

LIST OF PUBLICATIONS

1. PAPERS PUBLISHED IN ISI JOURNALS

39. C. Stanciu, **S. Hau**, C. Tihon, "Effect of vacuum sintering on the microstructure and spectroscopic properties of Eu doped strontium titanate ceramics," Ceram. Int. **xx**(x), xxxx-xxx (2024), <https://doi.org/10.1016/j.ceramint.2024.01.303>. (*in press*)
38. 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).
37. 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).
36. A. M. Voiculescu, **S. Hau**, G. Stanciu, C. Gheorghe, "Effects of Eu³⁺ concentration on the thermoluminescence properties of narrow-band red-emitting Eu³⁺:SrLaGaO₄ phosphor," J. Alloys & Compds. **958**, 170507 (2023).
35. A. D. Timoshenko, O. O. Matvienko, A. G. Doroshenko, S. V. Parkhomenko, I. O. Vorona, O. S. Kryzhanovska, N. A. Safranova, O. O. Vovk, A. V. Tolmachev, V. N. Baumer, I. Matolínova, **S. Hau**, C. Gheorghe, R. P. Yavetskiy, "Highly-doped YAG:Sm³⁺ transparent ceramics: Effect of Sm³⁺ ions concentration," Ceram. Int. **49**(5), 7524-7533 (2023).
34. C. Gheorghe, **S. Hau**, L. Gheorghe, F. Voicu, M. Greculeasa, A. Broasca, and G. Stanciu, "RE³⁺-Doped Ca₃(Nb,Ga)₅O₁₂ and Ca₃(Li,Nb,Ga)₅O₁₂ Crystals (RE = Sm, Dy, and Pr): A Review of Current Achievements," Materials **16**(1), 269 (2023).
33. **S. Hau**, G. Stanciu, D. Avram, L. Gheorghe, C. Gheorghe, "Energy transfer and luminescent properties of Tb³⁺ and (Tb³⁺, Yb³⁺) doped CNGG phosphors," J. Rare Earths **40**(9), 1445-1453 (2022).
32. C. Gheorghe, **S. Hau**, G. Stanciu, D. Avram, A. Broasca, L. Gheorghe, "Novel optical temperature sensors based on the emission of the Pr³⁺ ions doped Ca₃(M,Ga)₅O₁₂ (M⁵⁺ = Nb, Ta) garnet phosphors," J. Alloys & Compds. **922**, 166178 (2022).
31. 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).
30. 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).
29. A. M. Voiculescu, **S. Hau**, G. Stanciu, D. Avram, C. Gheorghe, "Optical thermometry through infrared excited green upconversion emissions of Er³⁺ -Yb³⁺ co-doped LaAlO₃ phosphors," J. Lumin. **242**, 118602 (2022).
28. N. A. Safranova, R. P. Yavetskiy, O. S. Kryzhanovska, M. V. Dobrotvorska, A. E. Balabanov, I. O. Vorona, A. V. Tolmachev, V. N. Baumer, I. Matolínov, D. Yu. Kosyanov, O. O. Shichalin, E. K. Papynov, **S. Hau**, C. Gheorghe, "A novel IR-transparent Ho³⁺:Y₂O₃-MgO nanocomposite ceramics for potential laser applications," Ceram. Int. **47**(1), 1399-1406 (2021).
27. 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:Y₂O₃ ceramics via multi-step sintering method fabrication," Opt. Mater. **109**, 110411 (2020).

