S. Peter Gary

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Sex: Male Height: 6 feet Weight: 145 lbs.

Born: Cleveland, Ohio, USA (3 October 1939) US Citizen

Academic Data

B.S. in Physics (with Honors), Case Institute of Technology, Cleveland, OH, 1961.
National Merit Scholar, 1957-1961

A.M. (Physics), Washington University, St. Louis, MO, 1966.

Ph.D (Physics), Washington University, St. Louis, MO, 1967.
Graduate Teaching Assistant, 1961-1963
NSF Co-Operative Fellow, 1963-1966

Professional Employment

Aerospace Engineer, Marshall Space Flight Center, NASA, Huntsville, AL (Summers 1961, 1962)

Instructor, Webster College, Webster Groves, MO (1966-1967)

Summer Employee, Oak Ridge National Laboratory, Oak Ridge, TN (Summer 1967)

Research Associate, University of Iowa, Iowa City, IA (1967-1968)

Research Assistant, Unversity of St. Andrews, St. Andrews, Fife, Scotland (1968-1969)

Vacation Associate, Culham Laboratory, Abingdon, Berkshire, England (Summer 1969)

Leverhulme Visiting Fellow, University College of North Wales, Bangor, Caernarvonshire, Wales (1969-1970)

Visiting Scientist, Institut fur Plasmaphysik, 8046 Garching bei Munchen, Federal Republic of Germany (Summer 1970, August 1978)

Assistant Professor, College of William and Mary, Williamsburg, VA (1970-1975)

NASA-ASEE Summer Research Fellow, Langley Research Center, NASA, Hampton, VA (Summer 1971)

Summer Research, Langley Research Center, NASA, Hampton, VA (Summers 1972, 1973, 1974)

Visiting Staff Member, Los Alamos Scientific Laboratory, Los Alamos, NM (1974-1975, Summer 1976)

Associate Professor, College of William and Mary, Williamsburg, VA (1975-1977)

Staff Member, Los Alamos National Laboratory, Los Alamos, NM (1977-1984; 1992-2002)

SRC Senior Visiting Fellow, University of St. Andrews, St. Andrews, Fife, Scotland (July 1978; June 1980)

Adjunct Professor, University of New Mexico, Albuquerque, NM (Spring 1980; Spring 1982; Fall 1983)

Associate Group Leader, Los Alamos National Laboratory, Los Alamos, NM (1984-1987)

Group Leader, Los Alamos National Laboratory, Los Alamos, NM (1987-1992)

Professional Renewal Leave, University of California, San Diego, CA (Fall 1992)

Project Lead, Kurchatov Institute Project, Lab-to-Lab/MPC&A Program (1995-2002)

Fellow, Los Alamos National Laboratory, Los Alamos, NM (2002-Present)

Professional Activities

Member, American Physical Society

Member, Executive Committee, Division of Plasma Physics, American Physical Society, 1999-2002.

Member, American Geophysical Union

Associate Editor, Journal of Geophysical Research (Space Physics), 1982-1984, 2000-2001.

Associate Editor, Physics of Fluids B, 1989-1993

Associate Editor, Physics of Plasmas, 1994-Present

Referee, Geophysical Research Letters

Referee, Journal of Plasma Physics

Referee, The Astrophysical Journal

Referee, Physical Review Letters

Referee, Annales Geophysicae

Co-Chairman, University of California Institute of Geophysics and Planetary Physics Workshop on Space Plasma Physics, Los Alamos, NM, 4-5 September 1980.

Chairman, NASA Solar Terrestrial Theory Program Meeting and Workshop, Los Alamos, NM, 14-16 November 1984.

Chairman, IGPP Workshop on the Plasma Physics of the Earth's Magnetopause and its Boundary Layers, Los Alamos, NM, 2-4 October 1990.

Chair, Mini-Conference on Magnetic Reconnection in Space and Astrophysical Plasmas, APS/Division of Plasma Physics Meeting, Long Beach, CA, 30 October– 2 November 2001.

Publications

223 refereed scientific publications, including 104 first-authored papers, as of 1 Sept 2002.

Scientific monograph, *Theory of Space Plasma Instabilities*, Cambridge University Press, 1993.

Honors

Editors' Citation for Excellence in Refereeing (*Journal of Geophysical Research–Space Physics*), 1993.

Editors' Citation for Excellence in Refereeing (*Geophysical Research Letters*), 1993.

Fellow, Los Alamos National Laboratory, Los Alamos, NM, 2002.

Refereed Publications

1. Gary, S. P., Third order oscillations in a Maxwellian plasma, *Phys. Fluids*, **10**, 570, 1967.

2. Gary, S. P., and D. Montgomery, Numerical studies of turbulent heating, *Phys. Fluids*, **11**, 2733, 1968.

3. Gary, S. P., D. Montgomery and D. W. Swift, Particle acceleration by electrostatic waves with spatially varying phase velocities, *J. Geophys. Res.*, **73**, 7524, 1968.

4. Gary, S. P., Nonlinear transverse waves in a Vlasov plasma, *J. Plasma Phys.*, **3**, 577, 1969.

5. Gary, S. P., Nonlinear ion acoustic waves in a Vlasov plasma, *Phys. Fluids*, **13**, 694, 1970.

6. Gary, S. P., and J. J. Sanderson, Longitudinal waves in a perpendicular collisionless plasma shock, I, *J. Plasma Phys.*, **4**, 739, 1970.

7. Gary, S. P., Longitudinal waves in a perpendicular collisionless plasma shock, II, *J. Plasma Phys.*, **4**, 753, 1970.

8. Gary, S. P., Electron heating by ion wave turbulence, *Phys. Letters* **33A**, 301, 1970.

9. Gary, S. P., and D. Biskamp, Instabilities in perpendicular shock waves, *J. Phys. A* **4**, L27, 1971.

10. Abas, S., and S. P. Gary, Ion wave instability in an electrostatic shock, *Plasma Phys.*, **13**, 262, 1971.

11. Gary, S. P., and J. W. M. Paul, Anomalous resistivity due to elctrostatic turbulence, *Phys. Rev. Lett.*, **26**, 1097, 1971.

12. Gary, S. P., Longitudinal waves in a perpendicular collisionless plasma shock, 3, *J. Plasma Phys.*, **6**, 561, 1971.

13. Gary, S. P., Longitudinal waves in a perpendicular collisionless plasma shock, 4, *J. Plasma Phys.*, **7**, 417, 1972.

