9869, 1987.
- Carpenter, C. G., S. Grossberg, Stable self-organization of pattern recognition codes for analog input patterns, *Applied Optics*, **26**, 4919–4930, 1987.
- Carr, T. D., Jupiter's decametric rotation period and the source A emission beam, *Phys. Earth Planet. Int.*, **6**, 21–28, 1972.
- Carr, T. D., A. G. Smith, R. Peeples, and C. H. Barrow, 18-megacycle observations of Jupiter in 1957, *Astrophys. J.*, **127**, 274–283, 1958.
- Carr, T. D., and S. Gulkis, The magnetosphere of Jupiter, *Ann. Rev. Astron. Astrophys.*, **7**, 577, 1969.
- Carr, T. D., A. G. Smith, F. F. Donovan, and H. I. Register, The twelve-year periodicities of the decametric radiation of Jupiter, *Radio Sci.*, **5**, 495–503, 1970.
- Carr, T. D., J. J. Schauble, and C. C. Schauble, Pre-encounter distributions of Saturn's low frequency radio emission, *Nature*, **292**, 745–747, 1981.
- Carr, T. D., M. D. Desch, and J. K. Alexander, Phenomenology of magnetospheric radio emissions, in *Physics of the Jovian Magnetosphere*, edited by A. J. Dessler, Cambridge University Press, New York, 226–284, 1983.
- Carr, T. D., and F. Reyes, Subpulse structure of Jovian decametric S-bursts, in *Planetary Radio Emissions III*, edited by H. O. Rucker, S. J. Bauer, and M. L. Kaiser, Austrian Academy of Sciences Press, Vienna, 145, 1992.
- Carr, T. D., F. Reyes, L. Garcia, W. B. Greenman, J. Levy, C. A. Higgins, J. M. De Buizer, J. May, J. Aparici, H. Alvarez, F. Olmos, J. A. Phillips, T. Clark, and S. Padin, Search for effects of comet S-L 9 fragment impacts on low radio frequency emission from Jupiter, *Earth, Moon and Planets*, **66**, 31–48, 1994.
- Carr, T. D., F. Reyes, J. A. Phillips, J. May, L. Wang, J. Aparici, H. Alvarez, F. Olmos, L. Garcia, J. M. De Buizer, W. B. Greenman, T. Clark, J. Levy, S. Padin, and

- C. A. Higgins, Results of decametric monitoring of the comet collision with Jupiter, *Geophys. Res. Lett.*, **22**, 1785–1788, 1995.
- Carreia, E., and P. Kaufmann, Repetition rates of fast pulses in a solar burst observed at mm-waves and hard X-rays, *Solar Physics*, **111**, 143–154, 1987.
- Caudal, G., and J. E. P. Connerney, Plasma pressure in the environment of Jupiter, inferred from Voyager 1 magnetometer observations, *J. Geophys. Res.*, **94**, 15055, 1989.
- Chernov, G. P., On microstructure in meter bursts type IV continual emission. Observations and source model, *Soviet Astron.*, **20**, 449, 1976a.
- Chernov, G. P., Continual emission modulation by whistler wave packets, *Soviet Astron.*, **20**, 582, 1976b.
- Chernov, G. P., Behaviour of low frequency waves in coronal magnetic traps, *Soviet Astron.*, **33**, 649, 1989.
- Chernov, G. P., Some features of fiber formations in type IV radio bursts, *Soviet Astron.*, **34**, 66, 1990.
- Chernov, G. P., K. L. Klein, P. Zlobec, and H. Aurass, Fine structure in a metric type IV burst: multi-site spectrographic, polarimetric and heliographic observations, *Solar Phys.*, **155**, 373, 1994.
- Chiuderi, C., R. Giachetti, and H. Rosenberg, Non-linear wave interaction in solar type IV radio bursts, *Solar Phys.*, **33**, 255, 1973.
- Chugunov, Yu. V., Electrical characteristics of the magnetic type radiators located in plasma, *Radiotekhnika i Elektronika*, **18**, 1111, 1973.
- Church, S. R., and R. M. Thorne, On the origin of plasmaspheric hiss: ray path integrated amplification, *J. Geophys. Res.*, **88**, 7941–7957, 1983.
- Ciraolo, L., and P. Spalla, Comparison of ionospheric total electron content from the Navy Navigation Satellite System and the GPS, *Radio Sci.*, **32**, 1071–1080, 1997.
- Cohen, M. H., Magnetoionic mode coupling at high frequency, *Astrophys. J.*, **131**, 664–680, 1960.
- Connerney, J. E. P., The magnetic field of Jupiter: A generalized inverse approach, *J. Geophys. Res.*, **86**, 7679, 1981.
- Connerney, J. E. P., Doing more with Jupiter's magnetic field, in *Planetary Radio Emissions III*, edited by H. O. Rucker, S. J. Bauer, and M. L. Kaiser, Austrian Academy of Sciences Press, Vienna, 13–33, 1992.
- Connerney, J. E. P., Magnetic Fields of the Outer Planets, *J. Geophys. Res.*, **98**, 18659–18679, 1993.
- Connerney, J. E. P., M. H. Acuña, and N. F. Ness, Modeling the Jovian current sheet and inner magnetosphere, *J. Geophys. Res.*, **86**, 8370–8374, 1981.

- Connerney, J. E. P., M. H. Acuña, and N. F. Ness, The magnetic field of Neptune, *J. Geophys. Res.*, **96**, suppl., 19023–19042, 1991.
- Connerney, J. E. P., R. Baron, T. Satoh, and T. Owen, Images of excited H_3^+ at the foot of the Io flux tube in Jupiter's atmosphere, *Science*, **262**, 1035–1038, 1993.
- Connerney, J. E. P., M. H. Acuña, and N. F. Ness, Octupole model of Jupiter's magnetic field from Ulysses observations, *J. Geophys. Res.*, **101**, 27453–27458, 1996.
- Cooley, J. W., and J. W. Tukey, An algorithm for the machine calculation of complex Fourier series, *Math. Computation*, **19**, 1965.
- Cordes, J. M., Low frequency interstellar scattering and pulsar observations, in *Low Frequency Astrophysics from Space*, edited by N. E. Kassim and K. W. Weiler, Lecture Notes in Physics 362, Springer, Berlin, 165–174, 1990.
- Coroniti, F. V., Energetic electrons in Jupiter's magnetosphere, *Astrophys. J.*, **27**, 261, 1974.
- Couturier, P., S. Hoang, N. Meyer-Vernet, and J.-L. Steinberg, Quasi-thermal noise in a stable plasma at rest, *J. Geophys. Res.*, **86**, 11127, 1981.
- Crary, F. J., On the generation of an electron beam by Io, *J. Geophys. Res.*, **102**, 37–49, 1997.
- Cronyn, W. M., Interstellar scattering of pulsar radiation and its effect on the spectrum of NP0532, *Science*, **168**, 1453, 1970.
- Daubechies, R., The wavelet transform, time–frequency localization, and signal analysis., *IEEE Transactions on Information Theory*, **36**(5), 961–1005, 1990.
- DeFatta, D. J., J. G. Lucas, and W. S. Hodgkiss, *Digital Signal Processing, a System Design Approach*, John Wiley & Sons, New York, 1984.
- de Lassus, H., Vers un système de reconnaissance automatique des signaux radio planétaires basses fréquence, in *thèse professionnelle de Mastère en traitement du signal*, Ecole Nationale Supérieure des Télécommunications, Paris, 1993.
- de Lassus, H., A. Lecacheux, S. Thiria, and F. Badran, Neural Network Clusters and Cellular Automata for the Detection and Classification of Overlapping Transient Signals on Radio Astronomy Spectrograms from Spacecraft, in *International Symposium on Time-Frequency and Time-Scale Analysis*, IEEE Signal Processing Society, 253–256, Paris, France, 1996a.
- de Lassus, H., P. Daigremont, A. Lecacheux, S. Thiria, and F. Badran, Rejection by prediction, in *ICANN'96*, Bochum, Germany, 1996b.
- Denis, L., and P. Zarka, Interference problems at the Nançay Decameter Array and studies towards a better immunity, *JCE Symposium "Interference problems in Radio Astronomy and Communications – or Cosmic Ecology"*, U.R.S.I. XXVth General Assembly, Lille, France, 752, 1996.
- de Pater, I., Radio images of the planets, *Annual Rev. Astron. Astrophys.*, **28**, 3347–3399, 1990.

- de Pater, I., S. Kenderdine, and J. R. Dickel, Comparison of the thermal and nonthermal radiation characteristics of Jupiter at 6, 11, and 21 cm with model calculations, *Icarus*, **51**, 25–38, 1982.
- de Pater, I., and S. T. Massie, Models of the millimeter-centimeter Spectra of the giant planets, *Icarus*, **62**, 143–171, 1985.
- de Pater, I., and M. J. Klein, Time variability in Jupiter's synchrotron radiation, in *Time-variable Phenomenon in the Jovian System*, edited by M. J. S. Belton, R. A. West and J. Rahe, NASA Special Publ. SP-494, 139, 1989.
- de Pater I., and C. K. Goertz, Radial diffusion models of energetic electrons and Jupiter's synchrotron radiation, 1. Steady state solution, *J. Geophys. Res.*, **95**, 39, 1990.
- de Pater I., and C. K. Goertz, Radial diffusion models of energetic electrons and Jupiter's synchrotron radiation, 2. Time variability, *J. Geophys. Res.*, **99**, 2271, 1994.
- de Pater, I., C. Heiles, M. Wong, R. J. Maddalena, M. K. Bird, O. Funke, J. Neidhöfer, R. M. Price, M. Kesteven, M. Calabretta, M. J. Klein, S. Gulkis, S. J. Bolton, R. S. Foster, S. Sukumar, R. G. Strom, R. S. LePoole, T. Spoelstra, M. Robison, R. W. Hunstead, D. Campbell-Wilson, T. Ye, G. A. Dulk, Y. Leblanc, P. Galopeau, E. Gerard, and A. Lecacheux, Outburst of Jupiter's synchrotron radiation following the impact of comet P/Shoemaker-Levy 9, *Science*, **268**, 1879–1883, 1995.
- Desch, M. D., Io-phase motion and Jovian decameter source location, *Nature*, **272**, 339–340, 1978.
- Desch, M. D., Evidence for solar wind control of Saturn radio emission, *J. Geophys. Res.*, **87**, 4549–4554, 1982.
- Desch, M. D., Jupiter radio bursts and particle acceleration, *Astrophys. J. Suppl.*, **90**, 541, 1994.
- Desch, M. D., and T. D. Carr, Decametric and hectometric observation of Jupiter from the RAE-1 satellite, *Astrophys. J.*, **194**, L57, 1974.
- Desch, M. D., T. D. Carr, and J. Levy, Observations of Jupiter at 26.3 MHz using a large array, *Icarus*, **25**, 12–17, 1975.
- Desch, M. D., and T. D. Carr, Modulation of the Jovian emission below 8 MHz, *Astron. J.*, **83**, 828, 1978.
- Desch, M. D., R. S. Flagg, and J. May, Jovian S-bursts observations at 32 MHz, *Nature*, **272**, 38–40, 1978.
- Desch, M. D., and M. L. Kaiser, The occurrence rate, polarization character, and intensity of broadband Jovian kilometric radiation, *J. Geophys. Res.*, **85**, 4248, 1980.
- Desch M. D., and M. L. Kaiser, Voyager measurement of the rotation period of Saturn's magnetic field, *Geophys. Res. Lett.*, **8**, 253–256, 1981.
- Desch, M. D., and H. O. Rucker, The relationship between Saturn kilometric radiation and the solar wind, *J. Geophys. Res.*, **88**, 8999–9006, 1983.

- Desch, M. D., and C. H. Barrow, Direct evidence for solar wind control of Jupiter's hectometer-wavelength radio emission, *J. Geophys. Res.*, **89**, 6819, 1984.
- Desch, M. D., and M. L. Kaiser, Predictions for Uranus from a Radiometric Bode's law, *Nature*, **310**, 755, 1984.
- Desch, M. D., M. L. Kaiser, P. Zarka, A. Lecacheux, Y. Leblanc, M. G. Aubier, and A. Ortega-Molina, Uranus as a radio source, in *Uranus*, edited by J. T. Bergstralh, E. D. Miner, and M. S. Matthews, University of Arizona Press, Tucson, 894–925, 1991.
- Desch, M. D., M. L. Kaiser, W. M. Farrell, R. J. MacDowall, and R. G. Stone, Traversal of comet SL-9 through the Jovian magnetosphere and impact with Jupiter: Radio upper limits, *Geophys. Res. Lett.*, **22**, 1781–1784, 1995.
- Desch, M. D., M. L. Kaiser, and W. M. Farrell, Control of terrestrial low frequency bursts by solar wind speed, *Geophys. Res. Lett.*, **23**, 1251–1254, 1996.
- Divine, N., and H. B. Garrett, Charged particle distributions in Jupiter's magnetosphere, *J. Geophys. Res.*, **88**, 6889–6903, 1983.
- Doe, R. A., M. Mendillo, J. F. Vickrey, L. J. Zanetti, and R. W. Estes, Observations of nightside auroral cavities, *J. Geophys. Res.*, **98**, 293, 1993.
- Doe, R. A., J. F. Vickrey, and M. Mendillo, Electrodynamical model for the formation of auroral ionospheric cavities, *J. Geophys. Res.*, **100**, 9683, 1995.
- Dowden, R. L., Low-frequency (100 kc./s.) Radio Noise from the Aurora, *Nature*, **184**, suppl., 803, 1959.
- Dubouloz, N., R. A. Treumann, R. Pottellette, and K. Lynch, Electron acceleration from localized lower-hybrid waves, *Geophys. Res. Lett.*, **22**, 3153, 1995.
- Dulk, G. A., Characteristic of Jupiter's decametric radio source measured with arc-second resolution, *Astrophys. J.*, **159**, 671–684, 1970.
- Dulk, G. A., D. J. McLean, and G. L. Nelson, Solar Flares, in *Solar Radiophysics*, edited by D. J. McLean and N. R. Labrum, Cambridge Univ. Press, 123–134, 1985.
- Dulk, G. A., A. Lecacheux, and Y. Leblanc, The complete polarization state of a storm of millisecond bursts from Jupiter, *Astron. Astrophys.*, **253**, 292–306, 1992.
- Dulk, G. A., Y. Leblanc, and A. Lecacheux, The complete polarization state of Io-related radio storms from Jupiter: a statistical study, *Astron. Astrophys.*, **286**, 683–700, 1994.
- Duncan, R. A., Jupiter's rotation, *Planet. Space Sci.*, **19**, 391–398, 1971.
- Eckmann, J.-P., and D. Ruelle, Ergodic theory of chaos and strange attractors, *Rev. Mod. Phys.*, **57**, 617, 1985.
- Eckmann, J.-P., and D. Ruelle, Fundamental limitations for estimating dimensions and Lyapunov exponents in dynamical systems, *Physica*, **56D**, 185, 1992.

