

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

PHYSICS OF VIBRATIONS

Volume 57, Number 3, 1993

CONTENTS

NONLINEAR ACOUSTICS. QUANTUM FLUIDS

- Nonlinear Raman-Type Wave Interactions in Quantum Liquids
N.I. Pushkina 107

NONLINEAR ACOUSTICS

- Sonic Field Induced by a Source Moving over the Surface of a Phase Conjugation Layer
V.N. Streltsov 123
- Phase Conjugation in a Parametric System with a Longitudinal Inhomogeneity of the Speed of Sound
V.N. Streltsov 129

FLUID DYNAMICS

- A New Approach to Parametric Excitation of Stationary Surface Waves in a Viscous Liquid
Nam Hong U 131

PHYSICS OF PLASMA

- Microwave Plasma Oscillators and Amplifiers
M.V. Kuzelev, A.A. Rukhadze, P.S. Strelkov, and A.G. Shkvarunets 136

THEORY OF ELECTROMAGNETIC WAVES

- Shape-Dependent Reflection of Ultrashort Nonsine Videopulses from Dispersive Media
A.B. Shvartsburg 149