

NATIONAL INSTITUTE FOR LASER, PLASMA AND RADIATION PHYSICS MAGURELE PO BOX MG-36, BUCHAREST R 077125, ROMANIA

LABORATORY OF SOLID-STATE QUANTUM ELECTRONICS

PRESENTATIONS AT INTERNATIONAL CONFERENCES

- 2012 -

- 1. G. Salamu, O. Sandu, M. Dejanu, F. Voicu, C. Ticos, D. Popa, S. Parlac, N. Pavel, and T. Dascalu, "Study of combustion process for a methane-air mixture using a microlaser system," International Student Conference on Photonics 2012, SPIE Student Chapter, 8-11 May 2012, Sinaia, Romania; Book of abstracts, ISSN 2284-9750, p. 17; Oral presentation.
- 2. L. Gheorghe, "Advanced nonlinear optic crystals for high efficiency visible and UV laser sources based on frequency conversion processes," International Student Conference on Photonics 2012, SPIE Student Chapter, 8-11 May 2012, Sinaia, Romania; Book of abstracts, ISSN 2284-9750, p. 27; Invited paper.
- 3. A. Achim, L. Gheorghe, and F. Voicu, "Second harmonic generation in new nonlinear optical crystals of Y_{1-x}R_xCa₄O(BO₃)₃ (R= Lu, Sc) through non-critical phase matching," International Student Conference on Photonics 2012, SPIE Student Chapter, 8-11 May 2012, Sinaia, Romania; Book of abstracts, ISSN 2284-9750, p. 53; Poster presentation.
- 4. A. Ionescu, C.A. Brandus, O. Sandu, M.E. Barbanta-Patrascu, L. Tugulea, and T. Dascalu, "THz domain spectroscopy in studying supported lipid membranes," International Student Conference on Photonics 2012, SPIE Student Chapter, 8-11 May 2012, Sinaia, Romania. Book of abstracts, ISSN 2284-9750, p. 65; Poster presentation.
- 5. F. Voicu, C. Gheorghe, and A. Crisan, "Preparation of Nd³⁺:YAG and Sm³⁺:Sc₂O₃ transparent ceramics," International Student Conference on Photonics 2012, SPIE Student Chapter, 8-11 May 2012, Sinaia, Romania. Book of abstracts, ISSN 2284-9750, p. 71; Poster presentation.
- 6. N. Pavel and T. Dascalu, "High-peak power passively Q-switched Nd:YAG/Cr⁴⁺:YAG lasers," International Student Conference on Photonics 2012, SPIE Student Chapter, 8-11 May 2012, Sinaia, Romania. Book of abstracts, ISSN 2284-9750, p. 79; Invited presentation.
- 7. C.M. Ticos, O. Sandu, N. Banu, M.L. Munteanu, and A. Scurtu, "Dusty plasmas: A review of experiments and possible applications," International Student Conference on Photonics 2012, SPIE Student Chapter, 8-11 May 2012, Sinaia, Romania. Book of abstracts, ISSN 2284-9750, p. 89; Invited presentation.
- 8. N. Pavel, G. Salamu, O. Sandu, A. Ionescu, C. Brandus, F. Voicu, and T. Dascalu, "Efficient, simultaneous dual-wavelength emission at 1.06 and 1.34 m in Nd:GdVO₄ laser crystal," 5th EPS-QEOD EUROPHOTON CONFERENCE, Solid State, Fibre, and Waveguide Coherent Light Sources, Stockholm, Sweden, presentation TuP.11; Poster presentation.
- 9. V. Lupei, A. Lupei, A. Ikesue, C. Gheorghe, L. Gheorghe, A. Achim, and F.M. Voicu, "Nd³⁺ and Yb³⁺ in disordered garnet crystals and ceramics," ICFE-8, 8th International Conference on f-Elements, Udine, Italy, August 26-31, 2012, presentation OPT 26P; Poster presentation.
- 10. A. Lupei, C. Tiseanu, C. Gheorghe, and F. Voicu, "Spectroscopic analysis of Sm^{3+} in C_2 and C_{3i} sites of Y_2O_3 ," ICFE-8, 8th International Conference on f-Elements, Udine, Italy, August 26-31, 2012, presentation OPT 23P; Poster presentation.
- 11. A.M. Voiculescu, S. Georgescu, S. Nastase, O. Toma, C. Matei, and A. Stefan, "Upconversion processes in langasite nanopowders doped with erbium and ytterbium," ICFE-8, 8th International Conference on f-Elements, Udine, Italy, August 26-31, 2012, presentation OPT 32P; Poster presentation.
- 12. C. Matei, S. Georgescu, D. Berger, S. Nastase, A.M. Voiculescu, and A. Stefan, "Luminescence properties in ZrO₂ nanoparticles doped with Er and Yb," ICFE-8, 8th International Conference on f-Elements, Udine, Italy, August 26-31, 2012, presentation OPT 31P; Poster presentation.