- Ellis, G. R. A., The decametric radio emission of Jupiter, *Radio Sci.*, **69D**, 1513–1530, 1965.
- Ellis, G. R. A., The Jupiter radio bursts, *Proc. Astron. Soc. Austr.*, **2**, 236–243, 1974.
- Ellis, G. R. A., Spectra of the Jupiter radio bursts, *Nature*, **253**, 415–417, 1975.
- Ellis, G. R. A., *An Atlas of Selected Spectra of the Jupiter S-Bursts*, Univ. of Tasmania, Hobart, Tasmania, Australia, 197 pp., 1979.
- Ellis, G. R. A., The source of Jupiter S-bursts, *Nature*, **283**, 48–50, 1980.
- Ellis, G. R. A., Observations of the Jupiter S-bursts between 3.2 and 32 MHz, *Austral. J. Phys.*, **35**, 165–175, 1982.
- Ellyett, C. D., Radio noise of auroral origin, *J. Atmos. Terr. Phys.*, **31**, 671–682, 1969.
- Ergun, R. E., et al., Initial results from the FAST mission: DC turbulence, VLF waves, and AKR, *EOS Trans. Am. Geophys. Union*, **77**, F625, 1996.
- Erickson, W. C., Radio noise near the Earth in the 1–30 MHz frequency range, in *Low Frequency Astrophysics from Space*, edited by N. E. Kassim and K. W. Weiler, Lecture Notes in Physics 362, Springer, Berlin, 59–69, 1990.
- ESA Report Number SCI-97-002, *Very low frequency array on the lunar far side*, 1997.
- Farrell, W., Fine structure of auroral kilometric radiation: A Fermi acceleration process?, *Radio Science*, **30**, 961, 1995.
- Farrell, W. M., M. L. Kaiser, M. D. Desch, and R. J. MacDowall, Possible radio wave precursors associated with the comet Shoemaker-Levy 9/Jupiter impacts, *Geophys. Res. Lett.*, **21**, 1067–1070, 1994.
- Fedorenkko, V. N., Electron cyclotron harmonics in solar radio emission and their explanation by plasma-beam instability, *Soviet Astron. (Astronomicheskii) J.*, **52**, 978, 1975.
- Fehmers, G., Tomography of the ionosphere, PhD Thesis, Technische Universiteit Eindhoven, The Netherlands, 1996.
- Feldman, W. C., Electron velocity distributions near collisionless shocks, in *Collisionless Shocks in the Heliosphere: Reviews of Current Research*, edited by B. T. Tsurutani and R. G. Stone, Geophys. Monogr. Ser. 35, AGU, Washington D.C., 195, 1985.
- Fermi, E., On the origin of cosmic radiation, *Phys. Rev.*, **75**, 1149, 1949.
- Filbert, P. C., and P. J. Kellogg, Electrostatic noise at the plasma frequency beyond the Earth's bow shock, *J. Geophys. Res.*, **84**, 1369, 1979.
- Filbert, P. C., and P. J. Kellogg, Observations of low-frequency radio emissions in the Earth's magnetosphere, *J. Geophys. Res.*, **94**, 8867–8885, 1989.
- Fischer, H. J., E. Pehlke, G. Wibberenz, L. J. Lanzerotti, and J. D. Mihalov, High energy charged particles in the innermost Jovian magnetosphere, *Science*, **272**, 856–858, 1996.

- Fischer, L., A. Yaroshevich, V. Martishovitch, S. V. Mironov, and A. Tirpak, The AKR-receiver, in *INTERSHOCK project*, Publ. of Astron. Inst. of Czechoslovak Academy of Sciences, 207, 1985.
- Flagg, R. S., and M. D. Desch, Simultaneous multifrequency observations of Jovian S-bursts, *J. Geophys. Res.*, **84**, 4238–4244, 1979.
- Flagg, R. S., W. B. Greenman, F. Reyes, and T. D. Carr, A catalog of high resolution Jovian decametric radio noise burst spectra, Volume 1, Dept. of Astronomy, University of Florida, Gainesville, 1991.
- Fomichev, V. V., and S. M. Fainshtein, On a possible mechanism of zebra pattern generation in solar radio emission, *Solar Phys.*, **71**, 385, 1981.
- Fomichev, V. V., and S. M. Fainshtein, To a theory of fine structure of solar type IV radio bursts, *Soviet Astron. (Astronomicheski) J.*, **66**, 1058, 1988.
- Frank, L. A., K. L. Ackerson, W. R. Paterson, J. A. Lee, M. R. English, and G. L. Pickett, Comprehensive plasma instrumentation (CPI) for the GEOTAIL spacecraft, *J. Geomag. Geoelectr.*, **46**, 23–37, 1994.
- Gallagher, D. L., and N. D'Angelo, Correlations between solar wind parameters and auroral kilometric intensity, *Geophys. Res. Lett.*, **8**, 1087, 1981.
- Gallet, R. M., Radio observations of Jupiter, in *Planets and Satellites*, edited by G. P. Kuiper and B. M. Middlehurst, Univ. of Chicago Press, Chicago, Illinois, 500, 1961.
- Galopeau, P., P. Zarka, and D. Le Quéau, Theoretical model of Saturn's kilometric radiation spectrum, *J. Geophys. Res.*, **94**, 8739–8755, 1989.
- Galopeau, P. H. M., P. Zarka, and D. Le Quéau, Source location of Saturn's kilometric radiation: The Kelvin-Helmholtz hypothesis, *J. Geophys. Res.*, **100**, 26397–26410, 1995.
- Galopeau, P. H. M., E. Gerard, and A. Lecacheux, Long term monitoring of Jupiter's synchrotron radiation with the Nançay Radio Telescope including the collision with comet P/Shoemaker-Levy 9, *Icarus*, **121**, 469–478, 1996.
- Galopeau, P. H. M., E. Gerard, and A. Lecacheux, Modifications of the synchrotron radiation belts of Jupiter: Evidence for natural variations in addition to SL9 effects, *Planet. Space Sci.*, **45**, 1197–1202, 1997.
- Garcia, L., Long-term periodicities in the Jovian decametric radiation, PhD Thesis, University of Florida, Gainesville, 1996.
- Gendrin, R., General relationships between wave amplification and particle diffusion in a magnetoplasma, *Reviews of Geophys. and Space Phys.*, **19**, 171, 1981.
- Genova, F., and M. G. Aubier, Io-dependent sources of the Jovian decameter emission, *Astron. Astrophys.*, **150**, 139–150, 1985.
- Genova, F., P. Zarka, and C. H. Barrow, Voyager and Nançay observations of the Jovian radio-emission at different frequencies: solar wind effect and source extent, *Astron. Astrophys.*, **182**, 159–162, 1987.

- Genova, F., and W. Calvert, The source location of Jovian millisecond radio bursts with respect to Jupiter's magnetic field, *J. Geophys. Res.*, **93**, 979–986, 1988.
- Gerard, E., Observations of Jupiter at 11.13 cm, *Astron. Astrophys.*, **8**, 181–188, 1970a.
- Gerard, E., Long term variations of the decimetric radio emission of Jupiter, *Radio Sci.*, **5**, 513, 1970b.
- Gerard, E., Variation of the radio emission of Jupiter at 21.3 cm and 6.2 cm wavelength, *Astron. Astrophys.*, **50**, 353–360, 1976.
- Gérard, E., La radioastronomie face à la saturation du domaine hertzien, *La Vie des Sciences*, Comptes rendus, série générale, **10**(3), 175–197, 1993.
- Gersho, A., and R. Gray, *Vector Quantization and Signal Compression*, Kluwer Academic publishers, Dordrecht, Holland, 1992.
- Giannakis, G. B., and M. K. Tsatsanis, Signal detection and classification using matched filtering and higher order statistics, *ICASSP*, **38**, 1284–1296, 1990.
- Giannakis, G. B., and M. K. Tsatsanis, A unifying maximum likelihood view of cumulant and polyspectral measures for non-Gaussian signal classification and estimation, *IIT*, **38**, 386–406, 1992.
- Ginzburg, V. L., *Theoretical Physics and Astrophysics*, Nauka, Moscow, 1987.
- Gledhill, J. A., Magnetosphere of Jupiter, *Nature*, **214**, 155–156, 1967.
- Godfrey D. A., The rotation period of Saturn's polar hexagon, *Science*, **247**, 1206–1208, 1990.
- Goertz, C. K., Polarization of Jovian decametric radiation, *Planet. Space Sci.*, **22**, 1491–1500, 1974.
- Goertz, C. K., and P. A. Deift, Io's interaction with the magnetosphere, *Planet. Space Sci.*, **21**, 1399–1415, 1973.
- Goertz, C. K., L. H. Shan, and R. A. Smith, Prediction of geomagnetic activity, *Univ. of Iowa preprint 91-15*, 1991.
- Goldman, M. V., Progress and problems in the theory of type III solar radio emission, *Solar Phys.*, **89**, 403, 1983.
- Goldman, M. V., Strong turbulence of plasma waves, *Rev. Mod. Phys.*, **55**, 709, 1984.
- Goldreich, P., and D. Lynden-Bell, Io: a Jovian unipolar inductor, *Astrophys. J.*, **156**, 59–78, 1969.
- Goldreich, P., and W. H. Julian, Pulsar electrodynamics, *Astrophys. J.*, **157**, 869, 1969.
- Goldstein, M. L., and C. K. Goertz, Theories of radio emissions and plasma waves, in *Physics of the Jovian Magnetosphere*, edited by A. J. Dessler, Cambridge University Press, New York, 317–352, 1983.

- Gough, M. P., and A. Urban, Auroral beam/plasma interaction observed directly, *Planet. Space Sci.*, **31**, 875, 1983.
- Grabbe, C. L., Theory of fine structure of auroral kilometric radiation, *Geophys. Res. Lett.*, **9**, 155, 1982.
- Grabbe, C., K. Papadopoulos, and P. Palmadesso, A coherent nonlinear theory of auroral kilometric radiation: I. Steady state model, *J. Geophys. Res.*, **85**, 3337, 1980.
- Grassberger, P., and I. Procaccia, Characterization of Strange Attractors, *Phys. Rev. Lett.*, **50**, 346, 1983a.
- Grassberger, P., and I. Procaccia, Measuring the strangeness of strange attractors, *Physica*, **9D**, 189, 1983b.
- Grassberger P., T. Schreiber, and C. Schaffrath, Nonlinear time sequence analysis, *Intern. J. of Bifurcation and Chaos*, **1**(3), 521, 1991.
- Green, J. L., The Io decametric emission cone, *Radio Sci.*, **19**(2), 556–570, 1984.
- Green, T. C., and W. M. Sherrill, Io-related polarization characteristics of the Jovian decametric emission, *Astrophys. J.*, **158**, 351–363, 1969.
- Grigor'eva, V. P., V. N. Kuril'chik, L. Fischer, A. Tirpak, S. V. Mironov, and A. Yaroshovich, Long-wave radioemission spectrometer AKR-X on-board the Tail Probe, in *INTERBALL mission and Payload*, Publ. CNES-IKI Russian Space Agency, 233, 1995.
- Gubchenko, V. M., Generation of quasisteady electromagnetic field by a distributed magnetic dipole moving in collisionless plasma, *Sov. J. Phys.*, **14**, 10, 1989.
- Gulkis, S., and T. D. Carr, Radio rotation period of Jupiter, *Science*, **154**, 257–259, 1966.
- Gurnett, D. A., The Earth as a radio source: The nonthermal continuum, *J. Geophys. Res.*, **80**, 2751–2763, 1975.
- Gurnett, D. A., Heliospheric radio emissions, *Space Sci. Rev.*, **72**, 243, 1995.
- Gurnett, D. A., and R. R. Shaw, Electromagnetic radiation trapped in the magnetosphere above the plasma frequency, *J. Geophys. Res.*, **78**, 8136–8149, 1973.
- Gurnett, D. A., and L. A. Frank, Electron plasma oscillations associated with type III radio emission and solar electrons, *Solar Phys.*, **45**, 477, 1975.
- Gurnett, D. A., R. R. Anderson, F. L. Scarf, and W. S. Kurth, The heliocentric radial variation of plasma oscillations associated with type III radio bursts, *J. Geophys. Res.*, **83**, 4147, 1978.
- Gurnett, D. A., F. M. Neubauer, and R. Schwenn, Plasma wave turbulence associated with an interplanetary shock, *J. Geophys. Res.*, **84**, 541, 1979a.
- Gurnett, D. A., R. R. Shaw, R. Anderson, and W. S. Kurth, Whistlers observed by Voyager 1: Detection of lightning on Jupiter, *Geophys. Res. Lett.*, **6**, 511, 1979b.

