

## **LIST OF PUBLICATIONS**

### **1. PAPERS PUBLISHED IN PEER-REVIEW JOURNALS**

31. A. Broasca, M. Greculeasa, F. Voicu, S. Hau, C. Gheorghe, G. Croitoru, N. Pavel, **G. Stanciu**, A. Petris, P. Gheorghe, F. Albota, A. Serban, L. Gheorghe, "LGYSB:Nd - high-performance lasing in the near-infrared region," *J. Am. Chem. Soc.* **146**(3), 2196-2207 (2024).
30. C. Stanciu, S. Hau, **G. Stanciu**, R. Trusca, B. S. Vasile, C. Tihon, "Structural, microstructural characterization and luminescence spectroscopy of europium-doped strontium titanate prepared by the sol-gel method", *Ceram. Int.* **49**(23, Part A), 37293-37306 (2023).
29. O. Toma, A. Enachi, **G. Stanciu**, "Excited-state absorption in light-scattering Er:CaSc<sub>2</sub>O<sub>4</sub> ceramic," *J. Lumin.* **262**, 119937 (2023).
28. A. M. Voiculescu, S. Hau, **G. Stanciu**, C. Gheorghe, "Effects of Eu<sup>3+</sup> concentration on the thermoluminescence properties of narrow-band red-emitting Eu<sup>3+</sup>:SrLaGaO<sub>4</sub> phosphor," *J. Alloys & Compds.* **958**, 170507 (2023).
27. L. I. Toderascu, L. E. Sima, S. Orobeti, P. E. Florian, M. Icriverzi, V. A. Maraloiu, C. Comanescu, N. Iacob, V. Kuncser, I. Antohe, G. Popescu-Pelin, **G. Stanciu**, P. Ionita, C. N. Mihailescu, and G. Socol, "Synthesis and Anti-Melanoma Activity of L-Cysteine-Coated Iron Oxide Nanoparticles Loaded with Doxorubicin," *Nanomaterials* **13**(4), 621 (2023).
26. C. Gheorghe, S. Hau, L. Gheorghe, F. Voicu, M. Greculeasa, A. Broasca, and **G. Stanciu**, "RE<sup>3+</sup>-Doped Ca<sub>3</sub>(Nb,Ga)<sub>5</sub>O<sub>12</sub> and Ca<sub>3</sub>(Li,Nb,Ga)<sub>5</sub>O<sub>12</sub> Crystals (RE = Sm, Dy, and Pr): A Review of Current Achievements," *Materials* **16**(1), 269 (2023).
25. S. Hau, **G. Stanciu**, D. Avram, L. Gheorghe, C. Gheorghe, "Energy transfer and luminescent properties of Tb<sup>3+</sup> and (Tb<sup>3+</sup>, Yb<sup>3+</sup>) doped CNGG phosphors," *J. Rare Earths* **40**(9), 1445-1453 (2022).
24. C. Gheorghe, S. Hau, **G. Stanciu**, D. Avram, A. Broasca, L. Gheorghe, "Novel optical temperature sensors based on the emission of the Pr<sup>3+</sup> ions doped Ca<sub>3</sub>(M,Ga)<sub>5</sub>O<sub>12</sub> (M<sup>5+</sup> = Nb, Ta) garnet phosphors," *J. Alloys & Compds.* **922**, 166178 (2022).
23. A. Broasca, M. Greculeasa, F. Voicu, **G. Stanciu**, S. Hau, C. Gheorghe, L. Gheorghe, "Pr:LGSB as a new nonlinear optical crystal: Czochralski growth and optical characterization," *J. Alloys & Comp.* **908**, 164633 (2022).
22. A. Broasca, M. Greculeasa, F. Voicu, **G. Stanciu**, S. Hau, C. Gheorghe, C. A. Brandus, N. Pavel, M. Enculescu, L. Gheorghe, "Growth and characterization of 3.5 at.% Nd:LGSB bifunctional crystal," *Opt. Mat.* **123**, 111832 (2022).
21. A. M. Voiculescu, S. Hau, **G. Stanciu**, D. Avram, C. Gheorghe, "Optical thermometry through infrared excited green upconversion emissions of Er<sup>3+</sup>-Yb<sup>3+</sup> co-doped LaAlO<sub>3</sub> phosphors," *J. Lumin.* **242**, 118602 (2022).
20. **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:Y<sub>2</sub>O<sub>3</sub> ceramics via multi-step sintering method fabrication," *Opt. Mater.* **109**, 110411 (2020).
19. M. Greculeasa, A. Broasca, F. Voicu, S. Hau, G. Croitoru, **G. Stanciu**, C. Gheorghe, N. Pavel, L. Gheorghe, "Bifunctional La<sub>x</sub>Nd<sub>y</sub>Gd<sub>z</sub>Sc<sub>4-x-y-z</sub>(BO<sub>3</sub>)<sub>4</sub> crystal: Czochralski growth, linear and nonlinear optical properties, and near-infrared laser emission performances," *Opt. & Laser Techn.* **131**, 106433 (2020).

