

**BULLETIN OF THE RUSSIAN ACADEMY OF SCIENCES. PHYSICS
SUPPLEMENT**

PHYSICS OF VIBRATIONS

Volume 57, Number 4, 1993

CONTENTS

FLUID DYNAMICS

- Rosby Wave Propagation over Periodic Topography
R. Purini and I.V. Shugan..... 157
- Formation of Oscillatory Vortex Flows in a Marginal Zone of the Sea Ice Cover
A.V. Marchenko and A.Yu. Semenov..... 172

NONLINEAR OPTICS

- Self-Sustained Oscillations of a Wave Beam Reflected from a Nonlinear Layer at Low Incidence Angles
S.D. Kunitsin, A.P. Sukhorukov, and V.A. Trofimov..... 184
- Self-Compression of the Fundamental and Second-Harmonic Pulses in Media with Quadratic
and Cubic Nonlinearities
M.V. Komissarova, A.P. Sukhorukov, and V.A. Trofimov 189

LASER MICROKINETICS

- Moving and Motionless Laser-Induced Kinks and Solitons in a Chemically Nonequilibrium Medium:
Influence of the V–T Relaxation Time
O.A. Gunaze and V.A. Trofimov 193

CLASSICAL ELECTRODYNAMICS

- The Causality Principle and Its Consequences for Linear Electrodynamics of Media
A.F. Aleksandrov, A.A. Rukhadze, and V.A. Stefan 201