- Gurnett, D. A., R. R. Anderson, F. L. Scarf, R. W. Fredericks, and E. J. Smith, Initial results from the ISEE 1 and 2 plasma wave investigation, *Space Sci. Rev.*, **23**, 103, 1979c.
- Gurnett, D. A., W. S. Kurth, and F. L. Scarf, The structure of the Jovian magnetotail from plasma wave observations, *Geophys. Res. Lett.*, **7**, 53, 1980.
- Gurnett, D. A., and R. R. Anderson, The kilometric radio emission spectrum: Relationship to auroral acceleration processes, in *Physics of Auroral Arc Formation*, edited by S.-I. Akasofu and J. R. Kan, Geophys. Monogr. Ser. 25, AGU, Washington DC, 341–350, 1981.
- Gurnett, D. A., and C. K. Goertz, Multiple Alfvén wave reflections excited by Io: origin of the Jovian decametric arcs, *J. Geophys. Res.*, **86**, 717–722, 1981.
- Gurnett, D. A., F. L. Scarf, W. S. Kurth, R. R. Shaw, and R. L. Poynter, Determination of Jupiter’s electron density profile from plasma wave observations, *J. Geophys. Res.*, **86**, 8199, 1981.
- Gurnett, D. A., R. L. Huff, J. D. Menietti, J. L. Burch, J. D. Winningham, and S. D. Shawhan, Correlated low-frequency electric and magnetic noise along the auroral field lines, *J. Geophys. Res.*, **89**, 8971, 1984.
- Gurnett, D. A., W. S. Kurth, R. R. Shaw, A. Roux, R. Gendrin, C. F. Kennel, and S. D. Shawhan, The Galileo plasma wave investigation, *Space Sci. Rev.*, **60**, 341–355, 1992.
- Gurnett, D. A., G. B. Hospodarsky, W. S. Kurth, D. J. Williams, and S. J. Bolton, Fine structure of Langmuir waves produced by a solar electron event, *J. Geophys. Res.*, **98**, 5631, 1993a.
- Gurnett, D. A., W. S. Kurth, S. C. Allendorf, and R. L. Poynter, Radio emission from the heliopause triggered by an interplanetary shock, *Science*, **262**, 199, 1993b.
- Gurnett, D. A., A. M. Persoon, R. F. Randall, D. L. Odem, S. L. Remington, T. F. Averkamp, M. M. DeBower, G. B. Hospodarsky, R. L. Huff, D. L. Kirchner, M. A. Mitchell, B. T. Pham, J. R. Phillips, W. J. Schintler, P. Sheyko, and D. R. Tomash, The POLAR plasma wave instrument, *Space Sci. Rev.*, **71**, 597–622, 1995.
- Gurnett, D. A., and W. S. Kurth, Radio emissions from the outer heliosphere, *Space Sci. Rev.*, **78**, 53, 1996.
- Gurnett, D. A., W. S. Kurth, A. Roux, S. J. Bolton, and C. F. Kennel, Galileo plasma wave observations in the Io plasma torus and near Io, *Science*, **274**, 391–392, 1996a.
- Gurnett, D. A., W. S. Kurth, A. Roux, S. J. Bolton, and C. F. Kennel, Evidence for a magnetosphere at Ganymede from plasma-wave observations by the Galileo spacecraft, *Nature*, **384**, 535–537, 1996b.
- Hafizi, B., J. C. Weatherall, M. V. Goldman, and D. R. Nicholson, Scattering and collapse of Langmuir waves driven by a weak electron beam, *Phys. Fluids*, **25**, 392, 1982.

- Han, J-L., X-Z. Zhang, and H-S. Chen, Jovian decametric events during the period of the impact of SL-9, *Earth, Moon and Planets*, **66**, 53–69, 1994.
- Han, J-L., X-Z. Zhang, H-S. Chen, and Q-B. Li, Decametric responses to the great impacts, *Publications of Purple Mountain Observatory*, **15**(2), 57–63, 1995.
- Harrington, R. F., *Field Computation by Moment Methods*, R. E. Krieger Publishing Company, Malabar, Florida, 1985.
- Harris, F. J., On the use of windows for harmonic analysis with the discrete Fourier transform, *Proceedings of the IEEE*, **66**(1), 1978.
- Hashimoto, K., and M. L. Goldstein, A theory of the Io phase asymmetry of the Jovian decametric radiation, *J. Geophys. Res.*, **88**, 2010–2020, 1983.
- Heaton, J. A. T., S. E. Pryse, and L. Kersley, Improved background representation, ionosonde input and independent verification in experimental ionospheric tomography, *Ann. Geophys.*, **13**, 1297–1302, 1995.
- Helliwell, R. A., *Whistlers and Related Ionospheric Phenomena*, Stanford Univ. Press, Stanford, Calif., 1965.
- Helliwell, R. A., A theory of discrete VLF emissions from the magnetosphere, *J. Geophys. Res.*, **72**, 4773, 1967.
- Higgins, C. A., A new determination of Jupiter's radio rotation period, PhD Thesis, University of Florida, Gainesville, 1996.
- Higgins, C. A., T. D. Carr, and F. Reyes, A new determination of Jupiter's radio rotation period, *Geophys. Res. Lett.*, **23**, 2653–2656, 1996.
- Hilgers, A., A. Roux, and R. Lundin, Characteristics of AKR sources: a statistical description, *Geophys. Res. Lett.*, **18**, 1493, 1991.
- Hilgers, A., and H. de Feraudy, The AKR of the Earth: from studies inside the sources to distant observations and remote sensing, in *Planetary Radio Emissions III*, edited by H. O. Rucker, S. J. Bauer, and M. L. Kaiser, Austrian Academy of Sciences Press, Vienna, 199–216, 1992.
- Hilgers, A., H. de Feraudy, and D. Le Quéau, Measurement of the direction of the auroral kilometric radiation electric field inside the source with the Viking satellite, *J. Geophys. Res.*, **79**, 8381, 1992.
- Hill, T. W., A. J. Dessler, and C. K. Goertz, Magnetospheric models, in *Physics of the Jovian magnetosphere*, edited by A. J. Dessler, Cambridge University Press, Cambridge, 353, 1983.
- Hoang, S., Projet Pyramides: Validite des methodes electrostatique de mesure de diagramme de rayonnement d'antennes electriquement courtes, *Rep. PYR/1105*, Dep. de Rech. Spatiale, Obs. de Paris-Meudon, 1972.
- Hoang, S., J. Fainberg, J. L. Steinberg, R. G. Stone, and R. D. Zwickl, The $2f_p$ circumterrestrial radio radiation as seen from ISEE-3, *J. Geophys. Res.*, **86**, 4531, 1981.

- Hoang, S., N. Meyer-Vernet, M. Moncuquet, A. Lecacheux and B. Pedersen, Electron density and temperature in the Io plasma torus from Ulysses thermal noise measurements, *Planet. Space Sci.*, **41**, 1007, 1993.
- Hoang, S., J.-L. Steinberg, M. J. Reiner, and R. G. Stone, Interplanetary type III radio bursts observed simultaneously by Ulysses and ICE, *Space Sci. Rev.*, **72**, 267, 1995.
- Høeg, P., A. Hauchecorne, G. Kirchengast, S. Syndergaard, B. Belloul, R. Leitinger, and W. Rothleitner, Derivation of atmospheric properties using a radio occultation technique, in *Final Report ESA Contract ESTEC/11024/94/NL/CN = DMI Scientific Report 95-4*, edited by P. Høeg, Danish Meteorological Institute, Copenhagen, especially 123–140, 1995.
- Holman, G. D., and M. E. Pesses, Solar type II radio emission and shock drift acceleration, *Astrophys. J.*, **267**, 837, 1983.
- Hood, Lon L., Long-term changes in Jovian synchrotron radio emission: Intrinsic variations or effects of viewing geometry?, *J. Geophys. Res.*, **98**, 5769–5783, 1993.
- Horne, R. B., Propagation to the ground at high latitudes of auroral radio noise below the electron gyrofrequency, *J. Geophys. Res.*, **100**, 14637, 1995.
- Huang, C. Y., and C. K. Goertz, Ray-tracing studies and path-integrated gains of E.L.F. unducted whistler-mode waves in the Earth's magnetosphere, *J. Geophys. Res.*, **89**, 6181, 1983.
- Huang, T. S., and T. J. Birmingham, The polarization electric field and its effect in an anisotropic rotating plasma, *J. Geophys. Res.*, **97**, 1511–1519, 1992.
- Hulin, R., and G. Epstein, Projet Pyramides: Simulation d'antennes en cuve rheographique, *Rep. 103/PYR/9*, Dep. de Rech. Spatiale, Obs. de Paris-Meudon, 1973.
- Imai, K., L. Wang, and T. D. Carr, A model for the production of Jupiter's decametric modulation lanes, *Geophys. Res. Lett.*, **19**, 953–956, 1992a.
- Imai, K., L. Wang, and T. D. Carr, Origin of Jupiter's decametric modulation lanes, in *Planetary Radio Emissions III*, edited by H. O. Rucker, S. J. Bauer, and M. L. Kaiser, Austrian Academy of Sciences Press, Vienna, Austria, 69–90, 1992b.
- Imai, K., L. Wang, and T. D. Carr, Modeling Jupiter's decametric modulation lanes, *J. Geophys. Res.*, **102**, 7127–7136, 1997.
- Inan, U. S., and T. F. Bell, The plasmopause as a VLF wave guide, *J. Geophys. Res.*, **82**, 2819, 1977.
- Ip, W.-H., *Eos*, **75** (Fall supplement), 404, 1994.
- Ip, W.-H., Time variations of the Jovian synchrotron radiation following the collisional impacts of comet SL9: Flux density enhancement induced by neutral atmospheric turbulence, *Planet. Space Sci.*, **43**, 221–223, 1995.
- Ip, W.-H., and R. Prange, On possible magnetospheric dust interactions of comet Shoemaker-Levy 9 at Jupiter, *Geophys. Res. Lett.*, **21**, 1051–1054, 1994.

- Isliker H., and J. Kurths, A test for stationarity: finding parts in time series apt for correlation dimension estimates, *Intern. J. of Bifurcation and Chaos*, **3**(6), 1573, 1993.
- Isliker, H., and A. O. Benz, Catalogue of 1–3 GHz solar flare radio emission, *Astron. Astrophys. Suppl. Ser.*, **104**, 145, 1994a.
- Isliker, H., and A. O. Benz, Non-linear properties of the dynamics of bursts and flares in the solar and stellar coronae, *Astron. Astrophys.*, **285**, 663, 1994b.
- Jackson, J. D., *Classical Electrodynamics*, John Wiley & Sons, New York and London, 1962.
- Jakowski, N., E. Sardon, E. Engler, A. Jungstand, and D. Klähn, Relationships between GPS-signal propagation studies and EISCAT observations, *Ann. Geophys.*, **14**, 1429–1436, 1996.
- James, H. G., E. L. Hagg, and D. L. P. Strange, Narrowband radio noise in the ionosphere, *AGARD Conf. Proc.*, AGARD-CP-138, 24-1, 1974.
- Jones, D., The magnetopause as a source of nonthermal continuum, *Physica Scripta*, **35**, 887–894, 1987.
- Jones, D., Planetary radio emissions from low magnetic latitudes: Observations and theories, in *Planetary Radio Emissions II*, edited by H. O. Rucker, S. J. Bauer, and B. M. Pedersen, Austrian Academy of Sciences Press, Vienna, 255, 1988.
- Kaiser, M. L., Observations of non-thermal radiation from planets, in *Plasma Waves and Instabilities at Comets and in Magnetospheres*, edited by B. T. Tsurutani and H. Oya, American Geophysical Union, Geophys. Monogr. Ser. 53, Washington, 221, 1989.
- Kaiser, M. L., Time-variable magnetospheric radio emissions from Jupiter, *J. Geophys. Res.*, **98**, 18757–18765, 1993.
- Kaiser, M. L., Jovian and terrestrial low frequency radio bursts: Possible cause of anomalous continuum, in *Program and Abstracts for Magnetospheres of the Outer Planets*, Boulder, Colorado, March 17–21, 124, 1997.
- Kaiser, M. L., and J. K. Alexander, The Jovian decametric rotation period, *Astrophys. Lett.*, **12**, 215–217, 1972.
- Kaiser, M. L., and J. K. Alexander, Source location measurements of terrestrial kilometric radiation obtained from lunar orbit, *Geophys. Res. Lett.*, **3**, 37–40, 1976.
- Kaiser, M. L., and M. D. Desch, Narrow band Jovian kilometric radiation: A new radio component, *Geophys. Res. Lett.*, **7**, 389, 1980.
- Kaiser, M. L., M. D. Desch, and A. Lecacheux, Saturnian kilometric radiation: Statistical properties and beam geometry, *Nature*, **292**, 731–733, 1981.
- Kaiser, M. L., and M. D. Desch, Saturnian kilometric radiation: Source location, *J. Geophys. Res.*, **87**, 4555–4559, 1982.