14. Gary, S. P., Long wavelength instability in a perpendicular shock, *Plasma Phys.*, **15**, 399, 1973.

15. Gary, S. P., and F. Hohl, Ion kinematics in a plasma focus, *Phys. Fluids*, **16**, 997, 1973.

16. Gary, S. P., and H. Bloomberg, Ion acceleration in high current diodes, *Appl. Phys. Lett.*, **23**, 112, 1973.

17. Bloomberg, H. W., and S. P. Gary, Particle acceleration by an electrostatic wave with spatially increasing phase velocity, *J. Geophys. Res.*, **78**, 7531, 1973.

18. Schmidt, M. J., and S. P. Gary, Density gradients and the Farley-Buneman instability, *J. Geophys. Res.*, **78**, 8261, 1973.

19. Gary, S. P., Solar cosmic ray acceleration by a plasma instability, *Ap. J.*, **187**, 195, 1974.

20. Gary, S. P., and M. J. Schmidt, Anomalous viscosity due to electrostatic turbulence, *Phys. Letters* **48A**, 23, 1974.

21. Gary, S. P., Ion acceleration in a plasma focus, *Phys. Fluids*, **17**, 2135, 1974.

22. Gary, S. P., W. C. Feldman, D. W. Forslund and M. D. Montgomery, Electron heat flux instabilities in the solar wind, *Geophys. Res. Lett.*, **2**, 79, 1975.

23. Gary, S. P., I. Alexeff and H. W. Bloomberg, Reflection and Transmission of ion acoustic waves from a plasma discontinuity, *IEEE Trans. on Plasma Science*, **PS-3**, 46, 1975.

24. Hsieh, S. L., H. W. Bloomberg and S. P. Gary, Coherent ion acceleration at a density gradient, *J. Plasma Phys.*, **13**, 553, 1975.

25. Gary, S. P., and D. W. Forslund, Electromagnetic current instabilities, *Phys. Letters* **54A**, 347, 1975.

26. Montgomery, M. D., S. P. Gary, D. W. Forslund and W. C. Feldman, Electromagnetic ion-beam instabilities in the solar wind, *Phys. Rev. Lett.*, **35**, 667, 1975.

27. Gary, S. P., W. C. Feldman, D. W. Forslund and M. D. Montgomery, Heat flux instabilities in the solar wind, *J. Geophys. Res.*, **80**, 4197, 1975.

28. Feldman, W. C., J. R. Asbridge, S. J. Bame, M. D. Montgomery and S. P. Gary, Solar wind electrons, *J. Geophys. Res.*, **80**, 4181, 1975.

29. Bame, S. J., J. R. Asbridge, W. C. Feldman, S. P. Gary and M. D. Montgomery, Evidence for local ion heating in solar wind high speed streams, *Geophys. Res. Lett.*, **2**, 373, 1975.

30. Gary, S. P., M. D. Montgomery, W. C. Feldman and D. W. Forslund, Proton temperature anisotropy instabilities in the solar wind, *J. Geophys. Res.*, **81**, 1241, 1976.

31. Gary, S. P., R. A. Gerwin and D. W. Forsulund, Electromagnetic current instabilities, *Phys. Fluids*, **19**, 579, 1976.

32. Lemons, D. S. and S. P. Gary, Temperature anisotropy instabilities in a plasma of two ion components, *J. Plasma Phys.*, **15**, 83, 1976.

33. Feldman, W. C., J. R. Asbridge, S. J. Bame, S. P. Gary and M. D. Montgomery, Electron parameter correlations in high-speed streams and heat flux instabilities, *J. Geophys. Res.*, **81**, 2377, 1976.

34. Montgomery, M. D., S. P. Gary, W. C. Feldman and D. W. Forslund, Electromagnetic instabilities driven by unequal proton beams in the solar wind, *J. Geophys. Res.*, **81**, 2743, 1976.

35. Gary, S. P., I. Alexeff and S. L. Hsieh, Ion acoustic waves at a plasma sheath, *Phys. Fluids*, **19**, 1630, 1976.

36. Feldman, W. C., J. R. Asbridge, S. J. Bame, S. P. Gary, M. D. Montgomery and S. M. Zink, Evidence for the regulation of solar wind heat flux at 1 AU, *J. Geophys. Res.*, **8l**, 5207, 1976.

37. Gary, S. P., and W. C. Feldman, Solar wind heat flux regulation by the whistler instability, *J. Geophys. Res.*, **82**, 1087, 1977.

38. Hohl, F. and S. P. Gary, Electron kinematics in a plasma focus, *Phys. Fluids*, **20**, 683, 1977.

39. Lemons, D. S. and S. P. Gary, Electromagnetic effects on the modified two-stream instability, *J. Geophys. Res.*, **82**, 2337, 1977.

40. Gary, S. P., and W. C. Feldman, A second order theory for $\mathbf{k} \parallel \mathbf{B}_o$ electromagnetic instabilities, *Phys. Fluids*, **21**, 72, 1978.

41. Gary, S. P., The electromagnetic ion beam instability and energy loss of fast alpha particles, *Nucl. Fusion*, **18**, 327, 1978.

42. Lemons, D. S. and S. P. Gary, Current driven instabilities in a laminar perpendicular shock, *J. Geophys. Res.*, **83**, 1625, 1978.

43. Gary, S. P., Ion-acoustic-like instabilities in the solar wind, *J. Geophys. Res.*, **83**, 2504, 1978.

44. Gary, S. P., and J. J. Sanderson, Density gradient drift instabilities: oblique propagation at zero beta, *Phys. Fluids*, **21**, 1181, 1978; Erratum,*ibid.*, **22**, 388, 1979.

45. Gary, S. P., Electrostatic heat flux instabilities, *J. Plasma Phys.*, **20**, 47, 1978.

46. Gary, S. P., A. G. Sgro and A. W. DeSilva, Effects of an axial heat flux limit in linear theta pinches, *Phys. Fluids*, **21**, 2103, 1978.

47. Lemons, D. S., W. C. Feldman and S. P. Gary, Stability of the ordinary mode to an electron heat flux, *Solar Phys.*, **59**, 387, 1978.

48. Lemons, D. S., D. Winske and S. P. Gary, Nonlinear theory of the Weibel instability, *J. Plasma Phys.*, **22**, 287, 1979.

