

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

PHYSICS OF VIBRATIONS

Volume 59, Number 2, 1995

CONTENTS

NONLINEAR OPTICS

Elementary Classical Analysis of Optical-Harmonic Generation and Four-Wave Mixing
in Strong Light Fields

D.A. Akimov, N.I. Koroteev, A.M. Zheltikov, G. Ferrante, and M. Zarcone 61

NONLINEAR ACOUSTICS

Phase Conjugation of a Sound Wave in Photoacoustic Interaction in an Electroacoustic Amplifier

V.N. Strelets 78

Acoustic Resonance in Impurity Hematite Crystals near the Morin Phase Transition

V. Moshkin and V. Preobrazhensky 83

FLUID DYNAMICS

The Existence of Solitary Waves in Dispersive Media

A.T. Il'ichev 88

Nonlinear Waveguides in Resonance Three-Wave Interaction in an Ideal Fluid with Surface Effects

A.T. Il'ichev and A.V. Marchenko 98

WAVES IN PLASMA

Nonlinear Steady Waves in Cold Plasma

Sh. Amiranashvili and A. Ignatov 108

NONLINEAR WAVE STATISTICS

Adiabatic Reduction of Dimensionality and the Method of Similar Additive Noise in Nonlinear
Stochastic Dynamics

G.A. Lyakhov and S.L. Popyrin 112