- Kaiser, M. L., M. D. Desch, W. S. Kurth, A. Lecacheux, F. Genova, B. M. Pedersen, and D. R. Evans, Saturn as a radio source, in *Saturn*, edited by T. Gehrels and M. S. Matthews, University of Arizona Press, Tucson, 378–415, 1984.
- Kaiser, M. L., P. Zarka, M. D. Desch, and W. M. Farrell, Restrictions on the characteristics of Neptunian lightning, *J. Geophys. Res.*, **96**, 19043–19047, 1991.
- Kaiser, M. L., M. D. Desch, W. M. Farrell, R. J. MacDowall, R. G. Stone, A. Lecacheux, B.-M. Pedersen, and P. Zarka, Ulysses observations of escaping VLF emissions from Jupiter, *Geophys. Res. Lett.*, **19**, 649, 1992.
- Kaiser, M. L., M. D. Desch, W. M. Farrell, J.-L. Steinberg, and M. J. Reiner, LF band terrestrial radio bursts observed by Wind/WAVES, *Geophys. Res. Lett.*, **23**, 1283–1286, 1996.
- Kane, M., B. H. Mauk, E. P. Keath, S. M. Krimigis, A convected κ distribution model for hot ions in the Jovian magnetodisc, *Geophys. Res. Lett.*, **19**, 1435–1438, 1992.
- Kaufman, R. L., Electrostatic wave growth: secondary peaks in a measured auroral electron distribution function, *J. Geophys. Res.*, **85**, 1713, 1980.
- Kawamura, K., and I. Suzuki, A model of Jovian short duration bursts, *Astrophys. Lett.*, **18**, 19–23, 1976.
- Kellogg, P. J., Plasma effects on the interaction of a comet with Jupiter, *Geophys. Res. Lett.*, **21**, 1055–1058, 1994.
- Kellogg, P. J., and S. J. Monson, Radio emissions from the aurora, *Geophys. Res. Lett.*, **6**, 297, 1979.
- Kellogg, P. J., and S. J. Monson, Further studies of auroral roar, *Radio Sci.*, **19**, 551, 1984.
- Kellogg, P. J., K. Goetz, S. J. Monson, and S. D. Bale, Limits on decametric radiation from the Shoemaker-Levy 9 impacts on Jupiter, *Astrophys. J.*, **484**, 432, 1997.
- Kennel, C. F., and H. E. Petschek, Limit on stably trapped particle fluxes, *J. Geophys. Res.*, **71**, 1, 1966.
- Kennel, C. F., F. L. Scarf, F. V. Coroniti, E. J. Smith, and D. A. Gurnett, Nonlocal plasma turbulence associated with interplanetary shocks, *J. Geophys. Res.*, **87**, 17, 1982.
- Kennel, C. F., J. P. Edmiston, and T. Hada, A quarter century of collisionless shock research, in *Collisionless Shocks in the Heliosphere: Review of Current Research*, edited by B. S. Tsurutani and R. G. Stone, Geophys. Monogr. Ser. 35, Washington DC, 1, 1985.
- Kersley, L., J. A. T. Heaton, S. E. Pryse, and T. D. Raymond, Experimental ionospheric tomography with ionosonde input and EISCAT verification, *Ann. Geophys.*, **11**, 1064–1074, 1993.
- Kersley, L., and S. E. Pryse, The development of experimental ionospheric tomography, *I. J. Imaging Systems and Technology*, **5**, 141–147, 1994.

- Kersley, L., S. E. Pryse, I. K. Walker, J. A. T. Heaton, C. N. Mitchell, M. J. Williams, and C. A. Willson, Imaging of electron density troughs by tomographic techniques, in *Proc. Ionospheric Effects Symposium 1996*, edited by J. Goodman, Alexandria, VA, USA, 1A-2-1 – 1A-2-8, 1996.
- Kimura, I., Effects of ions on whistler-mode ray tracing, *Radio Sci.*, **1**, 269, 1966.
- Kivelson, M. G., K. K. Khurana, C. T. Russell, R. J. Walker, J. Warnecke, F. V. Coroniti, C. Polansky, D. J. Southwood, and G. Schubert, Discovery of Ganymede's magnetic field by the Galileo spacecraft, *Nature*, **384**, 537, 1996.
- Klein, M. J., S. Gulkis, and C. T. Stelzried, Jupiter: New evidence of long-term variations of its decimeter flux density, *Astrophys. J. Lett.*, **176**, L85–L88, 1972.
- Klein, M. J., T. J. Thompson, and S. J. Bolton, Systematic observations and correlation studies of variations in the synchrotron radio emission from Jupiter, in *Time-Variable Phenomena in the Jovian System*, edited by M. J. S. Belton, NASA SP 494, 151, 1989.
- Klein, M. J., S. Gulkis, and S. J. Bolton, Changes in Jupiter's 13-cm synchrotron radio emission following the impact of comet Shoemaker-Levy-9, *Geophys. Res. Lett.*, **22**(13), 1779–1800, 1995.
- Klein, M. J., S. J. Bolton, and S. Gulkis, Observations of Jupiter's synchrotron radiation: An update on long- and short-term variations, Paper presented at the Fall Meeting of the American Geophysical Union, San Francisco, Dec. 15–19, 1996.
- Kraus, J. D., *Radio Astronomy*, McGraw–Hill Book Company, New York, 1966.
- Kraus, J. D., *Radio Astronomy*, Cygnus-Quasar Books, Powell, Ohio, 2nd edition, 1986.
- Krausche, D. S., R. S. Flagg, G. R. Lebo, and A. G. Smith, High-resolution spectral analyses of the Jovian decametric radiation: I. Burst morphology and drift rates, *Icarus*, **29**, 463–475, 1976.
- Krauss-Varban, D., Fast Fermi and gradient drift acceleration of electrons at nearly perpendicular collisionless shocks, *J. Geophys. Res.*, **94**, 15367, 1989.
- Kuijpers, J. A., A coherent radiation mechanism for solar type IV dm radio bursts, *Solar Phys.*, **36**, 157, 1974.
- Kuijpers, J., Collective wave-particle interaction in solar type IV radio sources, Thesis, Utrecht, 1975.
- Kuijpers, J., Theory of type IV dm bursts, in *Radio Physics of the Sun*, edited by M. R. Kundu and T. E. Gergely, IAU Symp. 86, 341, 1980.
- Kuijpers, J., Radio emission from stellar flares, in *Solar and Stellar Flares*, edited by Haisch and Rodono, Kluwer Academic Publisher, 1989.
- Kundu, M. R., *Solar Radio Astronomy*, Interscience Publishers, New York, 1965.
- Kundu, M. R., and L. Vlahos, Microwave bursts, *Space Sci. Rev.*, **32**, 405, 1982.

- Kuril'chik, V. N., V. P. Grigor'eva, A. Tirpak, and L. Fischer, The Earth as source of narrowband emissions, *Pis'ma v Astron. Zhurn.*, **14**(7), 659, 1988.
- Kuril'chik, V. N., V. P. Grigor'eva, A. Tirpak, S. V. Mironov, L. Fischer, and A. Yaroshevich, The discovery and investigation of the nonthermal continuum at the frequencies 1486 and 992 kHz, *Cosmic Res.*, **30**(1), 86, 1992a.
- Kuril'chik, V. N., V. P. Grigor'eva, A. Tirpak, S. V. Mironov, L. Fischer, and A. Yaroshevich, Observations of the nonthermal continuum in the Southern subpolar region of the terrestrial magnetosphere by Prognoz-10 Intercosmos, *Cosmic Res.*, **30**(2), 186, 1992b.
- Kuril'chik, V. N., V. P. Grigor'eva, A. Tirpak, S. V. Mironov, L. Fischer, and A. Yaroshevich, Observations of the subauroral nonthermal continuum by Prognoz-10 satellite outside the terrestrial magnetosphere, *Cosmic Res.*, **30**, N3, 287, 1992c.
- Kurth W. S., Continuum radiation in planetary magnetospheres, in *Planetary Radio Emissions III*, edited by H. O. Rucker, S. J. Bauer, and M. L. Kaiser, Austrian Academy of Sciences Press, Vienna, 329–350, 1992.
- Kurth, W. S., D. D. Barbosa, F. L. Scarf, D. A. Gurnett, and R. L. Poynter, Low-frequency radio emissions from Jupiter: Jovian kilometric radiation, *Geophys. Res. Lett.*, **6**, 747, 1979.
- Kurth, W. S., D. D. Barbosa, D. A. Gurnett, and F. L. Scarf, Electrostatic waves in the Jovian magnetosphere, *Geophys. Res. Lett.*, **7**, 57, 1980a.
- Kurth, W. S., D. A. Gurnett, and F. L. Scarf, Spatial and temporal studies of Jovian kilometric radiation, *Geophys. Res. Lett.*, **7**, 61, 1980b.
- Kurth, W. S., D. A. Gurnett, and R. R. Anderson, Escaping nonthermal continuum radiation, *J. Geophys. Res.*, **86**, 5519–2763, 1981a.
- Kurth, W. S., D. A. Gurnett, and F. L. Scarf, Control of Saturn's kilometric radiation by Dione, *Nature*, **292**, 742–745, 1981b.
- Kurth, W. S., J. D. Sullivan, D. A. Gurnett, F. L. Scarf, H. S. Bridge, and E. C. Sittler Jr., Observation of Jupiter's distant magnetotail and wake, *J. Geophys. Res.*, **87**, 10373, 1983.
- Kurth, W. S., D. A. Gurnett, F. L. Scarf, and R. L. Poynter, Detection of a radio emission at 3 kHz in the outer heliosphere, *Nature*, **312**, 27, 1984.
- Kurth, W. S., D. A. Gurnett, and F. L. Scarf, Jovian type III radio bursts, *J. Geophys. Res.*, **94**, 6917–6924, 1989.
- Kurth, W. S., and D. A. Gurnett, New observations of the low frequency interplanetary radio emissions, *Geophys. Res. Lett.*, **18**, 1801, 1991.
- Kurth, W. S., S. J. Bolton, D. A. Gurnett, and S. Levin, A determination of the source of Jovian hectometric radiation via occultation by Ganymede, *Geophys. Res. Lett.*, **24**, 1171, 1997a.

- Kurth, W. S., D. A. Gurnett, A. Roux, and S. J. Bolton, Ganymede: A new radio source, *Geophys. Res. Lett.*, **24**, 2167, 1997b.
- Kurths, J., A. O. Benz, and M. J. Aschwanden, The attractor dimension of solar decimetric radio pulsations, *Astron. Astrophys.*, **248**, 270, 1991.
- LaBelle, J., Radio noise of auroral origin: 1968–1988, *J. Atmos. Terr. Phys.*, **51**, 197, 1989.
- LaBelle, J., and A. T. Weatherwax, Ground-based observations of LF/MF/HF radio waves of auroral origin, in *Proceedings of 1992 Cambridge Workshop in Geoplasma Physics*, edited by T. Chang, Scientific Publishers, Cambridge, Mass., 223, 1993.
- LaBelle, J., A. T. Weatherwax, M. L. Trimpi, R. Brittain, R. D. Hunsucker, and J. V. Olson, The spectrum of LF/MF/HF radio noise at ground level during geomagnetic substorms, *Geophys. Res. Lett.*, **21**, 2749, 1994.
- LaBelle, J., M. L. Trimpi, R. Brittain, and A. T. Weatherwax, Fine structure of auroral roar emissions, *J. Geophys. Res.*, **100**, 21953, 1995.
- LaBelle, J., S. G. Shepherd, and M. L. Trimpi, Observations of auroral medium frequency burst emissions, *J. Geophys. Res.*, **102**, 22221, 1997.
- LaBelle, J., and R. A. Treumann, An interplanetary type III storm observed by Ampte/Irm, *J. Geophys. Res.*, not published, 1997.
- Lacombe, C., A. Mangeney, C. C. Harvey, and J. D. Scudder, Electron plasma waves upstream of the Earth's bow shock, *J. Geophys. Res.*, **90**, 73, 1985.
- Ladreitner, H. P., and Y. Leblanc, Prediction of the Ulysses Jovian hectometric observations, *J. Geophys. Res.*, **96**, 21207, 1991.
- Ladreitner, H. P., Y. Leblanc, G. K. F. Rabl, and H. O. Rucker, Emission characteristics and source location of the smooth Neptunian kilometric radiation, *J. Geophys. Res.*, **96**, 19101–19110, 1991.
- Ladreitner, H. P., P. Zarka, and A. Lecacheux, Direction finding study of Jovian hectometric and broadband kilometric radio emissions: evidence for their auroral origin, *Planet. Space Sci.*, **42**, 919–931, 1994.
- Ladreitner, H. P., P. Zarka, A. Lecacheux, W. Macher, H. O. Rucker, R. Manning, D. A. Gurnett, and W. S. Kurth, Analysis of electromagnetic wave direction finding performed by spaceborne antennas using singular value decomposition techniques, *Radio Sci.*, **30**, 1699–1712, 1995.
- Lallement, R., J.-L. Bertaux, and J. T. Clark, Deceleration of interstellar hydrogen at the heliospheric interface, *Science*, **260**, 1095, 1993.
- Lallement, R., J. L. Linsky, J. Lequeux, and V. B. Baranov, Physical and chemical characteristics of the ISM inside and outside the heliosphere, *Space Sci. Rev.*, **78**, 299, 1996.
- Lang, K. G., A. H. Waibel, G. E. Hinton, A time delay neural network architecture for isolated word recognition, *Neural Networks*, **3**, 23–43, 1990.

