

PHYSICS OF VIBRATIONS

Volume 8, Number 2, 2000

CONTENTS

NONLINEAR OPTICS

Nonlinear-Optical Spectral Transformation of the Powerful Femtosecond Laser Pulse in Air <i>I.S. Golubtsov, O.G. Kosareva, and E.I. Mozhaev</i>	73
--	----

SEA SURFACE WAVES

Impact of Internal Waves on the Sea Surface <i>I.V. Shugan and K.I. Voliak</i>	79
Sea Surface Statistical Properties as Measured by Laser Beam Reflections <i>I.V. Shugan, K.I. Voliak, K.-J. Lee, and Y. Park</i>	106

GENERAL WAVE THEORY

Wave Field in Inhomogeneous Media Calculated Numerically on the Basis of Complex Geometrical Optics <i>R.A. Egorchenkov</i>	122
---	-----

NONLINEAR DYNAMICS

Nonlinear Dynamics of Hydrogen-Containing Systems: Ferroelectrics and Ionic Channels of Biomembranes <i>V.S. Bystrov and T.R. Tazieva</i>	128
---	-----

MICROWAVE ELECTRONICS

Pulsed Processes During the Interaction between an Electron Beam and a Surface Electromagnetic Wave <i>V.I. Kanavets, Yu.D. Mozgovoi, S.A. Khritkin, and D.E. Galushko</i>	133
Stimulated Radiation of Nonlinear Electron Oscillators at Electrostatic Focusing <i>V.I. Kanavets, Yu.D. Mozgovoi, S.A. Khritkin, and N.N. Shishov</i>	137