



PRESENTATIONS AT INTERNATIONAL CONFERENCES

- 2023 -

1. C. Dumitrache, G. Croitoru, N. Pavel, "Laser ignition of CH₄-air mixtures by a four-beam passively Q-switched Nd:YAG/Cr⁴⁺:YAG laser operating in burst mode," The 9th Tiny Integrated Laser and Laser Ignition Conference 2023, 19-21 April 2023, Pacifico Yokohama, Yokohama, Japan, presentation TILA-LIC2-02 (oral presentation).
2. L. M. Gheorghe, A. Broasca, M. Greculeasa, F. Voicu, G. Croitoru, S. Hau, C. Gheorghe, N. Pavel, "Yb- and Nd-doped La_xGd_ySc_{4-x-y}(BO₃)₄ (LGSB) as new high performance near-infrared laser crystals," The 9th Tiny Integrated Laser and Laser Ignition Conference 2023, 19-21 April 2023, Pacifico Yokohama, Yokohama, Japan, presentation TILA-LICp-01 (poster presentation).
3. G. Stanciu, F. Voicu, C. A. Brandus, C. E. Tihon, S. Hau, C. Gheorghe, G. Croitoru, L. M. Gheorghe, N. Pavel, "RE³⁺:Y₂O₃ transparent ceramic media realized via a multi-step sintering method," The 9th Tiny Integrated Laser and Laser Ignition Conference 2023, 19-21 April 2023, Pacifico Yokohama, Yokohama, Japan, presentation TILA-LICp-02 (poster presentation).
4. G. Croitoru, I. Anghel, F. Voicu, M. Greculeasa, A. Broasca, L. M. Gheorghe, N. Pavel, "Waveguides realized in RE³⁺:CLNGG laser crystals by direct writing with a fs-laser beam," The 9th Tiny Integrated Laser and Laser Ignition Conference 2023, 19-21 April 2023, Pacifico Yokohama, Yokohama, Japan, presentation TILA-LICp-03 (poster presentation).
5. O. V. Grigore, A. Craciun, N. Pavel, "Thermal analysis of a passively Q-switched Nd:YAG/Cr⁴⁺:YAG laser with multiple-beam output," The 9th Tiny Integrated Laser and Laser Ignition Conference 2023, 19-21 April 2023, Pacifico Yokohama, Yokohama, Japan, presentation TILA-LICp-05 (poster presentation).
6. C. Tihon, C. Stanciu, G. Stanciu, S. Hau, M. Cernea, "Synthesis, characterization and spectroscopic properties of Er, Yb - doped SrTiO₃ ceramics sintered from sol-gel derived powders," E-MRS 2023 Spring meeting, 29 May - 2 June 2023, Strasbourg, France; session FP, paper 29_909 (poster presentation).
7. C. Stanciu, C. Tihon, G. Stanciu, S. Hau, M. Cernea, R. Trusca, "Investigation of rare earth (Er, Yb) effects on structural, morphological, and optical properties of SrTiO₃ doped ceramics elaborated from sol-gel synthesized nanopowders," E-MRS 2023 Spring meeting, 29 May - 2 June 2023, Strasbourg, France; session FP, paper 30-922 (poster presentation).
8. G. Croitoru, I. Anghel, F.-M. Voicu, M. Greculeasa, A. Broasca, L.-M. Gheorghe, N. Pavel, "Buried Depressed-Cladding Waveguides Fabricated in RE³⁺:CLNGG Laser Crystals using Direct Laser Writing Technique," 2023 Conference on Lasers and Electro-Optics/Europe - European Quantum Electronics Conferences (CLEO@/Europe-EQEC 2023), 26-30 June 2023, Munich, Germany, presentation CA-P.4 (poster presentation); doi: 10.1109/CLEO/Europe-EQEC57999.2023.10232516.
9. C. Stanciu, C. Tihon, G. Stanciu, R. Trusca, "Structural, morphological, and optical properties of rare earth (erbium, ytterbium)-doped SrTiO₃ ceramics," XVIIIth Conference of the European Ceramic Society, 2-6 July 2023, Lyon, France, paper S8-P146 (poster presentation).



