



## LABORATORY OF SOLID-STATE QUANTUM ELECTRONICS

## PRESENTATIONS AT INTERNATIONAL CONFERENCES

- 2021 -

1. M. Greculeasa, A. Broasca, F. Voicu, S. Hau, G. Croitoru, C. Brandus, G. Stanciu, C. Gheorghe, L. Gheorghe, "RE-doped LGSB (RE = Nd, Yb) as new high performance near-infrared laser crystals," 2021 Conference on Lasers and Electro-Optics/Europe - European Quantum Electronics Virtual Conferences (CLEO®/Europe-EQEC 2021), 21-25 June 2021, presentation CA-P.7 (poster presentation).
2. O.-V. Grigore, A. Craciun, N. Pavel, T. Dascalu, "Exploring the topological charge and shape of an optical vortex generated with wavelength-detuned spiral phase plates," 2021 Conference on Lasers and Electro-Optics/Europe - European Quantum Electronics Virtual Conferences (CLEO®/Europe-EQEC 2021), 21-25 June 2021, presentation CA-P.15 (poster presentation).
3. G. Stanciu, F. Voicu, C.-A. Brandus, E.-C. Tihon, S. Hau, C. Gheorghe, G. Croitoru, L. Gheorghe, "Development of a new sintering technique for fabricating high-quality Nd<sup>3+</sup>- and Yb<sup>3+</sup>-doped Y<sub>2</sub>O<sub>3</sub> Transparent Ceramics," 2021 Conference on Lasers and Electro-Optics/Europe - European Quantum Electronics Virtual Conferences (CLEO®/Europe-EQEC 2021), 21-25 June 2021, presentation CE-P.4 (poster presentation).
4. A. Craciun, O. Grigore, T. Dascalu, "Theoretical and experimental study of the vector beams generated with an axicon pair and uniaxial crystals," 2021 Conference on Lasers and Electro-Optics/Europe - European Quantum Electronics Virtual Conferences (CLEO®/Europe-EQEC 2021), 21-25 June 2021, presentation CL-P.5 (poster presentation).
5. A. Craciun, T. Dascalu, "Accurate beam propagation methods assisted by ray-tracing," 2021 Conference on Lasers and Electro-Optics/Europe - European Quantum Electronics Virtual Conferences (CLEO®/Europe-EQEC 2021), 21-25 June 2021, presentation EJ-P.4 (poster presentation).
6. A. Broasca, M. Greculeasa, F. Voicu, G. Stanciu, S. Hau, C. Gheorghe, G. Croitoru, N. Pavel, L. Gheorghe, "LYSB and Yb-Doped LYSB crystals: Czochralski growth, optical characterization and laser emission performances," OSA Laser Congress Virtual Event, 03 Oct. - 07 Oct. 2021; oral presentation ATh1A.6.
7. C. Dumitrache, A.P. Yalin, "Vorticity dynamics in laser-induced plasma," 19<sup>th</sup> International Conference on Plasma Physics and Applications, CPPA 2021, Aug. 31 - Sept. 3, Magurele, Bucharest, Romania; presentation O-11 (oral presentation).
8. C.I. Constantin, C. Dumitrache, B. Mitu, "Characterization of a filamentary argon plasma jet by optical emission spectroscopy," 19<sup>th</sup> International Conference on Plasma Physics and Applications, CPPA 2021, Aug. 31 - Sept. 3, Magurele, Bucharest, Romania; presentation P2-02 (poster presentation).
9. S. Hau, C. Gheorghe, L. Gheorghe, G. Stanciu, "Optical properties of Pr<sup>3+</sup>-doped Ca<sub>3</sub>(Ta,Ga)<sub>5</sub>O<sub>12</sub> ceramic phosphors," TIM20-21 Physics Conference, 11 - 13 November 2021, Timisoara, Romania; poster presentation CMP-P3.
10. A. M. Voiculescu, S. Hau, G. Stanciu, C. Gheorghe, "Synthesis by solid state reaction and luminescence properties of LaAlO<sub>3</sub> perovskite phosphor doped with Rare Earths", TIM 20-21 Physics Conference, 11-13 November 2021, Timisoara, Romania; poster presentation CMP-P10.
11. N. Pavel, G. Croitoru, O.-V. Grigore, N.-T. Vasile, T. Dascalu, A. Birtas, N. Boicea, M. Dinca, F. Draghici, R. Chiriac, "Laser Spark-Plug Development - From Experimental Device to Successfully Engine Ignition," 1<sup>st</sup> International Conference Advances in 3OM: Opto-Mechatronics, Opto-Mechanics and Optical Metrology, 13-16 December 2021, Timisoara, Romania; paper 3OM100-55 (keynote presentation).