49. Gary, S. P., A second order theory for the ion acoustic instability, *J. Plasma Phys.*, **22**, 361, 1979.

50. Winske, D. and S. P. Gary, Magnetic gradient effects on the universal drift instability, *Phys. Fluids*, **22**, 665, 1979.

51. Lemons, D. S., J. R. Asbridge, S. J. Bame, W. C. Feldman, S. P. Gary and J. T. Gosling, The source of electrostatic fluctuations in the solar wind, *J. Geophys. Res.*, **84**, 2135, 1979.

52. Gary, S. P., and J. J. Sanderson, Electrostatic temperature gradient drift instabilities, *Phys. Fluids*, **22**, 1500, 1979.

53. Gary, S. P., and R. A. Gerwin, The electrostatic ion cyclotron electron drift instability, *Phys. Fluids*, **22**, 1764, 1979.

54. Gary, S. P., and T. E. Eastman, The lower hybrid drift instability at the magnetopause, *J. Geophys. Res.*, **84**, 7378, 1979.

55. Simons, D. J., M. B. Pongratz and S. P. Gary, Prompt striations in ionospheric barium clouds due to a velocity space instability, *J. Geophys. Res.*, **85**, 671, 1980.

56. Gary, S. P., Wave particle transport from electrostatic instabilities, *Phys. Fluids*, **23**, 1193, 1980.

57. Gary, S. P., and S. J. Schwartz, An electrostatic flow shear instability, *J. Geophys. Res.*, **85**, 2978, 1980.

58. Klevans, E. H., and S. P. Gary, Particle and energy end loss from a collisionless plasma, *Phys. Fluids*, **23**, 2219, 1980.

59. Gary, S. P., and B. Abraham-Shrauner, Three electrostatic temperature drift instabilities, *J. Plasma Phys.*, **25**, 145, 1981.

60. Gary, S. P., and J. J. Sanderson, Energy transport by electrostatic drift fluctuations, *Phys. Fluids*, **24**, 638, 1981.

61. Schwartz, S. J., W. C. Feldman and S. P. Gary, The source of proton anisotropy in the high speed solar wind, *J. Geophys. Res.*, **86**, 541, 1981.

62. Gary, S. P., and M. Ashour-Abdalla, The lower hybrid density drift instability with cold plasma, *J. Geophys. Res.*, **86**, 1613, 1981.

63. Gary, S. P., Microinstabilities upstream of the Earth's bow shock: a brief review, *J. Geophys. Res.*, **86**, 4331, 1981.

64. Schwartz, S. J., W. C. Feldman and S. P. Gary, Wave-electron interactions in the high speed solar wind, *J. Geophys. Res.*, **86**, 4574, 1981.

65. Gary, S. P., J. T. Gosling and D. W. Forslund, The electromagnetic ion beam instability upstream of the Earth's bow shock, *J. Geophys. Res.*, **86**, 6691, 1981; Correction, *ibid.*, **89**, 404, 1984.

66. Rahal, L. J., and S. P. Gary, The lower hybrid density drift instability with magnetic curvature, *Phys. Fluids*, **24**, 1588, 1981.

67. Gary, S. P., and S. J. Schwartz, Wave-particle transport due to electrostatic flow shear fluctuations, *J. Geophys. Res.*, **86**, 11139, 1981.

68. Gary, S. P., and M. F. Thomsen, An electrostatic parabolic density drift instability, *J. Geophys. Res.***87**, 73, 1982.

69. Bernhardt, P. A., M. B. Pongratz, S. P. Gary and M. F. Thomsen, Dissipation of ionospheric irregularities by wave-particle and collisional interactions, *J. Geophys. Res.*, **87**, 2356, 1982.

70. Thomsen, M. F. and S. P. Gary, A nonlocal theory of an electrostatic sinusoidal density drift instability, *J. Geophys. Res.*, **87**, 3551, 1982.

71. Feldman, W. C., S. J. Bame, S. P. Gary, J. T. Gosling, D. McComas, M. F. Thomsen, G. Paschmann, N. Sckopke, M. M. Hoppe and C. T. Russell, Electron heating within the Earth's bow shock, *Phys. Rev. Lett.*, **49**, 199 , 1982.

72. Huba, J. D. and S. P. Gary, Finite β stabilization of the universal drift instability: revisited, *Phys. Fluids*, **25**, 1821, 1982.

73. Gary, S. P., and M. F. Thomsen, Collisionless electrostatic interchange instabilities, *J. Plasma Phys.*, **28**, 551, 1982.

74. Feldman, W. C., R. C. Anderson, S. J. Bame, S. P. Gary, J. T. Gosling, D. J. McComas, M. F. Thomsen, G. Paschmann, M. M. Hoppe and C. T. Russell, Electron velocity distributions near the Earth's bow shock, *J. Geophys. Res.*, **88**, 96, 1983.

75. Bernhardt, P. A., M. F. Thomsen and S. P. Gary, The nonlocal theory of periodic density drift instabilities, *J. Geophys. Res.*, **88**, 938, 1983.

76. Sentman, D. D., M. F. Thomsen, S. P. Gary, W. C. Feldman and M. M. Hoppe, The oblique whistler instability in the Earth's foreshock, *J. Geophys. Res.*, **88**, 2048, 1983.

77. Gary, S. P., P. A. Bernhardt and T. E. Cole, Density drift instabilities and weak collisions, *J. Geophys. Res.*, **88**, 2103, 1983.

78. Thomsen, M. F., H. C. Barr, S. P. Gary, W. C. Feldman and T. E. Cole, Stability of electron distributions within the Earth's bow shock, *J. Geophys. Res.*, **88**, 3035, 1983.

79. Gary, S. P., Linear density drift instabilities in very low beta plasmas: a different approach, *J. Plasma Phys.*, **30**, 75, 1983.

80. Sanderson, J. J. and S. P. Gary, Transport by weak electrostatic density drift fluctuations, *J. Plasma Phys.*, **30**, 153, 1983.

81. Gary, S. P., and T. E. Cole, Pedersen density drift instabilities, *J. Geophys. Res.*, **88**, 10104 , 1983.

82. Gary, S. P., Kinetic theory of current and density drift instabilities with weak charged-neutral collisions, *J. Geophys. Res.*, **89**, 179 , 1984.

83. Lebeda, C., S. P. Gary and M. B. Pongratz, Density spectra as a function of altitude in an ionospheric barium release, *Geophys. Res. Lett.*, **11**, 591, 1984.