- Lang, K. R., *Astrophysical Data: Planets and Stars*, Springer, New York, 1991.
- Larson, D. E., R. P. Lin, J. P. McFadden, R. E. Ergun, C. W. Carlson, K. A. Anderson, T. D. Phan, M. P. McCarthy, G. K. Parks, H. Rème, J. M. Bosqued, C. d'Uston, T. R. Sanderson, K.-P. Wenzel, and R. P. Lepping, Probing the Earth's bow shock with upstream electrons, *Geophys. Res. Lett.*, **23**, 2203, 1997.
- Leblanc, Y., On the arc structure of the DAM Jupiter emissions, *J. Geophys. Res.*, **86**, 8546, 1981.
- Leblanc, Y., The kilometric Jovian radio sources at the Io torus, in *Planetary Radio Emissions II*, edited by H. O. Rucker, S. J. Bauer, and B. M. Pedersen, Austrian Academy of Sciences Press, Vienna, 149, 1988.
- Leblanc, Y., F. Genova, and J. de la Noë, The Jovian S-bursts: I. Occurrence with L-bursts and frequency limit, *Astron. Astrophys.*, **86**, 342–348, 1980a.
- Leblanc, Y., M. G. Aubier, C. Rosolen, F. Genova, and J. de la Noë, The Jovian S-bursts: II. Frequency drift measurements at different frequencies throughout several storms, *Astron. Astrophys.*, **86**, 349–354, 1980b.
- Leblanc, Y., and F. Genova, The Jovian S-burst sources, *J. Geophys. Res.*, **86**, 8564–8568, 1981.
- Leblanc, Y., G. A. Dulk, and F. Bagenal, On Io's excitation and the origin of Jupiter's decametric radiation, *Astron. Astrophys.*, **290**, 660–673, 1994.
- Leblanc, Y., G. A. Dulk, and S. Hoang, The low radio-frequency limit of solar type III bursts: Ulysses observations in and out of the ecliptic, *Geophys. Res. Lett.*, **22**, 3429, 1995.
- Lecacheux, A., Direction finding of a radiosource of unknown polarization with short electric antennas on a spacecraft, *Astron. Astrophys.*, **70**, 701–706, 1978.
- Lecacheux, A., Polarization aspects from planetary radio emissions, in *Planetary Radio Emissions II*, edited by H. O. Rucker, S. J. Bauer, and B. M. Pedersen, Austrian Academy of Sciences Press, Vienna, 311–325, 1988.
- Lecacheux, A., N. Meyer-Vernet, and G. Daigne, Jupiter's decametric radio emission: a nice problem of optics, *Astron. Astrophys.*, **94**, L9-L12, 1981.
- Lecacheux, A., and F. Genova, Source location of Saturn kilometric radio emission, *J. Geophys. Res.*, **88**, 8993–8998, 1983.
- Lecacheux, A., and F. Biraud, An Earth-based attempt to detect SED at 21 centimeters, in *Planetary Rings*, edited by A. Brahic, CNES/Cepadues, Toulouse, 319–324, 1984.
- Lecacheux, A., J. L. Steinberg, S. Hoang, and G. A. Dulk, Characteristics of Type III bursts in the solar wind from simultaneous observations onboard ISEE-3 and Voyager, *Astron. Astrophys.*, **217**, 237, 1989.
- Lecacheux, A., A. Boischot, M. Y. Boudjada, and G. A. Dulk, Spectra and complete polarization state of two, Io-related, radio storms from Jupiter, *Astron. Astrophys.*, **251**, 339–348, 1991.

- Lecacheux, A., B. M. Pedersen, P. Zarka, M. G. Aubier, M. D. Desch, W. M. Farrell, M. L. Kaiser, R. J. MacDowall, and R. G. Stone, In ecliptic observations of Jovian radio emissions by Ulysses comparison with Voyager results, *Geophys. Res. Lett.*, **19**, 1307, 1992.
- Leitinger, R., G. Schmidt, and A. Tauriainen, An evaluation method combining the differential Doppler measurements from two stations that enables the calculation of the electron content of the ionosphere, *J. Geophysics (Zs. Geophysik)*, **41**, 201–213, 1975.
- Leitinger, R., G. Kirchengast, and H. P. Ladreiter, Ionospheric tomography with GPS/MET and NNSS, in *Proc. Ionospheric Effects Symposium 1996*, edited by J. Goodman, Alexandria, VA, USA, 2A-4-1 – 2A-4-8, 1996.
- Lengyel-Frey, D., and R. G. Stone, Characteristics of interplanetary type II radio burst emission and the relationship to shock and plasma properties, *J. Geophys. Res.*, **85**, 159, 1985.
- Lepping, R. P., M. H. Acuña, L. F. Burlaga, W. M. Farrell, J. A. Slavin, K. H. Schatten, F. Mariani, N. F. Ness, F. M. Neubauer, Y. C. Whang, J. B. Byrnes, R. S. Kennon, P. V. Panetta, J. Scheifele, and E. M. Worley, The Wind magnetic field investigation, *Space Sci. Rev.*, **71**, 207, 1995.
- Le Quéau, D., Planetary radio emissions from high magnetic latitudes: the “Cyclotron-Maser” theory, in *Planetary Radio Emissions II*, edited by H. O. Rucker, S. J. Bauer, and B. M. Pedersen, Austrian Academy of Sciences Press, Vienna, 381–398, 1988.
- Le Quéau, D., R. Pellat, and A. Roux, The Maser Synchrotron Instability in an inhomogeneous medium: application to the generation of the Auroral Kilometric Radiation, *Ann. Geophys.*, **3**, 273–292, 1985.
- Le Quéau, D., and P. Louarn, Analytical study of the relativistic dispersion: application to the generation of the AKR, *J. Geophys. Res.*, **94**, 2605, 1989.
- Leroy, M. M., and A. Mangeney, A theory of energization of solar wind electrons by Earth’s bow shock, *Ann. Geophys.*, **2**, 449, 1984.
- Lewis, J. S., Lightning of Jupiter: rate, energetic, and effects, *Science*, **210**, 1351, 1980.
- Lifshitz, E. M., and L. P. Pitaevsky, Physical Kinetics, in *Pergamon*, New York, 1981.
- Lin, C. S., D. Winske, and R. L. Tokar, Simulation of the electron acoustic instability in the polar cusp, *J. Geophys. Res.*, **90**, 8269, 1985.
- Lin, C. S., H. K. Wong, J. Koga, and J. L. Burch, Excitation of low-frequency waves by auroral electron beams, *J. Geophys. Res.*, **94**, 1327, 1989.
- Lin, R. P., Energetic solar electrons in the interplanetary medium, *Solar Phys.*, **100**, 537, 1985.
- Lin, R. P., WIND observations of particle distributions and radio waves, Lecture Notes in Physics (LNP) Vol.483, 1997.

- Louarn, P., Auroral planetary radio emissions: theoretical aspects, *Adv. Space Res.*, **12**(8), 121–134, 1992.
- Louarn, P., A. Roux, H. de Feraudy, D. Le Quéau, M. Andri, and L. Matson, Trapped electrons as a free energy source for the auroral kilometric radiation, *J. Geophys. Res.*, **95**, 5983, 1990.
- Louarn, P., J. E. Wahlund, T. Chust, H. de Feraudy, A. Roux, B. Holback, P. O. Dovner, A. I. Eriksson, and G. Holmgren, Observation of kinetic Alfvén waves by the Freja spacecraft, *Geophys. Res. Lett.*, **21**, 1847–1850, 1994.
- Louarn, P., and D. Le Quéau, Generation of the Auroral Kilometric Radiation in plasma cavities: - I. Experimental study, *Planet. Space Sci.*, **44**, 199–210, 1996a.
- Louarn, P., and D. Le Quéau, Generation of the Auroral Kilometric Radiation in plasma cavities: - II. The cyclotron maser instability in small scale sources, *Planet. Space Sci.*, **44**, 211–224, 1996b.
- Lyne, A. G., and F. Graham-Smith, *Pulsar Astronomy*, Cambridge University Press, 1990.
- Lyons, L. R., R. M. Thorne, and C. F. Kennel, Pitch-angle diffusion of radiation belt electrons within the plasmasphere, *J. Geophys. Res.*, **77**, 3455, 1972.
- MacDowall, R. J., M. L. Kaiser, M. D. Desch, W. M. Farrell, R. A. Hess, and R. G. Stone, Quasiperiodic Jovian radio bursts: Observations from the Ulysses radio and plasma wave experiment, *Planet. Space Sci.*, **41**, 1059, 1993.
- Macek, W. M., Emission mechanism for low-frequency radiation in the outer heliosphere, *Space Sci. Rev.*, **76**, 231, 1996.
- Maeda, K., and T. D. Carr, Measurement of Jovian decametric Io-related source location and beam shape, *J. Geophys. Res.*, **97**, 1549–1556, 1992.
- Maeda, K., N. Tokimasa, and T. Kuroda, A report on observations of Jovian decametric radiation during the SL9/Jupiter impact period, *Annual Report of the Nishi-Harima Astronomical Observatory*, 1996.
- Maltseva, O. A., and G. P. Chernov, Whistler trajectories in the solar corona, *Kinematika i Fizika Nebesnykh Tel*, **5**, 39, 1989.
- Manchester, R. N., *Pulsars*, W. H. Freeman and Company, San Francisco, 1977.
- Mann, G., Theory and observations of coronal shock waves, in *Coronal Magnetic Energy Release*, edited by A. O. Benz and A. Krüger, Springer, Berlin, 183, 1995.
- Mann, G., M. Karlicky, and U. Motschmann, On the intermediate drift burst model, *Solar Phys.*, **110**, 381, 1987.
- Mann, G., H. Aurass, W. Voigt, and J. Pashke, Preliminary observations of solar type II bursts with the new radio spectrograph in Trensorf, *ESA-Journal*, **SP-348**, 25, 1992.

- Mann, G., H.-T. Claßen, and H. Auraß, Characteristics of coronal shock waves and solar type II radio bursts, *Astron. Astrophys.*, **295**, 775, 1994a.
- Mann, G., H. Lühr, and W. Baumjohann, Statistical analysis of short large-amplitude magnetic field structures in the vicinity of the quasi-parallel bow shock, *J. Geophys. Res.*, **99**, 13315, 1994b.
- Mann, G., and H.-T. Claßen, Electron acceleration to high energies at quasi-parallel shock waves in the solar corona, *Astron. Astrophys.*, **304**, 576, 1995.
- Manning, R., and J. Fainberg, A new method of measuring radio source parameters of a partially polarized distributed source from spacecraft observations, *Space Sci. Instrum.*, **5**, 161, 1980.
- Maroulis, D., O. Dumas, J.-L. Bougeret, C. Caroubalos, and M. Poquerusse, The digital system Artemis for real-time processing of radio transient in the solar corona, *Solar Phys.*, **147**, 359, 1993.
- Marsch, E., Kinetic physics of the solar wind plasma, in *Physics of the Inner Heliosphere* Vol. 2, edited by R. Schwenn and E. Marsch, Springer, Berlin, 103, 1990.
- Marth, A., Ephemeris for physical observations of Jupiter, *Mon. Not. Roy. Astro. Soc.*, **45**, 504, 1885.
- Maslacovic, H., S. Linscott, I. R. Oslick, M. Twicken, Excising radio frequency interference using the discrete wavelet transform, in *International Symposium on Time-Frequency and Time-Scale Analysis*, IEEE Signal Processing Systems, Paris, France, 349–352, 1996.
- Matsumoto, H., I. Nagano, R. R. Anderson, H. Kojima, K. Hashimoto, M. Tsutsui, T. Okada, I. Kimura, Y. Omura, and M. Okada, Plasma wave observations with GEOTAIL Spacecraft, *J. Geomag. Geoelectr.*, **46**, 59–95, 1994.
- May, J., T. D. Carr, and M. D. Desch, Decametric radio measurements of Jupiter’s rotation period, *Icarus*, **40**, 87–93, 1979.
- Mayor, M., and D. Queloz, A Jupiter-mass companion to a solar-type star, *Nature*, **378**, 355, 1995.
- McKean, M. E., and R. M. Winglee, A model for the frequency fine structure of auroral kilometric radiation, *J. Geophys. Res.*, **96**, 21055, 1991.
- McLean, D. J., and N. R. Labrum (eds.), *Solar Radiophysics*, Cambridge Univ. Press, Cambridge, 1985.
- Mead, G. D., and W. N. Ness, Jupiter’s radiation belts and the sweeping effect of its satellites, *J. Geophys. Res.*, **78**, 2793, 1973.
- Melatos, A., and P. A. Robinson, Transit time interactions in magnetized plasmas, *Phys. Plasmas*, **3**, 1263, 1996.
- Mel’nik, V. N., Gas-dynamic theory of flight of fast electron flux in plasma, in *Proc. 17th EPS Conf. Contr. Fusion and Plasma Heating, Amsterdam*, **14B**, part 4, 1729–1732, 1989.

- Mel'nik, V. N., "Gas-dynamic" expansion of a fast-electron flux in plasma, *Plasma Physics Reports*, **21**(1), 94–96, 1995.
- Melrose, D. B., Plasma emission mechanisms, in *Solar Radiophysics*, edited by D. J. McLean and N. R. Labrum, Cambridge Univ. Press, Cambridge, 177, 1985.
- Melrose, D. B., A phase-bunching mechanism for fine structure in AKR and Jovian decameter radiation, *J. Geophys. Res.*, **91**, 7970–7980, 1986.
- Melrose, D. B., Plasma emission: A review, *Solar Phys.*, **111**, 89, 1987.
- Melrose, D. B., and G. A. Dulk, On the elliptical polarization of Jupiter's decametric radio emission, *Astron. Astrophys.*, **249**, 250–257, 1991.
- Menietti, J. D., J. L. Green, S. Gulkis, and F. Six, Three-dimensional ray tracing of the Jovian magnetosphere in the low-frequency range, *J. Geophys. Res.*, **89**, 1489–1495, 1984.
- Menietti, J. D., H. K. Wong, W. S. Kurth, D. A. Gurnett, L. J. Granroth, and J. B. Groene, Discrete stimulated auroral kilometric radiation observed in the Galileo and DE 1 wideband data, *J. Geophys. Res.*, **101**, 10673, 1996.
- Meyer-Vernet, N., Aspects of Debye shielding, *Am. J. Phys.*, **61**, 249–257, 1993.
- Meyer-Vernet, N., On the thermal noise "temperature" in an anisotropic plasma, *Geophys. Res. Lett.*, **21**, 397–400, 1994.
- Meyer-Vernet, N., and C. Perche, Tool kit for antennae and thermal noise near the plasma frequency, *J. Geophys. Res.*, **94**, 2405–2415, 1989.
- Meyer-Vernet, N., S. Hoang and M. Moncuquet, Bernstein waves in the Io torus: a novel kind of electron temperature sensor, *J. Geophys. Res.*, **98**, 21163–21176, 1993.
- Meyer-Vernet, N., M. Moncuquet, and S. Hoang, Temperature inversion in the Io plasma torus, *Icarus*, **116**, 202–213, 1995.
- Mikhailovskii, A. B., *Theory of Plasma Instabilities*, Consultant Bureau, New York, 1974.
- Miniere, X., Approche Réseaux de Neurones pour la Classification d'Emissions Structurées de Type Sifflement, Thèse de doctorat, Université Paris VII, 1994.
- Mitchell, C. N., D. G. Jones, L. Kersley, S. E. Pryse, and I. K. Walker, Imaging of field-aligned structures in the auroral ionosphere, *Ann. Geophys.*, **13**, 1311–1319, 1995.
- Mogro-Campero, A., Absorption of radiation belt particles by the inner satellites of Jupiter, in *Jupiter*, edited by T. Gehrels, University of Arizona Press, Tucson, 1190–1214, 1976.
- Mollwo, L., Interpretation of patterns of drifting zebra stripes, *Solar Phys.*, **83**, 305, 1983.
- Mollwo, L., Magnetohydrostatic field in the region of zebra-patterns in solar type IV dm-bursts, *Solar Phys.*, **116**, 323, 1988.
- Moncuquet, M., Equilibre du tore de plasma d'Io: observations d'Ulysse et modelisation, Thèse de Doctorat de l'Université Paris VII, 1997.