18. 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  $\text{La}_x\text{Gd}_y\text{R}_z\text{Sc}_{4-x-y-z}(\text{BO}_3)_4$  (R = Yb, Nd) crystals - A review of recent developments," *Opt. Mat. X* **7**, 100052 (2020).
17. A. M. Voiculescu, C. E. Tihon, S. Hau, **G. Stanciu**, O. Toma, "Optical study of  $\text{SrLaGa}_3\text{O}_7$  ceramic samples doped with  $\text{Er}^{3+}$  and  $\text{Yb}^{3+}$ ," *Opt. Mater.* **100**, 109613 (2020).
16. L. Gheorghe, M. Greculeasa, A. Broasca, F. Voicu, **G. Stanciu**, K. N. Belikov, E. Yu. Bryleva, and O. Gaiduk, "Incongruent Melting  $\text{La}_x\text{Y}_y\text{Sc}_{4-x-y}(\text{BO}_3)_4$  - LYSB Nonlinear Optical Crystal Grown by the Czochralski Method," *ACS Appl. Mat. Interfaces*, **11**(23), 20987-20994 (2019).
15. S. Hau, C. Gheorghe, L. Gheorghe, F. Voicu, M. Greculeasa, **G. Stanciu**, A. Broasca, M. Enculescu, "Spectroscopic investigations of  $\text{Pr}^{3+}$  ions doped CNGG and CLNGG single crystals," *J. Alloy. Compd.* **799**, 288-301 (2019).
14. **G. Stanciu**, L. Gheorghe, F. Voicu, S. Hau, C. Gheorghe, G. Croitoru, M. Enculescu, and R.P. Yavetskiy, "Highly transparent  $\text{Yb}:\text{Y}_2\text{O}_3$  ceramics obtained by solid-state reaction and combined sintering procedures," *Ceram. Int.* **45**(3), 3217-3222 (2019).
13. **G. Stanciu**, N. D. Scarisoreanu, V. Ion, M. Dumitru, E. Andronescu, and M. Dinescu, "Structure and dielectric properties of Ca doped  $\text{Sr}_{0.5}\text{Ba}_{0.5}\text{Nb}_2\text{O}_6$  ceramic compositions", *Romanian Journal of Materials* **46**(1), 70-74 (2016).
12. **G. Stanciu**, N. D. Scarisoreanu, R. Birjega, A. Moldovan, E. Andronescu, and M. Dinescu, "Structural and morphological properties of  $\text{Sr}_{0.5}\text{Ba}_{0.5}\text{Nb}_2\text{O}_6$  thin films deposited by RF-PLD technique on Pt:Si and MgO substrates", *U.P.B. Sci. Bull., Series B*, **78**(3), (2016); ISSN 1454-2331 (2016).
11. E.S. Barca, M. Filipescu, C. Luculescu, R. Birjega, V. Ion, M. Dumitru, L.C. Nistor, **G. Stanciu**, M. Abrudeanu, C. Munteanu, and M. Dinescu, "Pyramidal growth of ceria nanostructures by pulsed laser deposition," *Applied Surface Science* **363**, 245-251 (2016).
10. **G. Stanciu**, A. Achim, N. D. Scarisoreanu, V. Ion, R. Birjega, E. Andronescu, and M. Dinescu, "Synthesis of calcium doped strontium barium niobate ceramic samples", *Journal of Optoelectronics and Advanced Materials - Rapid Communication* **9** (5-6), 720-723 (2015).
9. A. Achim, L. Gheorghe, F. Voicu, and **G. Stanciu**, "Blue light production by type-I non-critical phase matching second-harmonic generation in  $\text{La}(\text{Ca}_{1-x}\text{Sr}_x)_4\text{O}(\text{BO}_3)_3$  single crystals," *CrystEngComm.* **17**, 4098-4101 (2015).
8. C. Gheorghe, L. Gheorghe, A. Achim, S. Hau, R. D. Avram, **G. Stanciu**, "Optical properties of  $\text{Sm}^{3+}$  doped strontium hexa-aluminate single crystals," *J. Alloys & Compd.* **622**, 296-302 (2015).
7. D. Stoica and **G. Stanciu**, "Influence the degree of sorting the separation process a conical sieve," *Digest Journal of Nanomaterials and Biostructures* **8** (2), 513-518, (2013).
6. A. Andrei, N. D. Scarisoreanu, R. Birjega, M. Dinescu, **G. Stanciu**, F. Craciun, and C. Galassi, "Pulsed laser deposition of lead-free  $(\text{Na}_{0.5}\text{Bi}_{0.5})_{1-x}\text{Ba}_x\text{TiO}_3$  ferroelectric thin films with enhanced dielectric properties," *Applied Surface Science* **278**, 162-165 (2013).
5. **G. Stanciu**, M. Filipescu, V. Ion, E. Andronescu, and M. Dinescu, "Optical properties of tantalum oxide thin films obtained by laser deposition techniques," *University Politehnica of Bucharest, Scientific Bulletin, Series B: Chemistry and Materials Science* **75** (2), (2013); ISSN 1454-2331, (2013).
4. **G. Stanciu**, N. D. Scarisoreanu, R. Birjega, M. Dinescu, and E. Andronescu, "Role of the oxygen on the initial growth mechanism and microstructure of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  thin films," *Journal of Optoelectronics and Advanced Materials - Rapid Communication* **6** (11-12), 1192-1196, (2012).
3. **G. Stanciu**, N. D. Scarisoreanu, V. Ion, A. Moldovan, E. Andronescu, and M. Dinescu, " $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  thin films deposited by pulsed laser deposition and radio-frequency assisted pulsed laser deposition," *Journal of Optoelectronics and Advanced Materials* **14** (9-10), 852-857 (2012).
2. I. Mohanu, N. Vlad, **G. Stanciu**, and R. Fechet, "Influence of conditions and period of storage for clinker and granulated furnace slag on cement characteristics," *Romanian Journal of Materials* **40** (2), 91-101, (2010).
1. A. Moanta, G. Guslicov, and **G Stanciu**, "The effect of surfactants on grinding and hardening the