84. Gary, S. P., C. W. Smith, M. A. Lee, M. L. Goldstein and D. W. Forslund, Electromagnetic ion beam instabilities, *Phys. Fluids*, **27**, 1852, 1984; Erratum,*ibid.*, **28**, 438, 1985.

85. Gary, S. P., The "drift dissipative instability": a critique, *J. Atm. Terr. Phys.*, **46**, 685, 1984.

86. Tokar, R. L. and S. P. Gary, The generation of electrostatic hiss in the dayside polar cusp at 2 to 5 R_E, *Geophys. Res. Lett.*, **11**, 1180, 1984.

87. Gary, S. P., and R. L. Tokar, The second order theory of electromagnetic hot ion beam instabilities, *J. Geophys. Res.*, **90**, 65, 1985.

88. Gary, S. P., and M. M. Mellott, Whistler damping at oblique propagation: laminar shock precursors, *J. Geophys. Res.*, **90**, 99, 1985.

89. Gary, S. P., Electromagnetic ion beam instabilities: hot beams at interplanetary shocks, *Ap. J.*, **288**, 342, 1985.

90. Smith, C. W., M. L. Goldstein, S. P. Gary and C. T. Russell, Beam driven ion-cyclotron harmonic resonances in the terrestrial foreshock, *J. Geophys. Res.*, **90**, 1429, 1985.

91. Tokar, R. L. and S. P. Gary, The whistler mode in a Vlasov plasma, *Phys. Fluids*, **28**, 1063, 1985.

92. Winske, D., E. K. Stover and S. P. Gary, The structure and evolution of slow mode shocks, *Geophys. Res. Lett.*, **12**, 295, 1985.

93. Gary, S. P., M. B. Pongratz, C. D. Madland and D. W. Swift, The zero frequency ion ring instability, *Phys. Fluids*, **28**, 1727, 1985.

94. Gary, S. P., and C. D. Madland, Electromagnetic electron temperature anisotropy instabilities, *J. Geophys. Res.*, **90**, 7607, 1985.

95. Gary, S. P., and R. L. Tokar, The electron acoustic mode, *Phys. Fluids*, **28**, 2439, 1985.

96. Gary, S. P., Electrostatic instabilities in plasmas with two electron components, *J. Geophys. Res.*, **90**, 8213, 1985.

97. Rogers, B., S. P. Gary and D. Winske, Electromagnetic hot ion beam instabilities: quasilinear theory and simulation, *J. Geophys. Res.*, **90**, 9494, 1985.

98. Gary, S. P., Electromagnetic electron beam instabilities: warm isotropic beams, *J. Geophys. Res.*, **90**, 10815, 1985.

99. Tsurutani, B. T., I. G. Richardson, R. M. Thorne, W. Butler, E. J. Smith, S. W. H. Cowley, S. P. Gary, S. I. Akasofu and R. D. Zwickl, Observations of the right-hand resonant ion-beam instability in the distant plasmasheet boundary layer, *J. Geophys. Res.*, **90**, 12159, 1985; Correction *ibid.*, **91**, 4606, 1986.

100. Gary, S. P., C. D. Madland and B. T. Tsurutani, Electromagnetic ion beam instabilities: II, *Phys. Fluids*, **28**, 3691, 1985.

101. Fuselier, S. A., M. F. Thomsen, S. P. Gary, S. J. Bame, C. T. Russell and G. K. Parks, The phase relationship between gyrophase-bunched ions and MHD-like waves, *Geophys. Res. Lett.*, **13**, 60, 1986.

102. Gary, S. P., M. F. Thomsen and S. A. Fuselier, Electromagnetic instabilities and gyrophase bunched particles, *Phys. Fluids*, **29**, 531, 1986.

103. Baker, D. N., W. C. Feldman, S. P. Gary, D. J. McComas and J. Middleditch,

Plasma fluctuations and large-scale mixing near comet Giacobini-Zinner, *Geophys. Res. Lett.*, **13**, 271, 1986.

104. Gary, S. P., C. D. Madland, D. Schriver and D. Winske, Computer simulations of electromagnetic cool ion beam instabilities, *J. Geophys. Res.*, **91**, 4188, 1986.

105. Winske, D. and S. P. Gary, Electromagnetic instabilities driven by cool heavy ion beams, *J. Geophys. Res.*, **91**, 6825, 1986.

106. Gary, S. P., Low frequency waves in a high β collisionless plasma: polarization, compressibility and helicity, *J. Plasma Phys.*, **35**, 431, 1986.

107. Gary, S. P., and D. Winske, Linearly polarized magnetic fluctuations at comet Giacobini-Zinner, *J. Geophys. Res.*, **91**, 13699, 1986.

108. Gary, S. P., S. Hinata, C. D. Madland and D. Winske, The development of shell-like distributions from newborn cometary ions, *Geophys. Res. Lett.*, **13**, 1364, 1986.

109. Galvez, M., and S. P. Gary, Electrostatic beam instabilities in a positive/negative ion plasma, *Phys. Fluids*, **29**, 4085, 1986.

110. Gary, S. P., and N. Omidi, The ion/ion acoustic instability, *J. Plasma Phys.*, **37**, 45, 1987.

111. Smith, C. W. and S. P. Gary, Electromagnetic ion beam instabilities: growth at cyclotron harmonic wavenumbers, *J. Geophys. Res.*, **92**, 117, 1987.

112. Gary, S. P., and D. Schriver, The electromagnetic ion cyclotron beam anisotropy instability, *Planet. Space Sci.*, **35**, 51, 1987.

113. Fuselier, S. A., S. P. Gary, M. F. Thomsen, S. J. Bame and D. A. Gurnett, Ion beams and the ion/ion acoustic instability upstream from the Earth's bow shock, *J. Geophys. Res.*, **92**, 4740, 1987.

114. Tokar, R. L., S. P. Gary and K. B. Quest, Electron heating by ion acoustic turbulence in simulated low Mach number shocks, *Phys. Fluids*, **30**, 2569, 1987.

115. Gary, S. P., R. L. Tokar and D. Winske, Ion/ion and electron/ion cross-field instabilities near the lower hybrid frequency, *J. Geophys. Res.*, **92**, 10029, 1987.

116. Gary, S. P., The electron/electron acoustic instability, *Phys. Fluids*, **30**, 2745, 1987.

117. Akimoto, K., S. P. Gary and N. Omidi, Electron/ion whistler instabilities and magnetic noise bursts, *J. Geophys. Res.*, **92**, 11209, 1987.