- Moncuquet, M., N. Meyer-Vernet, and S. Hoang, Dispersion of electrostatic waves in the Io plasma torus and derived electron temperature, *J. Geophys. Res.*, **100**, 21697–21708, 1995.
- Moncuquet, M., N. Meyer-Vernet, S. Hoang, R. J. Forsyth, and P. Canu, Detection of Bernstein wave forbidden bands in the Jovian magnetosphere: a new way to measure the electron density, *J. Geophys. Res.*, **102**, 2373, 1997.
- Morioka, A., H. Oya, and S. Miyatake, Terrestrial kilometric radiation observed by satellite JIKKIKEN (EXOS-B), *J. Geomagn. Geoelectr.*, **33**, 37, 1981.
- Morris, D., and G. L. Berge, Measurements of the polarization and angular extent of the decimeter radiation from Jupiter, *Astrophys. J.*, **136**, 276, 1962.
- Morrison, D. (Ed.), *Satellites of Jupiter*, The University of Arizona Press, Tucson, 1982.
- Newman, D. L., P. A. Robinson, and M. V. Goldman, Field structure of collapsing wave packets in 3D strong Langmuir turbulence, *Phys. Rev. Lett.*, **62**, 2132, 1989.
- Ogawara, Y., T. Takano, T. Kato, T. Kosugi, S. Tsuneta, T. Watanabe, I. Kondo, and Y. Uchida, The Solar-A Mission: An overview, *Solar Phys.* **136**, 1, 1991.
- Ogilvie, K. W., D. J. Chornay, R. J. Fitzenreiter, F. Hunsaker, J. Keller, J. Lobell, G. Miller, J. D. Scudder, E. C. Sittler Jr., R. B. Torbert, D. Bodet, G. Needell, A. J. Lazarus, J. T. Steinberg, J. H. Tappan, A. Mavretic, and E. Gergin, SWE, A comprehensive plasma instrument for the WIND spacecraft, *Space Sci. Rev.*, **71**, 55–77, 1995.
- Omura, Y., and M. Matsumoto, Competing processes of whistler and electrostatic instabilities in the magnetosphere, *J. Geophys. Res.*, **92**, 8649, 1987.
- Oppenheim, A. V., and R. W. Schaffer, *Digital Signal Processing*, Prentice Hall, New York, 1975.
- Ortega-Molina, A., and G. Daigne, Polarization response of two crossed monopoles on a spacecraft, *Astron. Astrophys.*, **130**, 301–310, 1984.
- Ortega-Molina, A., and A. Lecacheux, Polarization response of the Voyager-PRA experiment at low frequencies, *Astron. Astrophys.*, **229**, 558, 1990.
- Ott, M., A. Witzel, A. Quirrenbach, T. P. Krichbaum, K. J. Standke, C. J. Schalinski, and C. A. Hummel, An updated list of radio flux density calibrators, *Astron. Astrophys.*, **284**, 331–339, 1994.
- Oya, H., Enhancements of Jovian decameter radiations after the Shoemaker-Levy 9 comet crash event in 1994, *Solar-Terrestrial Energy Program (STEP) Ground-based, Balloon-borne, and Rocket-borne observations Situation Center (GBRSC) News*, **5**(3), 9, 1995.
- Parthasarathy, R., and F. T. Berkey, Radio noise from the auroral electrons, *J. Atmos. Terr. Phys.*, **26**, 199–203, 1964.
- Perraut, S., A. Roux, P. Louarn, D. A. Gurnett, W. S. Kurth, and K. K. Khurana, Mode conversion at the Jovian plasma sheet boundary, *J. Geophys. Res.*, **103**, 14995, 1997.

- Phillips, J. L., S. J. Bame, W. C. Feldman, B. E. Goldstein, J. T. Gosling, C. M. Hammond, D. J. McCommas, M. Neugebauer, E. E. Scime, and S. T. Suess, Ulysses solar wind plasma observations at high southerly latitudes, *Science*, **268**, 1030, 1995.
- Poquérusse, M., S. Hoang, J.-L. Bougeret, and M. Moncuquet, Reconstruction of the connection of an interplanetary type III burst to a coronal type III group, in Proceedings of the Eight International Solar Wind Conference AIP press, 62-65, 1996.
- Prangé, R., D. Rego, D. Southwood, P. Zarka, S. Miller, and W. Ip, Rapid energy dissipation and variability of the Io-Jupiter electrodynamic circuit, *Nature*, **379**, 323–325, 1996.
- Press, W. H., B. P. Flannery, S. A. Teukolsky, and W. T. Vetterling, *Numerical Recipes, the Art of Scientific Computing*, Cambridge University Press, 1986.
- Pritchett, P. L., Relativistic dispersion, the cyclotron maser instability and auroral kilometric radiation, *J. Geophys. Res.*, **89**, 8957, 1984.
- Pritchett, P. L., Cyclotron maser radiation from a source structure localised perpendicular to the ambient magnetic field, *J. Geophys. Res.*, **91**, 13569, 1986.
- Pritchett, P. L., and R. M. Winglee, Generation and propagation of kilometric radiation in the auroral plasma cavity, *J. Geophys. Res.*, **94**, 129, 1989.
- Pryse, S. E., C. N. Mitchell, J. A. T. Heaton, and L. Kersley, Travelling ionospheric disturbances imaged by tomographic techniques, *Ann. Geophys.*, **13**, 1325–1342, 1995.
- Raoult, A., and M. Pick, Space-time evolution of type III burst sources observed with the Nançay Radioheliograph-implications for the size of emitting source, *Astron. and Astrophys.*, **87**, 63–67, 1980.
- Raterron, J.-M., Réalisation d'un Spectrographe Acousto-Optique: Analyse et traitement de l'information, Thèse de Doctorat, Observatoire de Paris-Meudon/Université Paris-Sud (XI), Orsay, 1985.
- Reames, D. V., The dark side of the solar flare myth, *Eos*, **76**, 405, 1995.
- Reber, A., and G. R. A. Ellis, Cosmic radio-frequency radiation near 1 MHz, *J. Geophys. Res.*, **61**, 1, 1956.
- Reiner M. J., J. Fainberg, and R. G. Stone, Source characteristics and locations of hectometric radio emissions from the northern Jovian hemisphere, *Geophys. Res. Lett.*, **20**, 321, 1993a.
- Reiner, M. J., J. Fainberg, R. G. Stone, M. L. Kaiser, M. D. Desch, B. Manning, P. Zarka, and B.-M. Pedersen, Source characteristics of Jovian narrow-band kilometric radio emissions, *J. Geophys. Res.*, **98**, 13163, 1993b.
- Reiner, M. J., J. Fainberg, and R. G. Stone, Source characteristics and locations of Jovian hectometric radio emissions, *J. Geophys. Res.*, **98**, 18767, 1993c.
- Reiner, M. J., J. Fainberg, and R. G. Stone, Interplanetary type III radio bursts observed from high southern heliographic latitudes, *Space Sci. Rev.*, **72**, 255, 1995.

- Reiner, M. J., M. L. Kaiser, J. Fainberg, M. D. Desch, and R. G. Stone, 2 f_p radio emissions from the vicinity of the Earth's foreshock: WIND observations, *Geophys. Res. Lett.*, **23**, 1247–1250, 1996.
- Richard, M. D., and R. P. Lippmann, Neural network classifiers estimate Bayesian a posteriori probabilities, *Neural Computation*, **3**, 461–483, 1991.
- Rickett, B. J., Interstellar scattering and scintillation of radio waves, *Ann. Rev. Astron. Astrophys.*, **15**, 479, 1977.
- Riddle, A. C., Antenna pattern testing on spacecraft model, *Rep. MEM-MJS-76-S100*, Lab. for Extraterr. Phys., NASA Goddard Space Flight Center, Greenbelt, Md., 1976.
- Riddle, A. C., and J. W. Warwick, Redefinition of System III longitude, *Icarus*, **27**, 457–459, 1976.
- Riihimaa, J. J., Structured events in the dynamic spectra of Jupiter's decametric radio emission, *Astron. J.*, **73**, 265–270, 1968.
- Riihimaa, J. J., Modulation lanes in the dynamic spectra of Jovian L bursts, *Astron. Astrophys.*, **4**, 180–188, 1970.
- Riihimaa, J. J., Radio spectra of Jupiter, *Technical Report S-22*, Dept. of Electrical Engineering, University of Oulu, Finland, 1971.
- Riihimaa, J. J., Modulation lanes in the dynamic spectra of Jupiter's decametric radio emission, *Annales Academiae Scientiarum Fennicae*, **A VI**, 1–39, 1974.
- Riihimaa, J. J., S-bursts in Jupiter's decametric radio spectra, *Astrophys. Space Sci.*, **51**, 363–383, 1977.
- Riihimaa, J. J., Drift rates of Jupiter's S-bursts, *Nature*, **279**, 783, 1979.
- Riihimaa, J. J., Evolution of the spectral fine structure of Jupiter's decametric S-storms, *Earth, Moon and Planets*, **53**, 157–182, 1991.
- Riihimaa, J. J., Wide-range high-resolution S-bursts spectra of Jupiter, University of Oulu, Finland, 1992.
- Riihimaa, J. J., Modulation lanes revisited, *Technical Report*, Dept. of Electrical Engineering, University of Oulu, Finland, 1993.
- Riihimaa, J. J., and T. D. Carr, Interaction of S- and L-bursts in Jupiter's decametric radio spectra, *The Moon and the Planets*, **25**, 373, 1981.
- Rissanen, J., *Stochastic Complexity in Statistical Inquiry*, World Scientific, Singapore, 1989.
- Roberts, B., P. M. Edwin, and A. O. Benz, On coronal oscillations, *Astrophys. J.*, **279**, 857, 1984.
- Roberts, J. A., The pitch angles of electrons in Jupiter's radiation belt, *Proceedings of the ASA*, **3**, 53–55, 1976.

- Rodger, A. S., R. J. Moffett, and S. Quegan, The role of ion drift in the formation of ionization troughs in the mid and high-latitude ionosphere – A review, *J. Atmos. Terr. Phys.*, **54**, 1, 1992.
- Rompolt, B., and T. Kraus, The Wrocław Observatory Coronagraph, *Acta Univ. Vratislaviensis* No.77, Mat.-Fiz.-Astr. VIII, 171, 1969.
- Rönmark, K., Conversion of upper hybrid waves into magnetospheric radiation, in *Planetary Radio Emissions III*, edited by H. O. Rucker, S. J. Bauer, and M. L. Kaiser, Austrian Academy of Sciences Press, Vienna, 405–417, 1992.
- Rosenberg, T. J., S. Singh, C. S. Wu, J. LaBelle, R. A. Treumann, U. S. Inan, and L. J. Lanzerotti, Coincident bursts of auroral kilometric radiation and VLF emissions associated with a type III solar radio noise event, *J. Geophys. Res.*, **100**, 281, 1995.
- Rostoker, G., J. C. Samson, F. Creutzberg, T. J. Hughes, D. R. McDiarmid, A. G. McNamara, A. Vallance Jones, D. D. Wallis, and L. L. Cogger, CANOPUS – A ground-based instrument array for remote sensing the high latitude ionosphere during the ISTP/GGS program, *Space Sci. Rev.*, **71**, 743–760, 1995.
- Roux, A., A. Hilgers, H. de Feraudy, D. Le Quéau, P. Louarn, S. Perraut, A. Bahnsen, M. Jespersen, E. Ungstrup, and M. Andre, Auroral kilometric radiation sources: in situ and remote sensing observations from Viking, *J. Geophys. Res.*, **98**, 11657, 1993.
- Rucker, H. O., M. D. Desch, and G. K. F. Rabl, Persistence of solar wind features, *Ann. Geophys.*, **86**, 259, 1986.
- Rucker, H. O., and V. Mostetschnig, Interferometric observations at 16.7 and 22.2 MHz at the observatory Lustbühel, in *Planetary Radio Emissions II*, edited by H. O. Rucker, S. J. Bauer, and B. M. Pedersen, Austrian Academy of Sciences Press, Vienna, 87–93, 1988.
- Rucker, H. O., G. K. F. Rabl, and M. D. Desch, External control of the SKR by the solar wind: comparison between Voyager 1 and 2 observations, *Ann. Geophys.*, **7**(4), 341–354, 1989.
- Rucker, H. O., V. Mostetschnig, H. P. Ladreiter, and G. K. F. Rabl, Spectrometric observations of Jupiter S-bursts at the observatory Lustbühel, in *Planetary Radio Emissions III*, edited by H. O. Rucker, S. J. Bauer, and M. L. Kaiser, Austrian Academy of Sciences Press, Vienna, 115–124, 1992.
- Rucker, H. O., W. Macher, R. Manning, and H. P. Ladreiter, Cassini model rheometry, *Radio Sci.*, **31**, 1299–1311, 1996.
- Rukhadze, A. A., A. F. Alexandrov, and L. S. Bogdankevich, *Principles of Plasma Electrodynamics*, Vysshaya Shkola, Moscow, 1988.
- Russell, D. A., D. F. DuBois, and H. A. Rose, Nucleation in two-dimensional Langmuir turbulence, *Phys. Rev. Lett.*, **60**, 581, 1988.
- Rutov, D. D., and R. Z. Sagdeev, Quasi-gasdynamic description of hot electron cloud in cold plasma, *Zh. Exp. Teor. Fiz.*, **58**(2), 739–745, 1970, (in Russian).

