

# Contents

---

---

Vol. 32, No. 4, 2024

---

---

## Sources of Coherent Radiation of Infrared and Microwave Range

Optimization of Pump Pulse Duration and Cr:ZnSe Crystal Length for Efficient Generation of Tunable Mid-IR Laser Radiation Pumped by Laser Diode at Room Temperature

*A. Říha, H. Jelínková, M. E. Doroshenko, J. Šulc, M. Němec, D. Vyhlídal, and D. V. Badíkov* 257

Dependence of Plasma Maser Emission Spectra on Azimuthal Plasma Concentration Inhomogeneity

*A. E. Donets, V. I. Rogozhin, V. P. Bakhtin, A. B. Buleyko, A. G. Bykov, O. T. Loza, and A. A. Ravaev* 268

---

## Interaction of Laser Radiation with Matter

Effect of Laser-Induced Heating of the Antiferromagnetic IrMn Layer on Generation of Terahertz Pulses in Co/WSe<sub>2</sub>-Based Spintronic Emitters

*A. V. Gorbatova, A. M. Buryakov, P. Yu. Avdeev, E. D. Lebedeva, I. Yu. Pashen'kin, E. A. Karashkin, M. V. Sapozhnikov, and E. D. Mishina* 273

---

## Optical Methods for the Study of Aqueous Solutions

Features of Light Scattering in Turbid Media As Modeled for Two-Component Emulsions

*A. V. Shkirin, N. V. Suyazov, S. N. Chirikov, L. L. Chaikov, M. A. Shermeneva, and S. V. Gudkov* 280

---

## Underwater Acoustic

Resolution of Hydroacoustic Noise Signals under Conditions of Spatial-Temporal Variability of Ocean Environment

*V. M. Kuz'kin, S. A. Pereselkov, P. V. Rybyanets, and S. A. Tkachenko* 290

Comparison of the Waveguide and Phase-Energy Invariants in the Near-Field Zone of Acoustic Illumination

*S. P. Aksenov and G. N. Kuznetsov* 300

---