118. Gary, S. P., Plasma instabilities in the terrestrial magnetosphere: a review of recent theoretical research, *Phys. Scripta*, **T18**, 179, 1987.

119. Gary, S. P., and C. D. Madland, Electromagnetic ion instabilities in a cometary environment, *J. Geophys. Res.*, **93**, 235, 1988.

120. Galvez, M., S. P. Gary, C. Barnes and D. Winske, Computer simulations of plasma expansion across a magnetic field, *Phys. Fluids*, **31**, 1554, 1988.

121. Gary, S. P., C. D. Madland, N. Omidi, and D. Winske, Computer simulations of two-pickup-ion instabilities in a cometary environment, *J. Geophys. Res.*, **93**, 9584, 1988.

122. Akimoto, K., M. Galvez, S. P. Gary, A. G. Sgro, and D. Winske, Prompt structuring of a plasma cloud expanding in an external magnetic field, *J. Geomag. Geoelect.*, **40**, 1161, 1988.

123. Cayton, T. E., R. D. Belian, S. P. Gary, T. A. Fritz, and D. N. Baker, Energetic electron components at geosynchronous orbit, *Geophys. Res. Lett.*, **16**, 147, 1989.

124. Gary, S. P., K. Akimoto and D. Winske, Computer simulations of cometary-ion/ion instabilities and wave growth, *J. Geophys. Res.*, **94**, 3513, 1989.

125. Phillips, J. L., J. T. Gosling, D. J. McComas, S. J. Bame, S. P. Gary, and E. J. Smith, Anisotropic thermal electron distributions in the solar wind, *J. Geophys. Res.*, **94**, 6563, 1989.

126. Gary, S. P., and R. Sinha, Electromagnetic waves and instabilities from cometary ion velocity shell distributions, *J. Geophys. Res.*, **94**, 9131, 1989.

127. Le, G., C. T. Russell, S. P. Gary, E. J. Smith, W. Riedler, and K. Schwingenschuh, ULF waves at Comets Halley and Giacobini-Zinner: comparison with simulations, *J. Geophys. Res.*, **94**, 11989, 1989.

128. Sgro, A. G., S. P. Gary, and D. S. Lemons, Expanding plasma structure and its evolution toward long wavelengths, *Phys. Fluids*, **B1**, 1890, 1989.

129. Angelopoulos, V., R. Elphic, S. P. Gary, and C. Y. Huang, Electromagnetic instabilities in the plasma sheet boundary layer, *J. Geophys. Res.*, **94**, 15373, 1989.

130. Gary, S. P., and A. G. Sgro, The lower hybrid drift instability at the magnetopause, *Geophys. Res. Lett.*, **17**, 909, 1990.

131. Gary, S. P., and D. Winske, Computer simulations of electromagnetic instabilities in the plasma sheet boundary layer, *J. Geophys. Res.*, **95**, 8085, 1990.

132. Galvez, M., S. A. Fuselier, S. P. Gary, M. F. Thomsen and D. Winske, Alpha particle heating in hot diamagnetic cavities, *J. Geophys. Res.*, **95**, 11975, 1990.

133. Elphic, R. C., and S. P. Gary, ISEE observations of low frequency waves and ion distribution function evolution in the plasma sheet boundary layer, *Geophys. Res. Lett.*, **17**, 2023, 1990.

134. Gary, S. P., Electromagnetic ion/ion instabilities and their consequences in space plasmas: a review, *Space Sci. Rev.*, **56**, 373, 1991.

135. Gary, S. P., R. H. Miller, and D. Winske, Pitch-angle scattering of cometary ions: computer simulations, *Geophys. Res. Lett.*, **18**, 1067, 1991.

136. Miller, R. H., S. P. Gary, D. Winske, and T. I. Gombosi, Pitch-angle scattering of cometary ions into monospherical and bispherical distributions, *Geophys. Res. Lett.*, **18**, 1063, 1991.

137. Miller, R. H., T. I. Gombosi, S. P. Gary and D. Winske, The directional dependence of magnetic fluctuations generated by cometary ion pick-up, *J. Geophys. Res.*, **96**, 9479, 1991.

138. Akimoto, K., D. Winske, T. G. Onsager, M. F. Thomsen, and S. P. Gary, Steepening of parallel propagating hydromagnetic waves into magnetic pulsations: a simulation study, *J. Geophys. Res.*, **96**, 17599, 1991.

139. Lee, M. A., and S. P. Gary, Quasilinear evolution of ULF waves excited by cometary ion pickup, *J. Geophys. Res.*, **96**, 21319, 1991.

140. Gary, S. P., and D. Winske, Correlation function ratios and the identification of space plasma instabilities, *J. Geophys. Res.*, **97**, 3103, 1992.

141. Reeves, G. D., S. P. Gary, T. E. Cayton, and R. D. Belian, The great solar energetic particle events of 1989, *J. Geophys. Res.*, **97**, 6219, 1992.

142. Gary, S. P., The mirror and ion cyclotron anisotropy instabilities, *J. Geophys. Res.*, **97**, 8519, 1992.

143. McKean, M. E., D. Winske, and S. P. Gary, Kinetic properties of mirror waves in magnetosheath plasmas, *Geophys. Res. Lett.*, **19**, 1331, 1992.

144. Miller, R. H., D. Winske, and S. P. Gary, A second-order theory for transverse ion heating and momentum coupling due to electrostatic ion cyclotron waves, *Phys. Fluids*, **B4**, 2964, 1992.

145. Lemons, D. S., D. Winske, and S. P. Gary, Electrostatic ion cyclotron velocity shear instability, *J. Geophys. Res.*, **97**, 19381, 1992.

146. McKean, M. E., D. Winske, and S. P. Gary, Mirror and ion cyclotron anisotropy instabilities in the magnetosheath, *J. Geophys. Res.*, **97**, 19421, 1992.

147. Akimoto, K., D. Winske, S. P. Gary, and M. F. Thomsen, Nonlinear evolution of electromagnetic ion beam instabilities, *J. Geophys. Res.*, **98**, 1419, 1993.

148. Gary, S. P., S. A. Fuselier, and B. J. Anderson, Ion anisotropy instabilities in the magnetosheath, *J. Geophys. Res.*, **98**, 1481, 1993.

149. Gary, S. P., M. E. McKean, and D. Winske, Ion cyclotron anisotropy instabilities in the magnetosheath: theory and simulations, *J. Geophys. Res.*, **98**, 3963, 1993.