portland slag cement containing high blast furnace slag proportions," Romanian Journal of Materials **38** (4), 293-302, (2008).

## **2. PROCEEDINGS OF INTERNATIONAL CONFERENCES**

2. C.-A. Stanciu, T. Dascalu, **G. Stanciu**, N. Pavel, "Transparent Nd doped YAG ceramics," Journal of Physics: Conference Series **741**(1), art. 012074 (2016); 3rd International School and Conference on Optoelectronics, Photonics, Engineering and Nanostructures (Saint Petersburg OPEN 2016), 28-30 March 2016, St Petersburg, Russia; doi:10.1088/1742-6596/741/1/012074
1. L. Gheorghe, A. Achim, F. Voicu, and **G. Stanciu**, "Advanced NLO Crystals for Efficient Blue Laser Sources Based on SHG Processes," in Advanced Solid State Lasers, OSA Technical Digest (online) (Optical Society of America, 2015), paper ATu2A.3, doi: 10.1364/ASSL.2015.ATu2A.3.

## **3. COMMUNICATIONS AT INTERNATIONAL CONFERENCES**

(Technical Digests, manuscripts up to 3 pages)

74. 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," 2<sup>nd</sup> 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.
73. 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).
72. **G. Stanciu**, F. Voicu, C. A. Brandus, C. E. Tihon, S. Hau, C. Gheorghe, G. Croitoru, L. Gheorghe, N. Pavel, "Rare-earths doped Y<sub>2</sub>O<sub>3</sub> laser materials," International Conference on Crystal Growth and Epitaxy - ICCGE-20, 30 July - 04 August 2023, Naples, Italy; (poster presentation PS 2 - P30).
71. 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).
70. 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).
69. A. M. Voiculescu, S. Hau, **G. Stanciu**, C. Gheorghe, "Synthesis and characterization of a new red phosphor SrLaGaO<sub>4</sub> doped with Eu<sup>3+</sup>," The 21<sup>th</sup> 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).
68. C. Stanciu, C. Tihon, **G. Stanciu**, R. Trusca, "Structural, morphological, and optical properties of rare earth (erbium, ytterbium)-doped SrTiO<sub>3</sub> ceramics," XVIII<sup>th</sup> Conference of the European Ceramic Society, 2-6 July 2023, Lyon, France, paper S8-P146 (poster presentation).
67. C. Tihon, C. Stanciu, **G. Stanciu**, S. Hau, M. Cernea, "Synthesis, characterization and spectroscopic properties of Er, Yb - doped SrTiO<sub>3</sub> 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).
66. 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 SrTiO<sub>3</sub> 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).
65. **G. Stanciu**, F. Voicu, C. A. Brandus, C. E. Tihon, S. Hau, C. Gheorghe, G. Croitoru, L. M.

