



LABORATORY OF SOLID-STATE QUANTUM ELECTRONICS

PRESENTATIONS AT INTERNATIONAL CONFERENCES

- 2022 -

1. N. T. Vasile, G. Croitoru, N. Pavel, "Multi-point, burst pulse-train laser ignition of methane-air mixtures by a high-peak power passively Q-switched Nd:YAG/Cr⁴⁺:YAG multi-beam laser", The 8th Tiny Integrated Laser and Laser Ignition Conference 2022, 20-22 April 2022, Pacifico Yokohama, Yokohama, Japan, presentation LIC2-03 (oral presentation).
2. O. Toma, A. Enachi, G. Stanciu, "Excited-state absorption in optically-scattering erbium-doped ceramics," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P1-05. Book of Abstracts, ISSN 2821-7128.
3. O. Grigore, A. Craciun, N. Pavel, T. Dascalu, "Vector vortex beams generated by polarization conversion in uniaxial crystals," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P1-06. Book of Abstracts, ISSN 2821-7128.
4. S. Hau, C. Gheorghe, L. Gheorghe, F. Voicu, M. Greculeasa, A. Brosca, G. Stanciu, D. Avram, M. Enculescu, "Luminescence and optical thermometry of the Pr³⁺ ions doped Ca₃(M,Ga)₅O₁₂ (M⁵⁺ = Nb, Ta) garnet phosphors," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-01. Book of Abstracts, ISSN 2821-7128.
5. A. M. Voiculescu, S. Hau, G. Stanciu, R. D. Avram, C. Gheorghe, "Luminescence properties and optical thermometry of Er³⁺-Yb³⁺ co-doped LaAlO₃ phosphors," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-02. Book of Abstracts, ISSN 2821-7128.
6. A. Enachi, O. Toma, "Upconversion luminescence in BiTa₇O₁₂ codoped with Er³⁺ and Yb³⁺," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-03. Book of Abstracts, ISSN 2821-7128.
7. A. Broasca, M. Greculeasa, F. Voicu, G. Stanciu, S. Hau, C. Gheorghe, L. Gheorghe, "Czochralski Growth and Characterization of new Pr:LGSB Nonlinear Optical Crystal," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-04. Book of Abstracts, ISSN 2821-7128.
8. M. Greculeasa, A. Broasca, F. Voicu, G. Stanciu, S. Hau, C. Gheorghe, C.A. Brandus, N. Pavel, M. Enculescu, L. Gheorghe, "Crystal Growth and Characterization of La_{0.733}Nd_{0.035}Gd_{0.452}Sc_{2.78}(BO₃)₄ as a New Bifunctional Laser and Nonlinear Optical Crystal," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-05. Book of Abstracts, ISSN 2821-7128.
9. G. Stanciu, F. Voicu, C. A. Brandus, C. E. Tihon, S. Hau, C. Gheorghe, G. Croitoru, L. Gheorghe, N. Pavel, "Fabrication and laser performances of Nd- and Yb-doped Y₃Al₅O₁₂ transparent ceramics," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-06. Book of Abstracts, ISSN 2821-7128.
10. C.-A. Brandus and L. Gheorghe, "Exploring x(2) nonlinearity for mode-locking of Nd:LGSB laser," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-07. Book of Abstracts, ISSN 2821-7128.
11. M. Boni, S. I. Nistorescu, T. Tozar, A. Dinache, **G. Stanciu**, A. Simon, A. M. Udrea, A. Staicu, "System for water treatment based on singlet oxygen micronanobubbles," International Conference on Laser,



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- Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P5-11. Book of Abstracts, ISSN 2821-7128.
12. N. T. Vasile, G. Croitoru, C. Dumitrache, and N. Pavel, "Multi-point, pulse-train laser ignition of methane-air mixtures by a high-peak power passively Q-switched Nd:YAG/Cr⁴⁺:YAG compact laser," 10th EPS-QEOD EUROPHOTON Conference, 28 Aug. - 2 Sept. 2022, Hannover, Germany; presentation TUE-P-1.1.
 13. A. Broasca, M. Greculeasa, F. Voicu, G. Stanciu, S. Hau, C. Gheorghe, and L. Gheorghe, "Growth and optical properties of the newly developed Pr:LGSSB bifunctional crystal," 10th EPS-QEOD EUROPHOTON Conference, 28 Aug. - 2 Sept. 2022, Hannover, Germany; presentation TUE-P-1.8.
 14. M. Greculeasa, A. Broasca, F. Voicu, G. Stanciu, S. Hau, C. Gheorghe, C.A. Brandus, N. Pavel, and L. Gheorghe, "Development of Czochralski-grown La_{0.733}Nd_{0.035}Gd_{0.452}Sc_{2.75}(BO₃)₄ as a new bifunctional laser and nonlinear crystal," 10th EPS-QEOD EUROPHOTON Conference, 28 Aug. - 2 Sept. 2022, Hannover, Germany; presentation TUE-P-1.9.
 15. S. Hau, C. Gheorghe, L. Gheorghe, F. Voicu, M. Greculeasa, A. Broasca, G. Stanciu, M. Enculescu, "Spectroscopic Characterizations of Pr³⁺ and Dy³⁺ doped Calcium Tantalum Gallium Garnet-Ca_{2.85}Ta_{1.80}Ga_{3.10}O₁₂ Single Crystals," 20th International Balkan Workshop on Applied Physics and Materials Science (IBWAP 2022), July 12-15, Constanta, Romania; presentation S1-P7.
 16. L. Gheorghe, A. Broasca, M. Greculeasa, F. Voicu, G. Stanciu, S. Hau, C. Gheorghe, "Czochralski growth and characterization of newly developed Pr:LGSSB nonlinear optical and laser crystal," 7th European Conference on Crystal Growth - ECCG7, 25-27 July 2022, Paris, France; oral presentation.
 17. S. Hau, M. Greculeasa, A. Broasca, F. Voicu, G. Stanciu, D. Avram, M. Enculescu, L. Gheorghe, C. Gheorghe, "Pr³⁺-doped Ca₃(Ta, Ga)₅O₁₂ single crystal as potential laser material in the visible range," 7th European Conference on Crystal Growth - ECCG7, 25-27 July 2022, Paris, France; presentation P20.
 18. C. Stanciu, C. Tihon, G. Stanciu, S. Hau, M. Cernea, "Characterizations of vacuum sintered europium doped SrTiO₃ ceramics using sol-gel synthesized nanopowders," 14th International Conference on Physics of Advanced Materials - ICPAM-14 and PAMS-5, September 8-15, 2022, Dubrovnik, Croatia.
 19. C. Tihon, C. Stanciu, G. Stanciu, M. Cernea, "Synthesis, characterization and spectroscopic properties of Eu-doped SrTiO₃ ceramics sintered from sol-gel derived powders," 14th International Conference on Physics of Advanced Materials - ICPAM-14 and PAMS-5, September 8-15, 2022, Dubrovnik, Croatia.
 20. C. Tihon, C. Stanciu, G. Stanciu, M. Cernea, "Spectroscopic Properties of Eu-doped SrTiO₃ Ceramics Sintered from Sol-Gel Derived Powders," E-MRS 2022 Fall Meeting, 19-22 September 2022, Warsaw, Poland; presentation K.P.8.
 21. C. Stanciu, C. Tihon, G. Stanciu, S. Hau, M. Cernea, "Investigation of microstructure and spectroscopic properties of europium doped SrTiO₃ ceramics prepared via sol-gel method," E-MRS 2022 Fall Meeting, 19-22 September 2022, Warsaw, Poland; presentation K.P.9.