- Ryabov, B. P., Decametric radio emission of Jupiter. II. Localization of S-component sources, *Astron. Vestnik*, **20**, 20–34, 1986 (in Russian).
- Ryabov, B. P., Decametric radio emission of Jupiter. III. Several physical characteristics of the S-burst sources, *Astron. Vestnik*, **24**, 103–118, 1990a (in Russian).
- Ryabov, B. P., Radiation pattern of the S-component in the decametric radio emission of Jupiter, *Astron. Vestnik*, **24**, 221–231, 1990b (in Russian).
- Ryabov, B. P., Jovian S-emission: Decametric high sensitivity observations and model of radiation source, in *Planetary Radio Emissions III*, edited by H. O. Rucker, S. J. Bauer, and M. L. Kaiser, Austrian Academy of Sciences Press, Vienna, 125–144, 1992.
- Ryabov, B. P., Jovian S emission: model of radiation source, *J. Geophys. Res.*, **99**, 8441–8449, 1994.
- Ryabov, B. P., A. V. Arkhipov, and V. A. Shevchenko, Decametric radio emission of Jupiter. I. The morphology of S-burst storms, *Astron. Vestnik*, **19**, 296–318, 1985 (in Russian).
- Ryabov, B. P., and N. N. Gerasimova, *Sporadic Radio Emission of Jupiter at Decameter Wavelength*, Naukova Dumka, Kiev, 237 pp., 1990 (in Russian).
- Sanchez-Lavega, A., F. Colas, J. Lecacheux, P. Laques, D. Parker, and I. Miyazaki, The great white spot and disturbances in Saturn's equatorial atmosphere during 1990, *Nature*, **353**, 397–401, 1991.
- Sazhin, S. S., K. Bullough, and M. Hayakawa, Auroral hiss: A review, *Planet. Space Sci.*, **41**, 153, 1993.
- Scarf, F. L., D. A. Gurnett, and W. S. Kurth, Jupiter plasma wave observations: An initial Voyager 1 overview, *Science*, **204**, 991, 1979.
- Schneider, J., The Extra-Solar Planets Encyclopedia, Internet site at: <http://www.obspm.fr/planets>, Observatoire de Paris, Meudon, 1997.
- Scholer, M., Upstream waves, shocklets, short large-amplitude magnetic structures and cyclic behaviour of oblique, quasi-parallel collisionless shocks, *J. Geophys. Res.*, **98**, 47, 1993.
- Scholer, M., M. Fujimoto, and H. Kucharek, Quasi-parallel shock reformation: Two dimensional simulations, *Eur. Space Agency Spec. Publ.*, **ESA SP-346**, 59, 1992.
- Schwartz, S. J., M. F. Thomsen, and J. T. Gosling, Ions upstream of Earth's bow shock: A theoretical comparison of alternative source populations, *J. Geophys. Res.*, **88**, 2039, 1983.
- Schwartz, S. J., and D. Burgess, Quasi-parallel shocks: a patchwork of three-dimensional structures, *Geophys. Res. Lett.*, **18**, 373, 1991.
- Schwartz, S. J., D. Burgess, W. P. Wilkenson, R. L. Kessel, M. Dunlop, and H. Lühr, Observations of short large amplitude magnetic structures at a quasi-parallel shock, *J. Geophys. Res.*, **97**, 4209, 1992.

- Scokopke, N., G. Paschmann, S. J. Bame, J. T. Gosling, and C. T. Russell, Evolution of ion distributions across the nearly perpendicular bow shock: Specularly and non-specularly reflected ions, *J. Geophys. Res.*, **88**, 6121, 1983.
- Scudder, J. D., On the causes of temperature change in inhomogeneous low-density astrophysical plasmas. *Astrophys. J.*, **398**, 299–318, 1992a.
- Scudder, J. D., Why all stars should possess circumstellar temperature inversions, *Astrophys. J.*, **398**, 319–349, 1992b.
- Scudder, J. D., E. C. Sittler Jr., and H. S. Bridge, A survey of the plasma electron environment of Jupiter: a view from Voyager, *J. Geophys. Res.*, **86**, 8157–8179, 1981.
- Sentman, D. D., Thermal fluctuations and the diffuse electrostatic emissions, *J. Geophys. Res.*, **87**, 1455, 1982.
- Sentman, D. D., and C. K. Goertz, Whistler mode noise in Jupiter's inner magnetosphere, *J. Geophys. Res.*, **83**, 3151, 1978.
- Shapiro, V. D., G. I. Solov'ev, J. M. Dawson, and R. Bingham, Collapse of lower hybrid waves, Lower hybrid dissipative cavitons and ion heating in the auroral ionosphere, *Phys. Plasmas*, **2**, 516, 1995.
- Shaposhnikov, V. E., Relaxation oscillations in the Jovian decametric S-burst source, *Sov. Astron. Lett.*, **14**(4), 275, 1988.
- Shepherd, S. G., J. LaBelle, M. Trimpi, and R. Brittain, Further investigation of auroral roar fine structure, *EOS Trans. Am. Geophys. Union*, **77**, S190, 1996.
- Shepherd, S. G., J. LaBelle, J. Hughes, M. Trimpi, M. McCready, R. Doe, and A. T. Weatherwax, Testing Candidate Mechanisms for Auroral Roar Generation, to appear in *EOS Trans. Am. Geophys. Union*, 1997.
- Singer, H. J., L. Matheson, R. Grubb, A. Newman, and S. D. Bower, Monitoring space weather with the GOES magnetometers, *SPIE Proceedings*, **2812**, GOES-8 and Beyond, 4–9 August, 1996.
- Sittler, E. C., Jr., and D. F. Strobel, Io plasma torus electrons: Voyager 1, *J. Geophys. Res.*, **92**, 5741–5762, 1987.
- Slottje, C., Fast fine structure in microwave flares, in *IAU Symposium 86*, Reidel, Holland, 195–203, 1980.
- Slottje, C., Atlas of fine structures of dynamic spectra of solar type IV dm and some type II radio bursts, Utrecht Observatory, 1981.
- Smith, L. A., Intrinsic limits on dimension calculations, *Phys. Lett. A*, **133**, 283, 1988.
- Smith, R. A., and D. F. Strobel, Energy partitioning in the Io plasma torus, *J. Geophys. Res.*, **90**, 9469–9493, 1985.
- Sonnerup, B. U. Ö., Acceleration of particles reflected at a shock front, *J. Geophys. Res.*, **74**, 1301, 1969.

- Sotnikov, V., D. Schriver, M. Ashour-Abdalla, and J. LaBelle, Generation of auroral radio waves by a gyrating electron beam, *EOS Trans. Am. Geophys. Union*, **77**, F544, 1996.
- St. Cyr, O. C., Jupiter's decameter and kilometer emissions: satellite effects and long term periodicities, PhD Thesis, University of Florida, Gainesville, 1985.
- Steele, C. D. C., and E. R. Priest, The eruption of a prominence and coronal mass ejection which drive reconnection, *Solar Phys.*, **119**, 359, 1989.
- Steinberg, J.-L., C. Lacombe, and S. Hoang, A new component of terrestrial radio emission observed from ISEE-3 and ISEE-1 in the solar wind, *Geophys. Res. Lett.*, **15**, 176–179, 1988.
- Steinberg, J. L., S. Hoang, and C. Lacombe, Propagation of terrestrial kilometric radiation through the magnetosheath, *Ann. Geophys.*, **7**, 151, 1989.
- Steinberg, J.-L., S. Hoang, and J. M. Bosqued, Isotropic kilometric radiation: A new component of the Earth's radio emission, *Ann. Geophys.*, **8**, 671–686, 1990.
- Stelzried, C. T., and M. J. Klein, Precision DSN radiometer systems: Impact on microwave calibrations, *Proceedings of the IEEE*, **82**(5), 776–787, 1994.
- Stepanov, A. V., On a mechanism of solar type IV radio burst generation, *Soviet Astron. (Astronomichesky) J.*, **50**, 1243, 1973.
- Stone, R. G., J. L. Bougeret, J. Goldwell, P. Canu, Y. de Canchy, N. Cornilleau-Wehrin, M. D. Desch, J. Fainberg, K. Goetz, M. L. Goldstein, C. C. Harvey, S. Hoang, R. Howard, M. L. Kaiser, P. J. Kellogg, B. Klein, D. Knoll, A. Lecacheux, D. Lengyel-Frey, R. J. MacDowall, R. Manning, C. A. Meetre, A. Meyer, N. Monge, S. Monson, G. Nicol, M. J. Reiner, J. L. Steinberg, E. Torres, C. de Villedary, F. Wouters, and P. Zarka, The Unified Radio and Plasma Wave Investigation, *Astron. Astrophys. Suppl. Ser.*, **92**, 291, 1992a.
- Stone, R. G., B. M. Pedersen, C. C. Harvey, P. Canu, N. Cornilleau-Wehrin, M. D. Desch, C. de Villedary, J. Fainberg, W. M. Farrell, and K. Goetz, Ulysses radio and plasma wave observations in the Jupiter environment, *Science*, **257**, 1524, 1992b.
- Švestka, Z., and F. Farnik, Large-Scale Coronal Structures Associated with Solar Activity, in *IAU Colloq. 144 "Solar Coronal Structures"*, edited by V. Rusin, P. Heinzel, and J-C. Vial, Bratislava, 243, 1994.
- Swarup, G., Giant metrewave radio telescope (GMRT) – Scientific objectives and design aspects, *Indian Journal of Radio and Space Physics*, **19**, 493–505, 1990.
- Takakura, T., Numerical simulation of type III solar radio bursts on meter- and hectometer-waves, *Solar Physics*, **78**, 141–156, 1982.
- Takens, F., Detecting strange attractors in turbulence, in *Dynamical Systems and Turbulence*, edited by D. Rand and L. S. Young, Lecture Notes in Mathematics 898, Springer, 366–381, 1981.

- Temerin, M., J. McFadden, M. Boehm, C. W. Carlson, and W. Lotko, Production of flickering aurora and field-aligned electron flux by electromagnetic ion cyclotron waves, *J. Geophys. Res.*, **91**, 5769, 1986.
- Temerin, M., C. Carlson, and J. P. McFadden, The acceleration of electrons by electromagnetic ion cyclotron waves, in *Auroral Plasma Dynamics*, edited by R. L. Lysak, Geophys. Monogr. Ser. 80, AGU, Washington DC, 155, 1993.
- Theiler, J., Spurious dimension from correlation algorithms applied to limited time-series data, *Phys. Rev. A*, **34**, 2427, 1986.
- Thejappa, G., D. G. Wentzel, R. J. MacDowall, and R. G. Stone, Unusual wave phenomena near interplanetary shocks at high latitudes, *Geophys. Res. Lett.*, **22**, 3421, 1995.
- The Radioheliograph Group, The Mark IV Nançay Radioheliograph, *Solar Phys.*, **120**, 193, 1989.
- The Radioheliograph Group, The Nançay Multifrequency Radioheliograph: new developments and data acquisition for the solar physics community, *Adv. Space Res.*, **13**(9), 1993.
- Thomas, N., The variability of the Io plasma torus, *J. Geophys. Res.*, **98**, 18737–18750, 1993.
- Thompson, A. R., J. M. Moran, and G. W. Swenson, *Interferometry and Synthesis in Radio Astronomy*, Wiley-Interscience, 1986.
- Thomsen, M. F., S. J. Schwartz, and J. T. Gosling, Observational evidence on the origin of ions upstream of the earth's bow shock, *J. Geophys. Res.*, **88**, 7843, 1983.
- Thomsen, M. F., J. T. Gosling, S. J. Bame, and C. T. Russell, Gyrating ions and large-amplitude, monochromatic MHD waves upstream of the earth's bow shock, *J. Geophys. Res.*, **90**, 267, 1985.
- Thorne, K. S., Dependence of Jupiter's decimeter radiation on the electron distribution in its Van Allen belts, *Radio Sci.*, **69D**, 1557, 1965.
- Thorne, R. M., Microscopic plasma processes in the Jovian magnetosphere, in *Physics of the Jovian Magnetosphere*, edited by A. J. Dessler, Cambridge University Press, 454, 1983.
- Thorne, R. M., E. J. Smith, R. K. Burton, and R. E. Holzer, Plasmaspheric hiss, *J. Geophys. Res.*, **78**, 1581, 1973.
- Tidman, D. A., and N. A. Krall, *Shock Waves in Collisionless Plasmas*, Wiley-Interscience, New York, 1971.
- Tokar, R. L., and S. P. Gary, Electrostatic hiss and the beam driven electron acoustic instability in the dayside polar cusp, *Geophys. Res. Lett.*, **11**, 1180, 1984.
- Treumann, R. A., O. H. Bauer, J. LaBelle, G. Haerendel, P. J. Christiansen, A. G. Darbyshire, A. J. Norris, L. J. C. Woolliscroft, R. R. Anderson, D. A. Gurnett,