- Gheorghe, N. Pavel, "RE<sup>3+</sup>:Y<sub>2</sub>O<sub>3</sub> transparent ceramic media realized via a multi-step sintering method," The 9th Tiny Integrated Laser and Laser Ignition Conference 2022, 19-21 April 2023, Pacifico Yokohama, Yokohama, Japan, presentation TILA-LICp-02 (poster presentation).
64. C. Stanciu, C. Tihon, **G. Stanciu**, S. Hau, M. Cernea, "Investigation of microstructure and spectroscopic properties of europium doped SrTiO<sub>3</sub> ceramics prepared via sol-gel method," E-MRS 2022 Fall Meeting, 19-22 September 2022, Warsaw, Poland; presentation K.P.9.
  63. C. Tihon, C. Stanciu, **G. Stanciu**, M. Cernea, "Spectroscopic Properties of Eu-doped SrTiO<sub>3</sub> Ceramics Sintered from Sol-Gel Derived Powders," E-MRS 2022 Fall Meeting, 19-22 September 2022, Warsaw, Poland; presentation K.P.8.
  62. C. Stanciu, C. Tihon, **G. Stanciu**, S. Hau, M. Cernea, "Characterizations of vacuum sintered europium doped SrTiO<sub>3</sub> ceramics using sol-gel synthesized nanopowders," 14<sup>th</sup> International Conference on Physics of Advanced Materials - ICPAM-14 and PAMS-5, September 8-15, 2022, Dubrovnik, Croatia.
  61. C. Tihon, C. Stanciu, **G. Stanciu**, M. Cernea, "Synthesis, characterization and spectroscopic properties of Eu-doped SrTiO<sub>3</sub> ceramics sintered from sol-gel derived powders," 14<sup>th</sup> International Conference on Physics of Advanced Materials - ICPAM-14 and PAMS-5, September 8-15, 2022, Dubrovnik, Croatia.
  60. L. Gheorghe, A. Broasca, M. Greculeasa, F. Voicu, **G. Stanciu**, S. Hau, C. Gheorghe, "Czochralski growth and characterization of newly developed Pr:LGSB nonlinear optical and laser crystal," 7<sup>th</sup> European Conference on Crystal Growth - ECCG7, 25-27 July 2022, Paris, France; oral presentation.
  59. S. Hau, M. Greculeasa, A. Broasca, F. Voicu, **G. Stanciu**, D. Avram, M. Enculescu, L. Gheorghe, C. Gheorghe, "Pr<sup>3+</sup>-doped Ca<sub>3</sub>(Ta, Ga)<sub>5</sub>O<sub>12</sub> single crystal as potential laser material in the visible range," 7<sup>th</sup> European Conference on Crystal Growth - ECCG7, 25-27 July 2022, Paris, France; presentation P20.
  58. S. Hau, C. Gheorghe, L. Gheorghe, F. Voicu, M. Greculeasa, A. Broasca, **G. Stanciu**, M. Enculescu, "Spectroscopic Characterizations of Pr<sup>3+</sup> and Dy<sup>3+</sup> doped Calcium Tantalum Gallium Garnet- Ca<sub>2.85</sub>Ta<sub>1.80</sub>Ga<sub>3.10</sub>O<sub>12</sub> Single Crystals," 20th International Balkan Workshop on Applied Physics and Materials Science (IBWAP 2022), July 12-15, Constanta, Romania; presentation S1-P7.
  57. A. Broasca, M. Greculeasa, F. Voicu, **G. Stanciu**, S. Hau, C. Gheorghe, and L. Gheorghe, "Growth and optical properties of the newly developed Pr:LGSB bifunctional crystal," 10th EPS-QEOD EUROPHOTON Conference, 28 Aug. - 2 Sept. 2022, Hannover, Germany; presentation TUE-P-1.8.
  56. 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<sub>0.733</sub>Nd<sub>0.035</sub>Gd<sub>0.452</sub>Sc<sub>2.75</sub>(BO<sub>3</sub>)<sub>4</sub> 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.
  55. 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, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P5-11.
  54. **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 Y<sub>3</sub>Al<sub>5</sub>O<sub>12</sub> transparent ceramics," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-06.
  53. 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<sub>0.733</sub>Nd<sub>0.035</sub>Gd<sub>0.452</sub>Sc<sub>2.78</sub>(BO<sub>3</sub>)<sub>4</sub> 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.
  52. 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.