150. Gary, S. P., and D. Winske, Simulations of ion cyclotron anisotropy instabilities in the terrestrial magnetosheath, *J. Geophys. Res.*, **98**, 9171, 1993.

151. Gary, S. P., B. J. Anderson, R. E. Denton, S. A. Fuselier, M. E. McKean, and D. Winske, Ion anisotropies in the magnetosheath, *Geophys. Res. Lett.*, **20**, 1767, 1993.

152. McKean, M. E., S. P. Gary, and D. Winske, Kinetic physics of the mirror instability, *J. Geophys. Res.*, **98**, 21,313, 1993.

153. Anderson, B. J., S. A. Fuselier, S. P. Gary, and R. E. Denton, Magnetic spectral signatures in the Earth's magnetosheath and plasma depletion layer, *J. Geophys. Res.*, **99**, 5877, 1994.

154. Denton, R. E., S. P. Gary, B. J. Anderson, S. A. Fuselier, and M. K. Hudson, Low-frequency magnetic fluctuations spectra in the magnetosheath and plasma depletion layer, *J. Geophys. Res.*, **99**, 5893, 1994.

155. Gary, S. P., M. E. McKean, D. Winske, B. J. Anderson, R. E. Denton, and S. A. Fuselier, The proton cyclotron instability and the anisotropy/β correlation, *J. Geophys. Res.*, **99**, 5903, 1994.

156. Gary, S. P., P. Convery, R. E. Denton, S. A. Fuselier, and B. J. Anderson, Proton and helium cyclotron anisotropy instability thresholds in the magnetosheath, *J. Geophys. Res.*, **99**, 5915, 1994.

157. Song, P., C. T. Russell, and S. P. Gary, Identification of low-frequency fluctuations in the terrestrial magnetosheath, *J. Geophys. Res.*, **99**, 6011, 1994.

158. Gary, S. P., B. J. Anderson, R. E. Denton, S. A. Fuselier, and M. E. McKean, A limited closure relation for anisotropic plasmas from the Earth's magnetosheath, *Phys. Plasmas*, **1**, 1676, 1994.

159. McKean, M. E., D. Winske, and S. P. Gary, Two-dimensional simulations of ion anisotropy instabilities in the magnetosheath, *J. Geophys. Res.*, **99**, 11,141, 1994.

160. Denton, R. E., B. J. Anderson, S. P. Gary, and S. A. Fuselier, Bounded anisotropy fluid model, *J. Geophys. Res.*, **99**, 11,225, 1994.

161. Gary, S. P., and M. A. Lee, The ion cyclotron instability and the inverse correlation between proton anisotropy and proton beta, *J. Geophys. Res.*, **99**, 11,297,

1994.

162. Fuselier, S. A., B. J. Anderson, S. P. Gary, and R. E. Denton, Inverse correlations between the ion temperature anisotropy and plasma beta in the Earth's quasi-parallel magnetosheath, *J. Geophys. Res.*, **99**, 14,931, 1994.

163. Gary, S. P., E. E. Scime, J. L. Phillips, and W. C. Feldman, The whistler heat flux instability: threshold conditions in the solar wind, *J. Geophys. Res.*, **99**, 23,391, 1994.

164. Scime, E. E., S. J. Bame, W. C. Feldman, S. P. Gary, and J. L. Phillips, Regulation of the solar wind electron heat flux from 1 to 5 AU: Ulysses observations, *J. Geophys. Res.*, **99**, 23,401, 1994.

165. Phillips, J. L., S. J. Bame, S. P. Gary, J. T. Gosling, E. E. Scime, and R. J. Forsyth, Radial and meridional trends in solar wind thermal electron temperature and anisotropy: Ulysses, *Space Sci. Rev.*, **72**, 109, 1994.

166. Gary, S. P., M. B. Moldwin, M. F. Thomsen, and D. Winske, Hot proton anisotropies and cool proton temperatures in the outer magnetosphere, *J. Geophys. Res.*, **99**, 23,603, 1994.

167. Denton, R. E., S. P. Gary, X. Li, B. J. Anderson, J. W. LaBelle, and M. Lessard, Low-frequency fluctuations in the magnetosheath near the magnetopause, *J. Geophys. Res.*, **100**, 5665, 1995.

168. Winske, D., S. P. Gary, M. E. Jones, M. Rosenberg, V. W. Chow, and D. A. Mendis, Ion heating in a dusty plasma due to the dust/ion acoustic instability, *Geophys. Res. Lett.*, **22**, 2069, 1995.

169. Birn, J., S. P. Gary, and M. Hesse, Microscale anisotropy reduction and macroscale dynamics of the magnetotail, *J. Geophys. Res.*, **100**, 19,211, 1995.

170. Gary, S. P., M. F. Thomsen, L. Yin, and D. Winske, Electromagnetic proton cyclotron instability: Interactions with magnetospheric protons, *J. Geophys. Res.*, **100**, 21,961, 1995.

171. Gary, S. P., L. Yin, and D. Winske, Electromagnetic proton cyclotron instability: Heating of cool magnetospheric helium ions, *Ann. Geophysicae*, **14**, 1, 1996.

172. Gary, S. P., and D. Winske, Field/field spatial correlation function: The electromagnetic proton cyclotron instability, *J. Geophys. Res.*, **101**, 2661, 1996.

173. Gary, S. P., and J. Wang, Whistler anisotropy instability: Electron anisotropy upper bound, *J. Geophys. Res.*, **101**, 10,749, 1996.

174. Gary, S. P., V. M. Vazquez, and D. Winske, Electromagnetic proton cyclotron instability: Proton velocity distributions, *J. Geophys. Res.*, **101**, 13,327, 1996.

175. Gary, S. P., M. E. McKean, and D. Winske, Proton temperature anisotropy in the magnetosheath: Hybrid simulations, *Geophys. Res. Lett.*, **23**, 2887, 1996.

176. Gary, S. P., M. F. Thomsen, J. Lee, D. McComas, and K. R. Moore, Warm protons at geosynchronous orbit, *J. Geophys. Res.*, **102**, 2291, 1997.

177. Convery, P. D., and S. P. Gary, Electromagnetic proton cyclotron ring instability: Threshold and saturation, *J. Geophys. Res.*, **102**, 2351, 1997.

178. Gary, S. P., J. Wang, D. Winske, and S. A. Fuselier, Proton temperature anisotropy upper bound, *J. Geophys. Res.*, **102**, 27,159, 1997.