26. A. Broasca, M. Greculeasa, F. Voicu, **S. Hau**, G. Croitoru, C. Gheorghe, N. Pavel, L. Gheorghe, "Efficient near-infrared laser emission and nonlinear optical properties of a newly developed Yb:LYSB laser crystal," *J. Alloys & Comp.* **844**, 156143 (2020).
25. M. Greculeasa, A. Broasca, F. Voicu, **S. Hau**, G. Croitoru, G. Stanciu, C. Gheorghe, N. Pavel, L. Gheorghe, "Bifunctional $\text{La}_x\text{Nd}_y\text{Gd}_z\text{Sc}_{4-x-y-z}(\text{BO}_3)_4$ crystal: Czochralski growth, linear and nonlinear optical properties, and near-infrared laser emission performances," *Opt. & Laser Techn.* **131**, 106433 (2020).
24. 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 $\text{La}_x\text{Gd}_y\text{R}_z\text{Sc}_{4-x-y-z}(\text{BO}_3)_4$ ($\text{R} = \text{Yb}, \text{Nd}$) crystals - A review of recent developments," *Opt. Mat. X* **7**, 100052 (2020).
23. 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 Er^{3+} and Yb^{3+} ," *Opt. Mater.* **100**, 109613 (2020).
22. G. Stanciu, L. Gheorghe, F. Voicu, **S. Hau**, C. Gheorghe, G. Croitoru, M. Enculescu, and R. P. Yavetskiy, "Highly transparent $\text{Yb}:Y_2\text{O}_3$ ceramics obtained by solid-state reaction and combined sintering procedures," *Ceram. Int.* **45**(3), 3217-3222 (2019).
21. C. A. Brandus, **S. Hau**, A. Broasca, M. Greculeasa, F. M. Voicu, C. Gheorghe, L. Gheorghe, and T. Dascalu, "Efficient 1 μm Laser Emission of Czochralski-Grown Nd:LGSB Single Crystal," *Materials* **12**(12), 2005 (2019).
20. **S. Hau**, C. Gheorghe, L. Gheorghe, F. Voicu, M. Greculeasa, G. Stanciu, A. Broasca, M. Enculescu, "Spectroscopic investigations of Pr^{3+} ions doped CNGG and CLNGG single crystals," *J. Alloy. Compd.* **799**, 288-301 (2019).
19. L. Gheorghe, M. Greculeasa, F. Voicu, C. Gheorghe, **S. Hau**, A. M. Vlaicu, K. N. Belikov, E. Yu. Bryleva, O. V. Gaiduk, "Crystal growth and structural characterization of Sm^{3+} , Pr^{3+} and Dy^{3+} -doped CNGG and CLNGG single crystals," *Opt. Mater.* **84**, 335-338 (2018).
18. I. O. Vorona, R. P. Yavetskiy, M. V. Dobrotvorskaya, A. G. Doroshenko, S. V. Parkhomenko, A. V. Tolmachev, D. Yu. Kosyanov, L. Gheorghe, C. Gheorghe, **S. Hau**, M. Enculescu, "1532 nm sensitized luminescence and up-conversion in $\text{Yb},\text{Er}:\text{YAG}$ transparent ceramics," *Opt. Mater.* **77**, 221-225 (2018).
17. C. Gheorghe, **S. Hau**, L. Gheorghe, F. Voicu, M. Greculeasa, M. Enculescu, K. N. Belikov, E. Yu. Bryleva, O. V. Gaiduk, "Yellow laser potential of cubic $\text{Ca}_3(\text{Nb},\text{Ga})_5\text{O}_{12}:\text{Dy}^{3+}$ and $\text{Ca}_3(\text{Li},\text{Nb},\text{Ga})_5\text{O}_{12}:\text{Dy}^{3+}$ single crystals," *J. Alloy. Compd.* **739**, 806-816 (2018).
16. I. O. Vorona, R. P. Yavetskiy, A. G. Doroshenko, S. V. Parkhomenko, A. V. Tolmachev, V. N. Baumer, D. Yu Kosyanov, V. I. Vovna, V. G. Kuryavyi, M. Greculeasa, L. Gheorghe, **S. Hau**, C. Gheorghe, G. Croitoru, "Structural-phase state and lasing of 5-15 at.% $\text{Yb}^{3+}:\text{Y}_3\text{Al}_5\text{O}_{12}$ optical ceramics," *J. Eur. Cer. Soc.* **37**(13), 4115-4122 (2017).
15. C. Gheorghe, **S. Hau**, L. Gheorghe, F. Voicu, M. Greculeasa, A. Achim, M. Enculescu, "Optical properties of Sm^{3+} doped $\text{Ca}_3(\text{Nb},\text{Ga})_5\text{O}_{12}$ and $\text{Ca}_3(\text{Li},\text{Nb},\text{Ga})_5\text{O}_{12}$ single crystals," *J. Lumin.* **186**, 175-182 (2017).
14. V. Lupei, A. Lupei, **S. Hau**, C. Gheorghe, A. Ikesue, "Structural and electron-phonon interaction effects in optical spectra of Pr^{3+} and Sm^{3+} in YAG," *J. Alloys & Comp.* **706**, 176-185 (2017).
13. A. Lupei, V. Lupei, **S. Hau**, "Vibronics in optical spectra of Yb^{3+} and Ce^{3+} in YAG and Y_2O_3 ceramics," *Opt. Mat.* **63**, 143-152 (2017).
12. C. Gheorghe, A. Lupei, **S. Hau**, L. Gheorghe, A. M. Vlaicu, "Compositional dependence of optical properties of Sm^{3+} -doped $\text{Y}_3\text{Sc}_x\text{Al}_{5-x}\text{O}_{12}$ polycrystalline ceramics," *J. Alloy. Compd.* **683**, 547-553 (2016).
11. F. Khaled, P. Loiseau, F. Voicu, A. Achim, **S. Hau**, C. Gheorghe, G. Croitoru, N. Pavel, L. Gheorghe, G. Aka, "Spectroscopic properties and laser performances of Yb:LGSB nonlinear optical crystal," *J. Alloys & Comp.* **688** (Part A), 510-517 (2016).
10. A. Lupei, V. Lupei, **S. Hau**, C. Gheorghe, F. Voicu, "Structure and temperature effects on Nd^{3+} spectra in polycrystalline mixed scandium aluminum garnets $\text{Y}_3\text{Sc}_x\text{Al}_{5-x}\text{O}_{12}$," *Opt. Mat.* **47**, 465-472 (2015).
9. C. Gheorghe, L. Gheorghe, A. Achim, **S. Hau**, R. D. Avram, G. Stanciu, "Optical properties of Sm^{3+} doped strontium hexa-aluminate single crystals," *J. Alloys & Comp.* **622**, 296-302 (2015).