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- 13. A. Ionescu, M. Mernea, C.A. Brandus, M.E. Barbanta-Patrascu, L. Tugulea, D. Mihailescu, and T. Dascalu, "Study of supported phospholipid bilayers by THz-TDS," SPIE Optics + Photonics 2012, San Diego, USA, 12-16 August 2012, presentation 8496-39; Poster presentation.
- 14. A. Lupei, C. Tiseanu, and **C. Gheorghe**, "Electronic structure and energy transfer processes of Sm³⁺ in sesquioxides, 3rd International Conference on the Physics of Optical Materials and Devices (ICOM 2012), 3 6 Sept. 2012, Belgrad, Serbia; Book of abstracts, ISBN: 978-86-7306-116-0, pg. 144; Poster presentation.
- 15. A.M. Voiculescu, S. Georgescu, L. Gheorghe, A. Achim, C. Matei, and A. Stefan, "Infrared-excited red, green, violet and UV luminescence from langasite crystal doped with erbium and ytterbium," ICOM 2012, 3rd International Conference on the Physics of Optical Materials and Devices, Belgrade, Serbia, 3-6 September, 2012, presentation P1.2-31, Book of Abstract ISBN: 978-86-7306-116-0, (pg. 145); Poster presentation.
- 16. G. Salamu, F. Voicu, F. Jipa, M. Zamfirescu, N. Pavel, "Direct femtosecond laser written waveguides in Nd:YAG," Micro- to Nano-Photonics III, ROMOPTO 2012, 10th International Conference on Optics, 3-6 September, Bucharest, Romania, presentation II.P. 1; Poster presentation.
- 17. G. Salamu, A. Ionescu, C. Brandus, O. Sandu, N. Pavel, T. Dascalu, "Generation of high-peak power 532-nm green pulses from passively Q-switched, all-poly-crystalline Nd:YAG/Cr⁴⁺:YAG ceramics laser," Micro- to Nano-Photonics III, ROMOPTO 2012, 10th International Conference on Optics, 3-6 September, Bucharest, Romania, presentation I.P. 5; Poster presentation.
 Note: This work was awarded with the Certificate of Excellence for First Place Student Presentation (Best Poster SPIE Award) at the ROMOPTO 2012 conference.
- 18. A. Achim, L. Gheorghe, and F. Voicu, "Second harmonic generation in new nonlinear optical crystals of Y_{1-x}R_xCa₄O(BO₃)₃ (R = Lu, Sc) through non-critical phase matching," the 7th International Conference on Advanced Materials, ROCAM 2012, 28-31 August 2012, Brasov, Romania; Abstract Book, ISSN 1842-3574, p. 19 (2012). Poster presentation.
- 19. A.M. Voiculescu, S. Georgescu, O. Toma, and S. Nastase, "Properties of luminescence for nanopowders compounds from the langasite family doped with erbium and ytterbium", International Conference on Nanoscience + Technology (ICNT+T 2012) July 23-27, 2012, Paris, France, presentation PO3-21, Europhysics Conference Abstracts Volume 36D, ISBN No 2-914771-77-0, (pg. 97); Poster presentation.
- 20. A.M. Voiculescu, S. Georgescu, S. Nastase, C. Matei, A. Stefan, "Synthesis and characterization of langasite nanopowders doped with erbium and ytterbium," the 8th General Conference of Balkan Physical Union, 5-7 July 2012, Constanta, Romania; presentation SP-P11; Poster presentation.
- 21. S. Georgescu, A. M. Voiculescu, C. Matei, A. Stefan, O. Toma "Upconversion luminescence in $La_3Ga_{5.5}Ta_{0.5}O_{14}$ codoped with Er^{3+} and Yb^{3+} ," International Conference on Optics "Micro- to Nano-Photonics III ROMOPTO 2012", September 3-6, 2012, Bucharest, Romania, Presentation I.I.6; Oral presentation
- 22. O. Toma, S. Georgescu, and L. Gheorghe, "Energy levels of Er³+ and their kinetics in the partially disordered calcium lithium niobium gallium garnet," International Conference on Optics "Micro- to Nano-Photonics III ROMOPTO 2012", September 3-6, 2012, Bucharest, Romania, presentation I.P.4; Poster presentation.
- 23. L. Gheorghe, A. Achim, P. Loiseau, and G. Aka, "Advanced NLO crystals for UV light generation," The 7th International Conference on Advanced Materials, ROCAM 2012, 28-31 August 2012, Brasov, Romania; Abstract Book, ISSN 1842-3574, p. 9 (2012); Invited paper.
- 24. G. Aka, P. Loiseau, and L. Gheorghe, "Challenge of blue-green laser from Nd ⁴F_{3/2} → ⁴I_{9/2} laser transition or Ytterbium doped crystalline hosts: Review of crystal growth and laser performances," The 7th International Conference on Advanced Materials, ROCAM 2012, 28-31 August 2012, Brasov, Romania; Abstract Book, ISSN 1842-3574, p. 8 (2012); Invited paper.



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- 25. D. Avram, B. Cojocaru, N. Gheorghe, and C. Tiseanu, "Cubic and low symmetry centers in Eu³⁺ and Sm³⁺ doped CeO₂ nanoparticles. Effects of dopant concentration and thermal treatment," International Krutyn Summer School 2012, 23-29 September 2012, Krutyn, Polonia; Poster presentation.
- 26. O. Grigore, M. Mernea, J. Pintea, D. Mihailescu, and T. Dascalu, "Using of THz Radiation in Related Protein Solutions Discrimination," NATO Advanced Research Workshop on Detection of Explosives and CBRN (Using Terahertz), Izmir, Turkey, 3-6 November 2012; Poster presentation.