

Contents

Vol. 32, No. 5, 2024

Sources of Coherent Radiation of Infrared and Microwave Range

5- μm Lasing on Tb³⁺ Ions in a Chalcogenide Fiber Pumped by a 2.8- μm Er:ZBLAN Laser

V. V. Koltashev, M. P. Frolov, S. E. Sverchkov, B. I. Galagan, M. V. Sukhanov, A. P. Velmuzhov, B. I. Denker, and V. G. Plotnichenko

315

Resonant Plasmonic Structures for Spintronic THz Emitters

A. M. Buryakov, A. V. Gorbatova, and S. D. Lavrov

320

Diode-Side-Pumped Pulsed Nd:YAG Laser Operating in the Range of 1.3–1.44 μm with Single and Dual-Wavelength Output

I. V. Smirnov, P. G. Zverev, and A. A. Sirotkin

328

Nonlinear Optical Effects Under the Action of Short Laser Pulses

Highly Transient Stimulated Raman Scattering in SrMoO₄ under Ultrafast Double-Pulse Laser Pumping

Yu. A. Kochukov, D. P. Tereshchenko, S. N. Smetanin, A. G. Papashvili, K. A. Gubina, V. V. Bulgakova, A. A. Ushakov, V. E. Shukshin, E. E. Dunaeva, I. S. Voronina, and L. I. Ivleva

336

Experimental Proof of the Effect of Induced Optical Coalescence of Bubston Clusters at Water Breakdown Induced by Picosecond and Nanosecond Laser Pulses

V. A. Babenko, N. F. Bunkin, and A. A. Sychev

345

Methods of Optical Signal Processing

Autocollimation Optical Doppler Velocimeter: Velocity Measurement of Hard-to-Access Objects

A. L. Pavlov, Yu. N. Pyrkov, and V. B. Tsvetkov

354

Frequency Division Multiple Access with High Performance Based on Several Defect Resonators According to the Fibonacci Sequence in 1D Photonic Star Waveguide Structure

Younes Errouas, Ilyass El Kadmiri, Youssef Ben-Ali, and Driss Bria

360

Thermoacoustic Generation

Nonlinear Effects in Thermoacoustic Pressure Generation Mechanism—Analytic Models

A. A. Samokhin, P. A. Pivovarov, and L. A. Burtsev

378

Underwater Acoustics

Adaptive Method for Holographic Processing of Broadband Hydroacoustic Signals

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

382