51. A. M. Voiculescu, S. Hau, **G. Stanciu**, R. D. Avram, C. Gheorghe, "Luminescence properties and optical thermometry of  $\text{Er}^{3+}$ - $\text{Yb}^{3+}$  co-doped  $\text{LaAlO}_3$  phosphors," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-02.
50. S. Hau, C. Gheorghe, L. Gheorghe, F. Voicu, M. Greculeasa, A. Broasca, **G. Stanciu**, D. Avram, M. Enculescu, "Luminescence and optical thermometry of the  $\text{Pr}^{3+}$  ions doped  $\text{Ca}_3(\text{M},\text{Ga})_5\text{O}_{12}$  ( $\text{M}^{5+} = \text{Nb}, \text{Ta}$ ) garnet phosphors," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-01.
49. 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.
48. A. M. Voiculescu, S. Hau, **G. Stanciu**, C. Gheorghe, "Synthesis by solid state reaction and luminescence properties of  $\text{LaAlO}_3$  perovskite phosphor doped with Rare Earths", TIM 20-21 Physics Conference, 11-13 November 2021, Timișoara, Romania; poster presentation CMP - P10.
47. S. Hau, C. Gheorghe, L. Gheorghe, **G. Stanciu**, "Optical properties of  $\text{Pr}^{3+}$ -doped  $\text{Ca}_3(\text{Ta},\text{Ga})_5\text{O}_{12}$  ceramic phosphors," TIM 20-21 Physics Conference, 11 - 13 November 2021, Timisoara, Romania; poster presentation CMP-P3.
46. 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.
45. **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  $\text{Nd}^{3+}$ - and  $\text{Yb}^{3+}$ -doped  $\text{Y}_2\text{O}_3$  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).
44. 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).
43. **G. Stanciu**, F. Voicu, C. A. Brandus, C. Tihon, S. Hau, C. Gheorghe, G. Croitoru, L. Gheorghe, "Enhancement of the laser emission efficiency of  $\text{Yb}:\text{Y}_2\text{O}_3$  ceramics via multi-step sintering method fabrication," 9th EPS-QEOD Europhoton Virtual Conference, 30 August - 4 September 2020; poster presentation Tu-P1.13.
42. L. Gheorghe, M. Greculeasa, A. Broasca, F. Voicu, **G. Stanciu**, S. Hau, C. Gheorghe, C. Brandus, G. Croitoru, N. Pavel, "Undoped, Yb- and Nd-doped LGSB Czochralski-grown nonlinear and laser crystals," Advanced Solid State Lasers Conference - ASSL 2019, 29 September 2019 - 03 October 2019, Vienna, Austria, presentation AM3A.2 (oral presentation).
41. A. Broasca, L. Gheorghe, M. Greculeasa, F. Voicu, **G. Stanciu**, S. Hau, C. Gheorghe, G. Croitoru, N. Pavel, "Czochralski growth and characterization of pure and Yb-doped  $\text{La}_x\text{Y}_y\text{Sc}_{4-x-y}(\text{BO}_3)_4$  nonlinear and laser crystal," OSA Laser Congress, Advanced Solid State Lasers Conference - ASSL 2019, 29 September 2019 - 03 October 2019, Vienna, Austria, presentation JM5A.40 (poster presentation).
40. L. Gheorghe, M. Greculeasa, A. Broasca, F. Voicu, **G. Stanciu**, S. Hau, C. Gheorghe, "Yb<sup>3+</sup>-doped  $\text{La}_x\text{Y}_y\text{Sc}_{4-x-y}(\text{BO}_3)_4$  as bifunctional laser and nonlinear optical crystal," Excited States of Transitions Elements Conference - ESTE 2019, 08-13 September 2019, Kudowa Zdrój, Poland, presentation O-10 (oral presentation).
39. S. Hau, C. Gheorghe, L. Gheorghe, F. Voicu, M. Greculeasa, **G. Stanciu**, A. Broasca, M. Enculescu, "Optical properties of  $\text{Pr}^{3+}$  ions doped garnet crystals," Excited States of Transitions Elements Conference - ESTE 2019, 08-13 September 2019, Kudowa Zdrój, Poland, presentation

P-40 (poster presentation).

