

PHYSICS OF WAVE PHENOMENA

Volume 13, Number 2, 2005

CONTENTS

LASER REMOTE SENSING

Microbubbles of Dissolved Gas in Water: Physical Studies and Possible Applications in Biological Technologies and Medicine

N.F. Bunkin and G.A. Lyakhov 61

NONLINEAR ACOUSTICS

Acoustic Imaging of Object in Phase-Inhomogeneous Medium Using Phase Conjugation of Higher Harmonic of Ultrasonic Beam

A.P. Brysev, F.V. Bunkin, L.M. Krutyansky, and R.V. Klopotov 81

Application of Phase Conjugation of Ultrasound in Nondestructive Testing of Objects with Corrugated Surface

L. Krutyansky, P. Pernod, and K. Yamamoto 87

REMOTE SENSING OF NATURAL MEDIA

Technical Means and Methods of Acoustic Monitoring of Natural Phenomena in Water Areas

S.I. Kutakov and I.A. Maslov 91

PLASMA PHYSICS

Formation of Bead and Specific Ball Lightnings Upon Powerful Pumping of Gas Medium

A.M. Boichenko 104