

VOLUME 2
CHAPTER 4: NONLINEAR EFFECTS IN PLASMA PHYSICS

Problems in Oscillation Centre Theory <i>by R. L. Dewar & G. W. Kentwell</i>	549
Experimental Test of Quasilinear Theory <i>by F. Doveil, S. I. Tsunoda & J. H. Malmberg</i>	551
Computer Simulation of the Langmuir Collapse of the Isolated Cavity <i>by A. I. D'yachenko, A. M. Rubenchik, R. Z. Sagdeev, V. F. Shvets & V. E. Zakharov</i>	573
Review of Double Layer Theory and Experiments in Laser Produced Plasmas <i>by S. Eliezer & H. Hora</i>	597
Computer Models for Kinetic Equations of Magnetically Confined Plasmas <i>by J. Killeen, G. D. Kerbel, M. G. McCoy, A. A. Mirin, E. J. Horowitz & D. E. Shumaker</i>	617
Statistical Theory of Plasma-Molecular Systems <i>by Yu. L. Klimontovich, H. Wilhelmsson, I. P. Yakimenko & A. G. Zagorodny</i>	645
Rigorous Upper Bounds for Transport Due to Inhomogeneous Turbulence <i>by J. A. Krommes & R. A. Smith</i>	679
Low Frequency Plasma Turbulence Excited by Cometary Ions <i>by G. S. Lakhina</i>	683

Improper Character of the Ideal Charged Gas Equations and Vortex Turbulence <i>by V. P. Maslov</i>	692
Temperature Distribution of a Plasma Irradiated by Self-Focussed Gaussian Laser Beam <i>by S. S. Tyagi & M. P. Srivastava</i>	718
Kinetic Equations and Equilibrium Distributions for Bounded Plasma-Molecular Systems <i>by A. S. Usenko, I. P. Yakimenko & A. G. Zagorodny</i>	721
Ion Acceleration in Laser Induced Plasma Target Surrounded by Air <i>by P. Vyas & M. P. Srivastava</i>	751
Hamiltonian Formalism for the Rossby Waves and Drift Waves in Plasma <i>by V. E. Zakharov, A. S. Monin & L. I. Piterbarg</i>	754
CHAPTER 5: NONLINEAR EFFECTS IN VARIOUS AREAS OF SCIENCE	
Superfluorescence under Atomic Level Degeneration <i>by I. R. Gabitov & A. V. Mikhailov</i>	779
Ordered Formations in Magnetic and Optical Media <i>by N. N. Akhmediev, V. M. Eleonsky, N. E. Kulagin & V. P. Silin</i>	788
Nonlinear Waves and Mass Generation in Gauge Field Theories <i>by O. I. Batsula</i>	801
The Relaxation Processes in Magnetic and the Problem of Soliton Attenuation <i>by V. G. Bar'yakhtar</i>	822
The Relaxation of the Kink-Type Solitons in One-Dimensional and Three-Dimensional Systems <i>by V. G. Bar'yakhtar, B. A. Ivanov, A. L. Sukstanskii & E. V. Tartakovskaya</i>	849

Recent Results on the Statistical Mechanics of Integrable Models in (1 + 1) Dimensions <i>by J. Timonen, D. J. Pilling, Y. Z. Chen & R. K. Bullough</i>	878
Maxwell-Bloch System with Pumping <i>by S. P. Burtsev, I. R. Gabitov & V. E. Zakharov</i>	897
Mathematical Problems of State Evolution of Infinite Systems of Statistical Mechanics <i>by D. Ya. Petrina</i>	906
Problem of Microcontrol in Continuum <i>by Yu. I. Samoilenko</i>	933
To the Theory of Modulated Magnetic Structure-Phase Transitions and Low-Temperature Equilibrium Magnetic States <i>by E. P. Stefanovskii & D. A. Yablonskii</i>	957
Liquid-Gas System Near the Critical Point <i>by I. R. Yukhnovskii, I. M. Idzik & V. O. Kolomijets</i>	974