- R. W. Holzcroft, H. C. Koons, and J. Roeder, Electron plasma waves in the solar wind: Ampte/Irm and UKS observations, *Adv. Space Phys.*, **6**, 93, 1986.
- Treumann, R. A., M. Güdel, and A. O. Benz, Alfvén wave solitons and solar intermediate drift bursts, *Astron. Astrophys.*, **236**, 242, 1990.
- Treumann, R. A., and J. LaBelle, A very large solar magnetic loop inferred from radio observations of an interplanetary type V radio burst, *Geophys. Res. Lett.*, submitted, 1997.
- Tsuneta, S., L. Acton, M. Bruner, J. Lemen, W. Brown, R. Carvalho, R. Catura, S. Freeland, B. Jurcevich, M. Morrison, Y. Ogawara, T. Hirayama, and J. Owens, The soft X-ray telescope for the Solar-A Mission, *Solar Phys.*, **136**, 37, 1991.
- Tsunoda, R. T., High-latitude F region irregularities: A review and synthesis, *Rev. Geophys.*, **26**, 719, 1988.
- Ungstrup, E., A. Bahnsen, H. K. Wong, M. Andri, and L. Matson, Energy source and generation mechanism for AKR, *J. Geophys. Res.*, **95**, 5973, 1990.
- Vasyliunas, V. M., A survey of low-energy electrons in the evening sector of the magnetosphere with Ogo 1 and Ogo 3, *J. Geophys. Res.*, **73**, 2839–2885, 1968.
- Vasyliunas, V. M., J. R. Kan, G. L. Siscoe, and S.-I. Akasofu, Scaling relations governing magnetospheric energy transfer, *Planet. Space Sci.*, **30**, 359, 1982.
- Vedenov, C. C., and D. D. Rutov, Relaxation of nonrelativistic electron beam, *Vopr. teor. plasm.*, **6**, 3–10, 1972, (in Russian).
- Volwerk, M., P. Louarn, T. Chust, A. Roux, and H. de Feraudy, Solitary kinetic Alfvén waves: a study of the Poynting flux, *J. Geophys. Res.*, **101**, 13335–13343, 1996.
- Wahlund, J. E., P. Louarn, T. Chust, H. de Feraudy, A. Roux, B. Holback, P. O. Dovner, and G. Holmgren, On ion acoustic turbulence and the non linear evolution of kinetic Alfvén waves, *Geophys. Res. Lett.*, **21**, 1831–1834, 1994.
- Wang, C. S., Y. H. Lee, and J. S. Kim, Synchrotron radiation from auroral electrons, *Radio Sci.*, **6**, 775, 1971.
- Wang, L., Investigation of hectometric and kilometric radio emissions from Jupiter and Neptune, PhD Thesis, University of Florida, 1994.
- Wang, L., and T. D. Carr, Recalibration of the Voyager PRA antenna for polarization sense measurement, *Astron. Astrophys.*, **281**, 945–954, 1994.
- Wang, L., and T. D. Carr, A model for the source location and beam geometry of Neptune's principal smooth radio component, *J. Geophys. Res.*, **100**, 21669–21681, 1995.
- Ware, R., M. Exner, D. Feng, M. Gorbunov, K. Hardy, B. Herman, Y. Kuo, T. Meehan, W. Melbourne, C. Rocken, W. Schreiner, S. Sokolovskiy, F. Solheim, X. Zou, R. Anthes, S. Businger, and K. Trenberth, GPS sounding of the atmosphere from Low Earth Orbit: Preliminary results, *Bull. Amer. Meteorolog. Soc.*, **77**, 19–40, 1996.
- Warwick, J., *NASA Report CR1685*, 1970.

- Warwick, J. W., J. B. Pearce, R. G. Peltzer, and A. C. Riddle, Planetary Radio Astronomy experiment for the Voyager missions, *Space Sci. Rev.*, **21**, 309, 1977.
- Warwick, J. W., J. B. Pearce, A. C. Riddle, J. K. Alexander, M. D. Desch, M. L. Kaiser, J. R. Thieman, T. D. Carr, S. Gulkis, A. Boischot, C. C. Harvey, and B. M. Pedersen, Voyager-1 Planetary Radio Astronomy observations near Jupiter, *Science*, **204**, 995–998, 1979a.
- Warwick, J. W., J. B. Pearce, A. C. Riddle, J. K. Alexander, M. D. Desch, M. L. Kaiser, J. R. Thieman, T. D. Carr, S. Gulkis, A. Boischot, Y. Leblanc, B. M. Pedersen, and D. H. Staelin, Planetary Radio Astronomy observations from Voyager-2 near Jupiter, *Science*, **206**, 991, 1979b.
- Warwick, J. W., J. B. Pearce, D. R. Evans, T. D. Carr, J. J. Schauble, J. K. Alexander, M. L. Kaiser, M. D. Desch, B. M. Pedersen, A. Lecacheux, G. Daigne, A. Boischot, and C. H. Barrow, Planetary Radio Astronomy observations from Voyager 1 near Saturn, *Science*, **212**, 239–243, 1981.
- Warwick, J. W., and D. R. Evans, Jupiter's and Saturn's fine-scale magnetic fields, *Physics of the Earth and Planetary Interiors*, **36**(1), 85–89, 1984.
- Weatherwax, A. T., J. LaBelle, M. L. Trimpi, and R. Brittain, Ground based observations of radio emissions near $2f_{ce}$ and $3f_{ce}$ in the auroral zone, *Geophys. Res. Lett.*, **20**, 1447, 1993.
- Weatherwax, A. T., J. LaBelle, and M. L. Trimpi, A new type of auroral radio emission at 1.4–3.7 MHz observed from the ground, *Geophys. Res. Lett.*, **21**, 2753, 1994.
- Weatherwax, A. T., J. LaBelle, M. L. Trimpi, R. A. Treumann, J. Minow, and C. Deehr, Statistical and case studies of radio emissions observed near $2f_{ce}$ and $3f_{ce}$ in the auroral zone, *J. Geophys. Res.*, **100**, 7745, 1995.
- Webb, D. F., Coronal mass ejections: The key to major interplanetary and geomagnetic disturbances, *Rev. Geophys. (Suppl.)*, **33**, 577, 1995.
- Welch, P. D., The use of fast Fourier transform for the estimation of power spectra, *IEEE Transactions on Audio and Electroacoustics*, **AU-15**(2), 1967.
- Wild, J. P., K. V. Sheridan, and G. H. Trent, Transverse motion of the source of solar radio bursts, in *Proc. IAU/URSI Symp. Paris Symposium on Radio Astronomy*, edited by R. N. Bracewell, Stanford Univ. Press, Stanford, 176, 1959.
- Williamson, I. P., Pulse broadening due to multiple scattering in the interstellar medium, *Mon. Not. R. Astr. Soc.*, **157**, 55, 1972.
- Williamson, I. P., Pulse broadening due to multiple scattering in the interstellar medium II, *Mon. Not. R. Astr. Soc.*, **163**, 345, 1973.
- Williamson, I. P., Pulse broadening due to multiple scattering in the interstellar medium III, *Mon. Not. R. Astr. Soc.*, **166**, 499, 1974.
- Winglee, R. M., and G. A. Dulk, The electron-cyclotron maser instability as the source of solar type V continuum, *Astrophys. J.*, **310**, 432, 1986.

- Wolszczan, A., The pulsar planets update, *Astrophys. and Space Sci.*, **223**, 205, 1995.
- Wu, C. S., A fast Fermi process: energetic electrons accelerated by a nearly perpendicular bow shock, *J. Geophys. Res.*, **89**, 8857, 1984.
- Wu, C. S., and L. C. Lee, A theory of the terrestrial kilometric radiation, *Astrophys. J.*, **230**, 621–626, 1979.
- Wu, C. S., P. H. Yoon, and H. P. Freund, A theory of electron cyclotron waves generated along auroral field lines observed by ground facilities, *Geophys. Res. Lett.*, **16**, 1461, 1989.
- Yermakova, Ye. N., and V. Yu. Trakhtengerts, Transitional mechanism of HF and VHF radio emission in the polar atmosphere, *Geomag. and Aeron.*, **21**, 56, 1981.
- Yoon, P. H., A. T. Weatherwax, T. J. Rosenberg, and J. LaBelle, Lower ionospheric cyclotron maser theory: A possible source of $2f_{ce}$ and $3f_{ce}$ auroral radio emissions, *J. Geophys. Res.*, **101**, 27015, 1996.
- Zaitsev, V. V., and A. V. Stepanov, On the origin of fast drift absorption bursts, *Astron. Astrophys.*, **45**, 135, 1975.
- Zaitsev, V. V., and A. V. Stepanov, The plasma radiation of flare kernels, *Solar Phys.*, **88**, 297, 1983.
- Zaitsev, V. V., E. Y. Zlotnik, and V. E. Shaposhnikov, The origin of S-bursts in Jupiter's decametric radio spectra, *Astron. Astrophys.*, **169**, 345–354, 1986.
- Zarka, P., Directivity of Saturn Electrostatic Discharges and ionospheric implications, *Icarus*, **61**, 508–520, 1985a.
- Zarka, P., Saturn Electrostatic Discharges: characteristics, comparison to planetary lightning and importance in the study of Saturn's ionosphere, in *Planetary Radio Emissions*, edited by H. O. Rucker and S. J. Bauer, Austrian Academy of Sciences Press, Vienna, 237–270, 1985b.
- Zarka, P., Beaming of planetary radio emissions, in *Planetary Radio Emissions II*, edited by H. O. Rucker, S. J. Bauer, and B. M. Pedersen, Austrian Academy of Sciences Press, Vienna, 327–342, 1988.
- Zarka, P., The auroral radio emissions from planetary magnetospheres: What do we know, what don't we know, what do we learn from them?, *Adv. Space Res.*, **12**(8), 99–115, 1992.
- Zarka, P., and B. M. Pedersen, Statistical study of Saturn Electrostatic Discharges, *J. Geophys. Res.*, **88**, 9007–9018, 1983.
- Zarka, P., and B. M. Pedersen, Radio detection of Uranian lightning by Voyager 2, *Nature*, **323**, 605–608, 1986.
- Zarka, P., D. Le Quéau, and F. Genova, The Maser Synchrotron Instability in an inhomogeneous medium: Determination of the spectral intensity of Auroral Kilometric Radiation, *J. Geophys. Res.*, **91**, 13542–13558, 1986.

- Zarka, P., and F. Genova, Solar wind effect on Jovian low-frequency magnetospheric radio emissions from ground-based and spacecraft observations, in *Time-variable Phenomena in the Jovian System*, edited by M. J. S. Belton, R. A. West, and J. Rahe, NASA SP-494, 175–179, 1989.
- Zarka, P., B. M. Pedersen, A. Lecacheux, M. L. Kaiser, M. D. Desch, W. M. Farrell, and W. S. Kurth, Radio emissions from Neptune, in *Neptune and Triton*, edited by D. Cruikshank, University of Arizona Press, Tucson, 341–388, 1995.
- Zarka, P., T. Farges, B. P. Ryabov, M. Abada-Simon, and L. Denis, A scenario for Jovian S-bursts, *Geophys. Res. Lett.*, **23**, 125–128, 1996.
- Zhang, X-Z., H. Wang, J-H. Du, and Z-K. Wang, Decametric bursts caused by the fragment S of comet SL-9, *Earth, Moon and Planets*, **66**, 49–52, 1994.
- Zheleznyakov, V. V., *Radio Emission of the Sun and Planets*, Pergamon Press, Oxford, 1970.
- Zheleznyakov, V. V., *Radiation in Astrophysical Plasmas*, Kluwer Academic Publishers, Dordrecht, 1995.
- Zheleznyakov, V. V., and E. Ya. Zlotnik, Cyclotron wave instability in the solar corona and origin of solar radio emission with fine structure. Bernstein modes and plasma waves in a hybrid band, *Solar Phys.*, **43**, 431, 1975a.
- Zheleznyakov, V. V., and E. Ya. Zlotnik, Cyclotron wave instability in the solar corona and origin of solar radio emission with fine structure. Origin of tadpoles, *Solar Phys.*, **44**, 447, 1975b.
- Zheleznyakov, V. V., and E. Ya. Zlotnik, Cyclotron wave instability in the solar corona and origin of solar radio emission with fine structure. Origin of zebra-pattern, *Solar Phys.*, **44**, 461, 1975c.
- Zheleznyakov, V. V., Vl. V. Kocharovskii, V. V. Kocharovskii, Linear wave interaction in a plasma with an inhomogeneous magnetic field, *Sov. Phys. JETP*, **50**, 51, 1979.
- Ziebell, L. F., C. S. Wu, and P. H. Yoon, Kilometric radio waves generated along auroral field lines observed by ground facilities: a theoretical model, *J. Geophys. Res.*, **96**, 1495, 1991.
- Zlotnik, E. Ya., The polarization of second harmonic radio emission in type III bursts, *Astron. Astrophys.*, **101**, 250–258, 1981.
- Zombeck, M. V., *Handbook of Space Astronomy and Astrophysics*, 2nd edition, Cambridge University Press, Cambridge, 1990.
- Zumberge, J. F., M. P. Urban, R. Liu, and R. E. Neilan (Eds.), IGS – International GPS service for geodynamics, 1995 annual report, IGS Central Bureau, JPL, Pasadena, California, 1996.