8. A. Lupei, V. Lupei, C. Gheorghe, **S. Hau**, and A. Ikesue, "Multicenters in Ce³⁺ visible emission of YAG ceramics," Opt. Mat. **37**, 727-733 (2014).
7. S. Georgescu, A.M. Voiculescu, O. Toma, L. Gheorghe, A. Achim, C. Matei, and **S. Hau**, "Luminescence efficiency of europium doped LGS, LGT, and LGN crystals," Optoelectronics and Advanced Materials - Rapid Communications **4** (12), 1937-1941 (2010).
6. A. Lupei, V. Lupei, A. Ikesue, C. Gheorghe, **S. Hau**, "Nd-Yb energy transfer in (Nd, Yb):Y₂O₃ transparent ceramics", Opt. Mat. **32** (10), 1333-1336 (2010).
5. V. Lupei, A. Lupei, A. Ikesue, C. Gheorghe, **S. Hau**, "Sensitization of Yb³⁺ emission in laser oxide ceramics," Rom. Reports in Physics **62** (3), 429-443 (2010).
4. C. Gheorghe, A. Lupei, V. Lupei, L. Gheorghe, **S. Hau**, "Judd-Ofelt analysis of Nd³⁺ in CLNGG single crystals," Journal of Optoelectronics and Advanced Materials **12** (4), 818-820 (2010).
3. V. Lupei, A. Lupei, C. Gheorghe, **S. Hau**, A. Ikesue, "Efficient sensitization of Yb³⁺ emission by Nd³⁺ in Y₂O₃ transparent ceramics and the prospect for high-energy Yb lasers," Opt. Lett. **34** (14), 2141-2143 (2009).
2. A. Lupei, A. Achim, V. Lupei, C. Gheorghe, L. Gheorghe, **S. Hau**, "RE³⁺ doped SrWO₄ as laser and nonlinear active crystals", Rom. J. Phys. **54** (9-10), 919-928 (2009).
1. D. Apostol, P.C.Logofatu, **S. Florea**, V. Damian, I. Iordache, M. Bojan "Accurate calibration of grating pitch," Journal of Optoelectronics and Advanced Materials **10** (2), 352-355 (2008).

2. PROCEEDINGS OF INTERNATIONAL CONFERENCES

(Presentations at International Meetings published in extended version)

1. A. Lupei, A. Achim, V. Lupei, C. Gheorghe, L. Gheorghe, **S. Florea**, "RE³⁺ doped SrWO₄ as laser and nonlinear active crystals," Proceedings of International Conference "MODERN LASER APPLICATIONS", INDLAS, Second Edition 2008, May 20-23, 2008, Bran, Romania; J. of Optoelectron. & Adv. Mat. (JOAM) - Symposia, Vol. **1**, No. 4, 666-669 (2009).

3. COMMUNICATIONS AT INTERNATIONAL CONFERENCES

(Technical Digests, manuscripts up to 3 pages)

60. 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).
59. 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).
58. 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).
57. 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).
56. 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).