10. A. M. Voiculescu, S. Hau, G. Stanciu, C. Gheorghe, "Synthesis and characterization of a new red phosphor SrLaGaO₄ doped with Eu³⁺," The 21th International Balkan Workshop on Applied Physics and Materials Science, 11-14 July, 2023, Constanta, Romania; paper S1 O17 (Book of abstracts, ISSN 2501-9058, page 30; oral presentation).
11. L. Gheorghe, A. Broasca, M. Greculeasa, F. Voicu, C. Gheorghe, S. Hau, G. Stanciu, C. A. Brandus, N. Pavel, "Czochralski-grown LGSB crystals as high-performance NIR laser crystals and SFD crystals in the VIS spectral range," International Conference on Crystal Growth and Epitaxy - ICCGE-20, 30 July - 04 August 2023, Naples, Italy (poster presentation PS 1 - P49).
12. G. Stanciu, F. Voicu, C. A. Brandus, C. E. Tihon, S. Hau, C. Gheorghe, G. Croitoru, L. Gheorghe, N. Pavel, "Rare-earths doped Y₂O₃ laser materials," International Conference on Crystal Growth and Epitaxy - ICCGE-20, 30 July - 04 August 2023, Naples, Italy; (poster presentation PS 2 - P30).
13. C. Gheorghe, S. Hau, A. Broasca, M. Greculeasa, F. Voicu, M. Enculescu, L. Gheorghe, "Ca₃(Ta,Ga)₅O₁₂:Pr³⁺ as potential laser crystal emitting in the blue and red spectral domains," International Conference on Crystal Growth and Epitaxy - ICCGE-20, 30 July - 04 August 2023, Naples, Italy; (poster presentation PS 3 - P15).
14. A. Broasca, M. Greculeasa, F. Voicu, S. Hau, G. Stanciu, C. Gheorghe, G. Croitoru, N. Pavel, L. Gheorghe, "Growth and optical properties of Nd:LYSB as a new laser and nonlinear optical borate crystal," International Conference on Crystal Growth and Epitaxy - ICCGE-20, 30 July - 04 August 2023, Naples, Italy; (oral presentation Optical Crystals 4 - O3).
15. M. Greculeasa, A. Broasca, F. Voicu, G. Stanciu, S. Hau, C. Gheorghe, G. Croitoru, N. Pavel, L. Gheorghe, "Development of LYSB and Yb-doped LYSB crystals as new candidates for the next generation of nonlinear optical and/or laser crystals," International Conference on Crystal Growth and Epitaxy - ICCGE-20, 30 July - 04 August 2023, Naples, Italy; (oral presentation Optical Crystals 6 - O4).
16. G. Croitoru and N. Pavel, "Buried depressed-cladding waveguides lasers realized in Nd-doped laser media by direct writing with a fs-laser beam," Markus Pessa International Summer School "New Frontiers in Optical Technologies," 7 - 11 August 2023, Tampere University, Finland (poster presentation).
17. O.-V. Grigore, C. Dumitrache, G. Croitoru, and N. Pavel, "Aspects of CH₄-air mixtures laser ignition by a multi-point, pulse-train passively Q-switched Nd:YAG/Cr⁴⁺:YAG laser," Markus Pessa International Summer School "New Frontiers in Optical Technologies," 7 - 11 August 2023, Tampere University, Finland (poster presentation).
18. O. V. Grigore, N. Pavel, "Single-point, pulse-burst mode laser-induced ignition of hydrogen-air mixtures in a constant-volume combustion chamber by a passively Q-switched Nd:YAG/Cr⁴⁺:YAG laser spark plug," Tmrees23Gr Technologies and Materials for Renewable Energy, Environment and Sustainability, Athens, Greece, November 27-29, 2023 (oral presentation, online).
19. N. Pavel, O.-V. Grigore, G. Stanciu, G. Croitoru, "Characteristics of Laser Ignition in Methane/Air and Hydrogen/Air Mixtures in a Constant-Volume Combustion Chamber," 2nd International Conference Advances in 3OM: Opto-Mechatronics, Opto-Mechanics and Optical Metrology, 11-14 December 2023, Timisoara, Romania (paper OPT23-13, keynote presentation). Book of Abstracts, ISSN 2810-5249.