179. Newbury, J. A., C. T. Russell, J. L. Phillips and S. P. Gary, Electron temperature in the ambient solar wind: Typical properties and a lower bound at 1 AU, *J. Geophys.*

Res., **103**, 9553, 1998.

180. Gary, S. P., H. Li, S. M. O'Rourke, and D. Winske, Proton resonant firehose instability: Temperature anisotropy and fluctuating field constraints, *J. Geophys. Res.*, **103**, 14,567, 1998.

181. Gary, S. P., J. A. Newbury, and B. E. Goldstein, Lower bound for electron core beta in the solar wind, *J. Geophys. Res.*, **103**, 14,559, 1998.

182. Daughton, W. S., and S. P. Gary, Electromagnetic proton/proton instabilities in the solar wind, *J. Geophys. Res.*, **103**, 20,613, 1998.

183. Denton, R. E., M. R. Lessard, J. W. LaBelle, and S. P. Gary, Identification of low-frequency magnetosheath waves, *J. Geophys. Res.*, **103**, 23,661, 1998.

184. Daughton, W. S., S. P. Gary, and D. Winske, Electromagnetic proton/proton instabilities in the solar wind: simulations, *J. Geophys. Res.*, **104**, 4657, 1999.

185. Gary, S. P., Collisionless dissipation wavenumber: Linear theory, *J. Geophys. Res.*, **104**, 6759, 1999.

186. Gary, S. P., R. M. Skoug, and W. Daughton, Electron heat flux constraints in the solar wind, *Phys. Plasmas*, **6**, 2607, 1999.

187. Gary, S. P., E. Neagu, R. M. Skoug, and B. E. Goldstein, Solar wind electrons: Parametric constraints, *J. Geophys. Res.*, **104**, 19,843, 1999.

188. Gary, S. P., and I. H. Cairns, Electron temperature anisotropy instabilities: Whistler, electrostatic, and z-mode, *J. Geophys. Res.*, **104**, 19,835, 1999.

189. Wang, J. J., S. P. Gary, and P. C. Liewer, Electromagnetic heavy-ion/proton instabilities, *J. Geophys. Res.*, **104**, 24,807, 1999.

190. Ober, D. M., M. F. Thomsen, S. P. Gary, D. L. Gallagher, and D. J. McComas, Survey of pancake-shaped warm ion distributions at geosynchronous orbit, *J. Geophys. Res.*, **104**, 28,625, 1999.

191. Goldstein, B. E., M. Neugebauer, L. D. Zhang, and S. P. Gary, Observed constraint on proton/proton relative velocities in the solar wind, *Geophys. Res. Lett.*, **27**, 53, 2000.

192. Gary, S. P., Y. Kazimura, H. Li, and J.-I. Sakai, Simulations of electron/electron instabilities: Electromagnetic fluctuations, *Phys. Plasmas*, **7**, 448, 2000.

193. Tokar, R. L., W. C. Feldman, S. P. Gary, J. T. Gosling, D. J. McComas, R. M. Skoug, C. W. Smith, N. F. Ness, and D. Haggerty, Suprathermal ions and MHD turbulence observed upstream of an interplanetary shock by Advanced Composition Explorer, *J. Geophys. Res.*, **105**, 7521, 2000.

194. Gary, S. P., and H. Li, Whistler heat flux instability at high beta, *Astrophys. J.*, **529**, 1131, 2000.

195. Keiter, P. A., E. E. Scime, M. M. Balkey, R. Boivin, J. L. Kline, and S. P. Gary, Beta-dependent upper bound on ion temperature anisotropy in a space-relevant laboratory plasma, *Phys. Plasmas*, **7**, 779, 2000.

196. Gary, S. P., L. Yin, D. Winske, and D. B. Reisenfeld, Electromagnetic alpha/proton instabilities in the solar wind, *Geophys. Res. Lett.*, **27**, 1355, 2000.

197. Gary, S. P., D. Winske, and M. Hesse, Electron temperature anisotropy instabilities: Computer simulations, *J. Geophys. Res.*, **105**, 10,751, 2000.

198. Kazimura, Y., S. P. Gary, H. Li, and J.-I. Sakai, Electromagnetic fluctuations

near the electron plasma frequency from electron/electron instabilities, *J. Geophys. Res.*, **105**, 10,537, 2000.

199. Scime, E.E., P. A. Keiter, M. M. Balkey, R. F. Boivin, J. L. Kline, M. Blackburn, and S. P. Gary, Ion temperature anisotropy limitation in high beta plasmas, *Phys. Plasmas*, **7**, 2157, 2000.

200. Maksimovic, M., S. P. Gary, and R. M. Skoug, Global trends of the solar wind electron suprathermal strength: Ulysses observations, *J. Geophys. Res.*, **105**, 18,337, 2000.

201. Gary, S. P., L. Yin, D. Winske, and D. B. Reisenfeld, Alpha/proton magnetosonic instability in the solar wind, *J. Geophys. Res.*, **105**, 20,989, 2000.

202. Gary, S. P., L. Yin, and D. Winske, Electromagnetic proton cyclotron anisotropy instability: Wave-particle scattering rate, *Geophys. Res. Lett.*, **27**, 2457, 2000.

203. Ofman, L., A. Viñas, and S. P. Gary, Constraints on the O^{5+} Anisotropy in the Solar Corona, *Ap. J.*, **547**, L175, 2001.

204. Neagu, E., S. P. Gary, J. E. Borovsky, W. Baumjohann, and R. A. Treumann, Constraints on magnetic fluctuation energies in the plasma sheet, *Geophys. Res. Lett.*, **28**, 919, 2001.

205. Li, H., S. P. Gary, and O. Stawicki, On the dissipation of magnetic fluctuations in the solar wind, *Geophys. Res. Lett.*, **28**, 1347, 2001.

206. Neugebauer, M., B. E. Goldstein, D. Winterhalter, R. J. MacDowall, and S. P. Gary, Ion distributions in large magnetic holes in the fast solar wind, *J. Geophys. Res.*, **106**, 5635, 2001.

207. Reisenfeld, D. B., S. P. Gary, J. T. Gosling, D. J. McComas, J. T. Steinberg, B. E. Goldstein, and M. Neugebauer, Helium energetics in the high-latitude solar wind: Ulysses observations, *J. Geophys. Res.*, **106**, 5693, 2001.

208. Stawicki, O., S. P. Gary, and H. Li, Solar wind magnetic fluctuation spectra: Dispersion versus damping, *J. Geophys. Res.*, **106**, 8273, 2001.