38. C. Tihon, **G. Stanciu**, G. Ruiu, and A. M. Voiculescu, "Spectroscopic characterization of LaGaO<sub>3</sub> doped with Er<sup>3+</sup> synthesized by solid state reaction," TIM 19 Physics Conference, 29 - 31 May 2019, Timisoara, Romania, presentation CM-P10 (poster presentation).
37. L. Gheorghe, M. Greculeasa, A. Broasca, F. Voicu, **G. Stanciu**, S. Hau, C. Gheorghe, G. Croitoru, and N. Pavel, "Pure, Yb- and Nd-doped La<sub>x</sub>Gd<sub>y</sub>Sc<sub>4-x-y</sub>(BO<sub>3</sub>)<sub>4</sub> Czochralski-grown nonlinear optical and laser crystals," TIM 19 Physics Conference, 29 - 31 May 2019, Timisoara, Romania, presentation CM-I02 (invited presentation).
36. A. Broasca, L. Gheorghe, M. Greculeasa, F. Voicu, and **G. Stanciu**, "Czochralski growth and optical properties of nonlinear La<sub>x</sub>Y<sub>y</sub>Sc<sub>4-x-y</sub>(BO<sub>3</sub>)<sub>4</sub> - LYSB single crystal," TIM 19 Physics Conference, 29 - 31 May 2019, Timisoara, Romania, presentation CM-P03 (poster presentation).
35. **G. Stanciu**, L. Gheorghe, F. Voicu, C. A. Brandus, C. Tihon, G. Croitoru, and N. Pavel, "Fabrication and laser performance of highly transparent Nd:YAG ceramics," TIM 19 Physics Conference, 29 - 31 May 2019, Timisoara, Romania, presentation CM-P08 (poster presentation).
34. S. Hau, C. Gheorghe, L. Gheorghe, F. Voicu, M. Greculeasa, **G. Stanciu**, and M. Enculescu, "Luminescence properties of Pr<sup>3+</sup> doped Ca<sub>3</sub>(Li,Nb,Ga)<sub>5</sub>O<sub>12</sub> single crystal," TIM 19 Physics Conference, 29 - 31 May 2019, Timisoara, Romania, presentation CM-P09 (poster presentation).
33. M. Greculeasa, L. Gheorghe, A. Broasca, F. Voicu, C. Gheorghe, S. Hau, and **G. Stanciu**, "Czochralski growth and characterization of Yb-doped LYSB single crystals," TIM 19 Physics Conference, 29 - 31 May 2019, Timisoara, Romania, presentation CM-P11 (poster presentation).
32. C. Gheorghe, S. Hau, L. Gheorghe, and **G. Stanciu**, "Cooperative energy transfer in Ca<sub>3</sub>(Nb,Ga)<sub>5</sub>O<sub>12</sub> ceramics doped with ytterbium and terbium," TIM 19 Physics Conference, 29 - 31 May 2019, Timisoara, Romania, presentation CM-P12 (poster presentation).
30. **G. Stanciu**, L. Gheorghe, F. Voicu, S. Hau, C. Gheorghe, T. Dascalu, M. Enculescu, "Highly transparent Yb:Y<sub>2</sub>O<sub>3</sub> ceramics obtained by solid-state reaction and combined sintering procedures," ECCG6 Sixth European Conference on Crystal Growth, Varna, Bulgaria, 16-20 September 2018; poster presentation S09-P11.
29. S. Hau, C. Gheorghe, L. Gheorghe, F. Voicu, M. Greculeasa, **G. Stanciu**, M. Enculescu, "Optical properties of Pr<sup>3+</sup> doped Ca<sub>3</sub>(Nb,Ga)<sub>5</sub>O<sub>12</sub> single crystal," TIM18 Physics Conference, 24-26 May 2018, Timisoara, Romania; CM-P11, poster presentation.
28. **G. Stanciu**, F. Voicu, C. A. Brandus, C. Tihon, L. Gheorghe, T. Dascalu, "Highly transparent Yb<sup>3+</sup>-doped Y<sub>2</sub>O<sub>3</sub> sesquioxide ceramics," TIM18 Physics Conference, 24-26 May 2018, Timisoara, Romania; CM-P10, poster presentation.
27. M. Greculeasa, L. Gheorghe, F. Voicu, A. Achim, **G. Stanciu**, "Growth and SHG in NCMP conditions in La(Ca<sub>1-x</sub>Sc<sub>x</sub>)<sub>4</sub>O(BO<sub>3</sub>)<sub>3</sub> single crystals," ROCAM 2017, 11-14 July 2017, Bucharest, Romania; poster presentation.
26. **G. Stanciu**, C. Stanciu, C. A. Brandus, F. Voicu, T. Dascalu, "Laser Gain Transparent Ceramics Media," The 5th Laser Ignition Conference, 20-23 June 2017, Bucharest, Romania; OSA Technical Digest (online) (Optical Society of America, 2017), paper LWA4.3 (poster presentation); ISBN: 978-1-943580-32-3 (<https://doi.org/10.1364/LIC.2017.LWA5.5>).
25. A. Andrei, **G. Stanciu**, N. D. Scarisoreanu, R. Birjega, A. Bercea, V. Ion, and M. Dinescu, "Properties of Ca-doped Sr<sub>x</sub>Ba<sub>1-x</sub>Nb<sub>2</sub>O<sub>6</sub> thin films growth by Pulsed Laser Deposition", E-MRS 2016 Fall Meeting, 19-22 September, Warsaw, Poland; presentation Y.P1.20 (poster).
24. N. D. Scarisoreanu, R. Birjega, A. Bercea, V. Ion, **G. Stanciu**, and M. Dinescu, "Optical and electrical properties of Ca-doped Sr<sub>x</sub>Ba<sub>1-x</sub>Nb<sub>2</sub>O<sub>6</sub> thin films by PLD for pyroelectric devices", E-MRS 2016 Spring Meeting, 2-6 May, Lille, France; presentation C.PI.59 (poster presentation).
23. **G. Stanciu**, C. A. Stanciu, A. Stefan, T. Dascalu, S. Georgescu, "Structural and optical properties of Neodymium-doped Yttrium Aluminum Garnet (Nd:YAG) transparent ceramics," The 16<sup>th</sup> International Balkan Workshop on Applied Physics, 7-9 July, 2016, Constanta, Romania; Book of Abstracts, pp. 39-40 (S1 P21, poster presentation).
22. C.-A. Stanciu, T. Dascalu, **G. Stanciu**, N. Pavel, "Transparent Nd:YAG Ceramic Media," 3<sup>rd</sup> International School and Conference "Saint Petersburg OPEN 2016", 28-30 March, Saint