55. A. M. Voiculescu, **S. Hau**, G. Stanciu, C. Gheorghe, "Synthesis and characterization of a new red phosphor SrLaGaO_4 doped with Eu^{3+} ," 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).
54. C. Tihon, C. Stanciu, G. Stanciu, **S. Hau**, M. Cernea, "Synthesis, characterization and spectroscopic properties of Er, Yb - doped SrTiO_3 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).
53. 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_3 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).
52. L. M. Gheorghe, A. Broasca, M. Greculeasa, F. Voicu, G. Croitoru, **S. Hau**, C. Gheorghe, N. Pavel, "Yb- and Nd-doped $\text{La}_x\text{Gd}_y\text{Sc}_{4-x-y}(\text{BO}_3)_4$ (LGSB) as new high performance near-infrared laser crystals," The 9th Tiny Integrated Laser and Laser Ignition Conference 2022, 19-21 April 2023, Pacifico Yokohama, Yokohama, Japan, presentation TILA-LICp-01 (poster presentation).
51. G. Stanciu, F. Voicu, C. A. Brandus, C. E. Tihon, **S. Hau**, C. Gheorghe, G. Croitoru, L. M. Gheorghe, N. Pavel, " $\text{RE}^{3+}:\text{Y}_2\text{O}_3$ 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).
50. C. Stanciu, C. Tihon, G. Stanciu, **S. Hau**, M. Cernea, "Investigation of microstructure and spectroscopic properties of europium doped SrTiO_3 ceramics prepared via sol-gel method," E-MRS 2022 Fall Meeting, 19-22 September 2022, Warsaw, Poland; presentation K.P.9.
49. C. Stanciu, C. Tihon, G. Stanciu, **S. Hau**, M. Cernea, "Characterizations of vacuum sintered europium doped SrTiO_3 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.
48. 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," 7th European Conference on Crystal Growth - ECCG7, 25-27 July 2022, Paris, France; oral presentation.
47. **S. Hau**, M. Greculeasa, A. Broasca, F. Voicu, G. Stanciu, D. Avram, M. Enculescu, L. Gheorghe, C. Gheorghe, "Pr³⁺-doped $\text{Ca}_3(\text{Ta}, \text{Ga})_5\text{O}_{12}$ 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.
46. **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- $\text{Ca}_{2.85}\text{Ta}_{1.80}\text{Ga}_{3.10}\text{O}_{12}$ Single Crystals," 20th International Balkan Workshop on Applied Physics and Materials Science (IBWAP 2022), July 12-145, Constanta, Romania; presentation S1-P7.
45. 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.
44. M. Greculeasa, A. Broasca, F. Voicu, G. Stanciu, **S. Hau**, C. Gheorghe, C.A. Brandus, N. Pavel, and L. Gheorghe, "Development of Czochralski-grown $\text{La}_{0.733}\text{Nd}_{0.035}\text{Gd}_{0.452}\text{Sc}_{2.75}(\text{BO}_3)_4$ 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.
43. 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 $\text{Y}_3\text{Al}_5\text{O}_{12}$ transparent ceramics," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P2-06.
42. 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 $\text{La}_{0.733}\text{Nd}_{0.035}\text{Gd}_{0.452}\text{Sc}_{2.75}(\text{BO}_3)_4$ 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.

41. 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.
40. 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.
39. **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.
38. A. M. Voiculescu, **S. Hau**, G. Stanciu, C. Gheorghe, "Synthesis by solid state reaction and luminescence properties of LaAlO₃ perovskite phosphor doped with Rare Earths", TIM 20-21 Physics Conference, 11-13 November 2021,Timisoara, Romania; poster presentation CMP - P10.
37. **S. Hau**, C. Gheorghe, L. Gheorghe, G. Stanciu, "Optical properties of Pr³⁺-doped Ca₃(Ta,Ga)₅O₁₂ ceramic phosphors," TIM 20-21 Physics Conference, 11 - 13 November 2021, Timisoara, Romania; poster presentation CMP-P3.
36. 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.
35. 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).
34. A. Broasca, M. Greculeasa, F. Voicu, **S. Hau**, G. Croitoru, C. Gheorghe, N. Pavel, L. Gheorghe, "New Yb:LYSB bifunctional crystal for efficient near-infrared laser emission and self-frequency doubling conversion," 9th EPS-QEOD Europhoton Virtual Conference, 30 August - 4 September 2020; poster presentation Tu-P1.12.
33. G. Stanciu, F. Voicu, C. A. Brandus, C. Tihon, **S. Hau**, C. Gheorghe, G. Croitoru, L. Gheorghe, "Enhancement of the laser emission efficiency of Yb:Y₂O₃ ceramics via multi-step sintering method fabrication," 9th EPS-QEOD Europhoton Virtual Conference, 30 August - 4 September 2020; poster presentation Tu-P1.13.
32. F. M. Voicu, L. Gheorghe, M. Greculeasa, A. Broasca, C. Gheorghe, **S. Hau**, and G.Croitoru, "Nd³⁺ doped La_xGd_ySc_{4-x-y}(BO₃)₄ as bifunctional laser and nonlinear crystal," TIM 19 Physics Conference, 29 - 31 May 2019, Timisoara, Romania, presentation CM-P06 (poster presentation).
31. **S. Hau**, C. Gheorghe, L. Gheorghe, F. Voicu, M. Greculeasa, G. Stanciu, and M. Enculescu, "Luminescence properties of Pr³⁺ doped Ca₃(Li,Nb,Ga)₅O₁₂ single crystal," TIM 19 Physics Conference, 29 - 31 May 2019, Timisoara, Romania, presentation CM-P09 (poster presentation).
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29. C. Gheorghe, **S. Hau**, L. Gheorghe, and G. Stanciu, "Cooperative energy transfer in Ca₃(Nb,Ga)₅O₁₂ ceramics doped with ytterbium and terbium," TIM 19 Physics Conference, 29 - 31 May 2019, Timisoara, Romania, presentation CM-P12 (poster presentation).
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