209. Scime, E. E., J. E. Littleton, S. P. Gary, R. Skoug, and N. Lin, Solar cycle variations in the electron heat flux: Ulysses observations, *Geophys. Res. Lett.*, **28**, 2169, 2001.

210. Yin, L., D. Winske, S. P. Gary, and J. Birn, Particle Hall-MHD simulation of collisionless reconnection: Finite Larmor radius correction, *Geophys. Res. Lett.*, **28**, 2173, 2001.

211. Gary, S. P., L. Yin, D. Winske, and L. Ofman, Electromagnetic heavy ion cyclotron instability: Anisotropy constraint in the solar corona, *J. Geophys. Res.*, **106**, 10,715, 2001.

212. Yin, L., D. Winske, S. P. Gary, and J. Birn, Hybrid and Hall-MHD simulations of collisionless reconnection: Dynamics of the electron pressure tensor, *J. Geophys. Res.*, **106**, 10,761, 2001.

213. Gary, S. P., R. M. Skoug, J. T. Steinberg, and C. W. Smith, Proton temperature anisotropy constraint in the solar wind: ACE observations, *Geophys. Res. Lett.*, **28**, 2759, 2001.

214. Issautier, K., R. M. Skoug, J. T. Gosling, S. P. Gary, and D. J. McComas, Solar wind plasma parameters on Ulysses: Detailed comparison between the URAP and SWOOPS experiments, *J. Geophys. Res.*, **106**, 15,665, 2001.

215. Samsonov, A. A., M. I. Pudovkin, S. P. Gary, and D. Hubert, Anisotropic MHD model of the dayside magnetosheath downstream of the oblique bow shock, *J. Geophys. Res.*, **106**, 21,689, 2001.

216. Lin, N., P. J. Kellogg, R. J. Macdowall, and S. P. Gary, Ion acoustic waves in the heliosphere, *Space Sci. Rev.*, *97*, 193, 2001.

217. Gary, S. P., B. E. Goldstein, and J. T. Steinberg, Helium ion acceleration and heating by Alfvén fluctuations in the solar wind, *J. Geophys. Res.*, **106**, 24,955, 2001.

218. Daughton, W., D. Winske, L. Yin, and S. P. Gary, The role of electron physics in slow mode shocks, *J. Geophys. Res.*, **106**, 25,031, 2001.

219. Gary, S. P., Mini-conference on magnetic reconnection in space and astrophysical plasmas, *Phys. Plasmas*, **9**, 2437, 2002.

220. Yin, L., D. Winske, S. P. Gary, and J. Birn, Hybrid and Hall-MHD simulations of collisionless reconnection: Effect of the ion pressure tensor and particle Hall-MHD, *Phys. Plasmas*, **9**, 2575, 2002.

221. Gary, S. P., B. E. Goldstein, and M. Neugebauer, Signatures of wave-ion interactions in the solar wind: Ulysses observations, *J. Geophys. Res.*, *107*, 1169, 10.1029/-2002JA000269, 2002.

222. Neagu, E., J. E. Borovsky, M. F. Thomsen, S. P. Gary, W. Baumjohann, and R. A. Treumann, Statistical survey of magnetic and velocity fluctuations in the near-Earth plasma sheet: AMPTE/IRM measurements, *J. Geophys. Res.*, *107*, 1098, 10.1029/-2001JA000318, 2002.

223. Kasper, J. C., A. J. Lazarus, and S. P. Gary, Wind/SWE observations of firehose constraint on solar wind proton temperature anisotropy, *Geophys. Res. Lett.*, **29**, 1839, doi:10.1029/2002GL014955, 2002.

224. Nishimura, K., S. P. Gary, and H. Li, Whistler anisotropy instability: Wave-particle scattering rate, *J. Geophys. Res.*, *107*, 1375, doi:10.1029/2002JA009250, 2002.

225. Ofman, L., S. P. Gary, and A. Viñas, Resonant heating and acceleration of ions in coronal holes driven by cyclotron resonant spectra, *J. Geophys. Res.*, *107*, 1461, doi:10.1029/2002JA009432, 2002.

226. Tuszewski, M., and S. P. Gary, Downstream instabilities of electronegative plasma discharges, *Phys. Plasmas*, *10*, in press, 2003.

227. Nishimura, K., S. P. Gary, H. Li, and S. A. Colgate, Magnetic reconnection in a force-free plasma: relationship between micro- and macroinstabilities, *Phys. Plasmas*, *10*, in press, 2003.

228. Gary, S. P., L. Yin, D. Winske, L. Ofman, B. E. Goldstein, and M. Neugebauer, Consequences of proton and alpha anisotropies in the solar wind: Hybrid simulations, *J. Geophys. Res.*, *108*, in press, 2003.

229. Nishimura, K., H. Matsumoto, H. Kojima, and S. P. Gary, Particle simulations of re-formation at collisionless perpendicular shocks: Coherent behavior of reflected ions, *J. Geophys. Res.*, submitted, 2002.

230. Liang, E., K. Nishimura, H. Li, and S. P. Gary, Particle energization in an expanding magnetized relativstic plasma, *Phys. Rev. Lett.*, submitted, 2002.

231. Nordholt, J. E., D. B. Reisenfeld, R. C. Wiens, F. Crary, D. M. Delapp, R. C. Elphic, H. O. Funsten, S. P. Gary, J. J. Hanley, D. J. Lawrence, M. Shappirio, J. T.

Steinberg, J. Wang, and D. T. Young, Deep Space 1 encounter with Comet 19P/Borrelly: Composition measurements by the PEPE ion mass spectrometer, *Geophys. Res. Lett.*, submitted, 2002.

Book

1. Gary, S. P., Theory of Space Plasma Microinstabilities, Cambridge Press, 1993.

Other Publications

1. Review of the book "Handbook of Plasma Instabilities," by F. F. Cap, *Astrophys. Lett.*, **19**, 66, 1978.

2. Review of the book "Instabilities in Space and Laboratory Plasmas," by D. B. Melrose, *EOS, Trans. Am. Geophys. Union*, **68**, 1145, 1987.

3. "What is a Plasma Instability?", *EOS, Trans. Am. Geophys. Union*, **73**, 529, 1992.

4. Review of the book "Plasma Physics: An Introductory Course," Edited by R. O. Dendy. *EOS, Trans. Am. Geophys. Union*, **76**, 53, 1995.