Petersburg, Russia, 2016; (poster presentation).

21. **G. Stanciu**, V. Ion, N. D. Scarisoreanu, E. Andronescu, M. Dinescu, "Synthesis of calcium doped strontium barium niobate," The fourth edition of the International Colloquium 'Physics of Materials' - PM-4 2014, 13-14 November, UPB, Bucharest, Romania; presentation P8 (poster presentation).
20. N. D. Scarisoreanu, R. Birjega, V. Ion, A. Andrei, **G. Stanciu**, M. Dinescu, "Growth of epitaxial  $\text{Sr}_x\text{Ba}_{1-x}\text{Nb}_2\text{O}_6$  and Ca - doped  $\text{Sr}_x\text{Ba}_{1-x}\text{Nb}_2\text{O}_6$  thin films by PLD for optical and electro-optical devices," E-MRS 2015 Spring Meeting, 11-15 May, Lille, France; presentation CC.PI58 (poster presentation).
19. L. Gheorghe, A. Achim, F. Voicu, **G. Stanciu**, C. Gheorghe, "Growth and characterization of Sm: ASL crystals for visible lasers," The 8<sup>th</sup> International Conference on Advanced Materials, ROCAM 2015, 7-10 July, Bucharest, Romania (oral presentation).
18. L. Gheorghe, A. Achim, F. Voicu, **G. Stanciu**, "Advanced NLO Crystals for Efficient Blue Laser Sources Based on SHG Processes," Advanced Solid State Lasers Conference and Exhibition (ASSL), 04 - 09 October 2015, WISTA-Technology Park, Adlershof-Berlin, Germany; presentation ATu2A.3 (poster presentation).
17. C.A. Brandus, L. Gheorghe, A. Achim, **G. Stanciu**, and T. Dascalu, "Evaluation of co-doped  $\text{Lu}^{3+}$ ,  $\text{Nd}^{3+}$ : $\text{GdCa}_4\text{O}(\text{BO}_3)_3$  single crystal, a potential self-doubling material with emission in green spectral range," CLEO Europe - EQEC 2015 Conference, 21-25 June 2015, München, Germany, presentation CA-P.32 (poster presentation).
16. C. Vasilescu, T. Dascalu, **G. Stanciu**, N. Pavel, E. Vasile and R. Trusca, "Transparent 1.0-at.% Nd:YAG ceramic media," TIM 14 Physics Conference - Physics without frontiers, 20-22 November 2014, Timisoara, Romania; presentation CM-P19 (poster presentation).
15. **G. Stanciu**, A. Achim, N. Scarisoreanu, M. Dinescu and E. Andronescu, "Growth of  $\text{Sr}_x\text{Ba}_{1-x}\text{Nb}_2\text{O}_6$  thin films by RF-PLD for optical and electro-optical devices," TIM 14 Physics Conference - Physics without frontiers, 20-22 November 2014, Timisoara, Romania; presentation CM-P18 (poster presentation).
14. C. Matei, S. Georgescu, C. Vasilescu, **G. Stanciu**, A.-M. Voiculescu and A. Stefan, "Synthesis and characterization of  $\text{Eu}^{3+}$  doped  $\text{SrY}_2\text{O}_4$  phosphor," TIM 14 Physics Conference - Physics without frontiers, 20-22 November 2014, Timisoara, Romania; presentation CM-P17 (poster presentation).
13. A. Achim, L. Gheorghe, **G. Stanciu** and F. Voicu, "Blue light production by type-I non-critical phase matching second-harmonic generation in  $\text{La}(\text{Ca}_{1-x}\text{Sr}_x)_4\text{O}(\text{BO}_3)_3$ : Crystal growth and nonlinear characterization," TIM 14 Physics Conference - Physics without frontiers, 20-22 November 2014, Timisoara, Romania; presentation CM-O03 (oral presentation).
12. L. Gheorghe, C. Gheorghe, A. Achim, F. Voicu and **G. Stanciu**, "Novel crystals for yellow-orange lasers," TIM 14 Physics Conference - Physics without frontiers, 20-22 November 2014, Timisoara, Romania; presentation CM-IO6 (invited presentation).
11. A. Achim, L. Gheorghe, and **G. Stanciu**, "Growth and preliminary characterization of  $\text{La}(\text{Ca}_{1-x}\text{Sr}_x)_4\text{O}(\text{BO}_3)_3$  single crystals for SHG in NCPM conditions of 1.03  $\mu\text{m}$  laser emission," 5th International Student Conference on Photonics, Orastie, Romania, 23-26 September 2014; presentation O.05 (oral presentation).
10. L. Gheorghe, A. Achim, **G. Stanciu**, F. Voicu, and C. Gheorghe, " $\text{Sm}^{3+}$ -doped  $\text{Sr}_{1-x}\text{La}_x\text{Mg}_x\text{Al}_{12-x}\text{O}_{19}$  (ASL) single crystals for visible yellow-orange lasers," 5th International Student Conference on Photonics, Orastie, Romania, 23-26 September 2014; presentation I.05 (invited presentation).
9. C. A. Vasilescu, T. Dascalu, **C. Stanciu**, R. Barjega, C. Luculescu and N. Pavel, "Preliminary Synthesis for Transparent 1 at.% Nd-YAG Ceramics," The 14<sup>th</sup> International Balkan Workshop on Applied Physics, July 2-4, 2014, Constanta, Romania, presentation S2-P08, Book of Abstracts p. 119 (poster presentation).
8. A. Achim, L. Gheorghe and **G. Stanciu**, "Visible and near UV light production by type-I non-critical phase matching second harmonic generation in  $\text{Y}_{1-x}\text{R}_x\text{Ca}_4\text{O}(\text{BO}_3)_3$  (R = Lu, Sc): crystal growth and nonlinear characterization," Physics Conference TIM-13, 21-24 November, Timisoara, Romania (poster presentation).



