



NATIONAL INSTITUTE FOR LASER, PLASMA AND RADIATION PHYSICS

ATOMISTILO 409, PO Box MG-36, Magurele 077125, Ilfov, ROMANIA
Phone: +40 21 457-4489, FAX: + 40 21 457-4243, <http://www.inflpr.ro>

LABORATORY OF SOLID-STATE QUANTUM ELECTRONICS

LIST OF PAPERS: 2020

1. A. M. Voiculescu, C. E. Tihon, S. Hau, G. Stanciu, O. Toma, "Optical study of SrLaGa₃O₇ ceramic samples doped with Er³⁺ and Yb³⁺," Opt. Mater. **100**, 109613 (2020).
2. C. A. Brandus, "Analysis of the self-frequency doubling nonlinear mirror mode-locking threshold. The case of Nd:GdCOB bi-functional material," Rom. Rep. Phys. **72**(1), 401 (2020).
3. N. T. Vasile, "Parallel encoding in optically multiplexed image camera for temporal resolution improvement," Opt. Eng. **59**(3), 033108 (2020).
4. A. Craciun and T. Dascalu, "A method to generate vector beams with adjustable amplitude in the focal plane," Appl. Sci. **10**(7), 2313 (2020).
5. L. Gheorghe, A. Broasca, M. Greculeasa, F. Voicu, G. Stanciu, S. Hau, G. Croitoru, C. A. Brandus, C. Gheorghe, F. Khaled, P. Loiseau, G. Aka, "Czochralski-grown La_xGd_yR_zSc_{4-x-y-z}(BO₃)₄ (R = Yb, Nd) crystals - A review of recent developments," Opt. Mat. X **7**, 100052 (2020).
6. M. Greculeasa, A. Broasca, F. Voicu, S. Hau, G. Croitoru, G. Stanciu, C. Gheorghe, N. Pavel, L. Gheorghe, "Bifunctional La_xNd_yGd_zSc_{4-x-y-z}(BO₃)₄ crystal: Czochralski growth, linear and nonlinear optical properties, and near-infrared laser emission performances," Opt. & Laser Techn. **131**, 106433 (2020).
7. A. Broasca, M. Greculeasa, F. Voicu, S. Hau, G. Croitoru, C. Gheorghe, N. Pavel, L. Gheorghe, "Efficient near-infrared laser emission and nonlinear optical properties of a newly developed Yb:LYSB laser crystal," J. Alloys & Comp. **844**, 156143 (2020).
8. C. Dumitrache and A. Yalin, "Gas dynamic regimes observed in dual-pulse laser ignition," Int. J. Heat Mass Transf. **161**, 120302 (2020).
9. S. Georgescu, A. Stefan, O. Toma, "Phonon sidebands of Eu³⁺ in BaGd₂ZnO₅," J. Lumin. **228**, 117597 (2020).
10. G. Stanciu, F. Voicu, C. A. Brandus, C. E. Tihon, S. Hau, C. Gheorghe, G. Croitoru, L. Gheorghe, M. Dumitru, "Enhancement of the laser emission efficiency of Yb:Y₂O₃ ceramics via multi-step sintering method fabrication," Opt. Mater. **109**, 110411 (2020).
11. C. Dumitrache, C. Butte, A. Yalin, "Resonant dual-pulse laser ignition technique based on oxygen REMPI pre-ionization," Sci. Rep. **10**, 19916 (2020).