7. L. Gheorghe, A. Achim, **G. Stanciu**, F. Voicu, P. Loiseau and G. Aka, "Development of new nonlinear optical crystals for the design of laser devices emitting in the visible and ultraviolet," 17th International Conference on Crystal Growth and Epitaxy, ICCGE-17, 11-16 August 2013, Warsaw, Poland. Scientific Program and Book of Abstracts, ISBN 83-89585-36-7, p. 430 (oral presentation).
6. A. Achim, L. Gheorghe, **G. Stanciu**, and F. Voicu, "Efficient second harmonic generation of blue-violet light in type-I noncritical phase matching," International Conference "Modern Laser Applications" Third Edition, INDLAS 2013, 20-24 May 2013, Bran, Romania, presentation P3 (poster presentation).
5. V. Ion, N. D. Scarisoreanu, A. Andrei, D. Colceag, A. Nedelcea, **G. Stanciu**, and M. Dinescu, "Properties of  $\text{Ba}_{1-x}\text{Sr}_x\text{TiO}_3$  thin films obtained by pulsed laser deposition," The 7th International conference on advanced materials, ROCAM 2012, 28-31 August, Brasov, Romania, (2012); Poster presentation.
4. R. Pascu, **G. Stanciu**, and G. Epurescu, "Dielectric function model used in optical characterization of "High-K" ceramic thin films"; Applications to Ni:YSZ thin films growth by PLD," The 7th International conference on advanced materials, ROCAM 2012, 28-31 August, Brasov, Romania, (2012); Oral communication.
3. **G. Stanciu**, "Optical and electrical properties of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  thin films deposited by radio-frequency assisted pulsed laser deposition," International Student Conference on Photonics 2012, ISCP 2012, 8-11 May, Sinaia, Romania, (2012); Oral communication,
2. **G. Stanciu**, N. D. Scarisoreanu, V. Ion, A. Moldovan, M. Dinescu, and E. Andronescu, "Structural and electrical properties of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$  thin films deposited by PLD and RF-assisted PLD," Conference for Young Scientists "The Ninth Students' Meeting, SM-2011" and "The Second ESR Workshop, COST MP0904", 16-18 November, Novi Sad, Serbia, (2011); Oral communication.
1. **G. Stanciu**, N. D. Scarisoreanu, V. Ion, A. Moldovan, B. Vasile, M. Dinescu, V. Leca, and E. Andronescu, "Properties and growth mechanisms of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  thin films deposited by pulsed laser deposition," Romanian International Conference on Chemistry and Chemical Engineering, RICCCCE 17, 7-10 September, Sinaia, Romania, (2011); Poster presentation.