

## LIST OF PUBLICATIONS

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

40. 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).
39. A. M. Voiculescu, C. E. Tihon, S. Hau, G. Stanciu, O. Toma, "Optical study of SrLaGa<sub>3</sub>O<sub>7</sub> ceramic samples doped with Er<sup>3+</sup> and Yb<sup>3+</sup>," Opt. Mater. **100**, 109613 (2020).
38. S. Georgescu, A. Stefan, A.M. Voiculescu, and O. Toma, "Judd-Ofelt analysis of Tm<sup>3+</sup> doped in CaSc<sub>2</sub>O<sub>4</sub> ceramic samples," J. Lumin. **166**, 130-136 (2015).
37. A.M. Voiculescu, S. Georgescu, C. Matei, A. Stefan, and O. Toma, "Synthesis and characterization of La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub> doped with holmium and ytterbium," Rom. J. Phys. **60**(3-4), 495-501 (2015).
36. S. Georgescu, A. Stefan, A. M. Voiculescu, O. Toma, "Judd-Ofelt analysis of ceramic La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub> doped with Er<sup>3+</sup>," J. Lumin. **162**, 168-173 (2015).
35. S. Georgescu, A. Stefan, O. Toma, A. M. Voiculescu, "Judd-Ofelt analysis of Ho<sup>3+</sup> doped in ceramic CaSc<sub>2</sub>O<sub>4</sub>," J. Lumin. **162**, 174-179 (2015).
34. I. Bibicu, S. Constantinescu, L. Diamandescu, A. M. Voiculescu, E. Cotoi, "Mössbauer spectroscopy on YVO<sub>4</sub>:Eu luminescent material," Rom. Reports Phys. **66** (4), 1012-1017 (2014).
33. S. Georgescu, O. Toma, C. Matei, A.M. Voiculescu, and A. Ștefan, "Judd-Ofelt analysis of Tm<sup>3+</sup> in La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub> ceramic with granular structure," J. Lumin. **157**, 35-38 (2015).
32. S. Georgescu, A. Stefan, A. M. Voiculescu, O. Toma, C. Matei, R. Birjega, "Peculiarities of the Ho<sup>3+</sup> → Yb<sup>3+</sup> energy transfer in CaSc<sub>2</sub>O<sub>4</sub>:Ho:Yb", J. Lumin. **154**, 142-147 (2014).
31. S. Georgescu, A. M. Voiculescu, C. Matei, A. Stefan, O. Toma, R. Birjega, "Upconversion luminescence in langatate ceramics doped with Tm<sup>3+</sup> and Yb<sup>3+</sup>", J. Lumin. **154**, 74-79 (2014).
30. S. Georgescu, A. M. Voiculescu, S. Nastase, A. Zanfir, C. Matei, D. Berger, C. Matei, A. Stefan, and O. Toma, "Luminescence of Eu-doped langasite nanopowders synthesized by a modified Pechini route," J. Lumin. **145**, 690-696 (January 2014).
29. S. Georgescu, A. M. Voiculescu, C. Matei, C. E. Secu, R. F. Negrea, and M. Secu, "Ultraviolet and visible up-conversion luminescence of Er<sup>3+</sup>/Yb<sup>3+</sup> co-doped CaF<sub>2</sub> nanocrystals in sol-gel derived glass-ceramics," J. Lumin. **143**, 150-156 (2013).
28. A. M. Voiculescu, S. Georgescu, C. Matei, A. G. Stefan, L. Gheorghe, A. Achim, and F. Voicu, "Infrared-excited red, green, violet and UV luminescence from langasite crystal doped with erbium and ytterbium", Rom. J. Phys. **58** (1-2), 136-142 (2013).
27. S. Georgescu, A. M. Voiculescu, C. Matei, A. G. Stefan, and O. Toma, "Violet and near-ultraviolet in La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub> codoped with Er<sup>3+</sup> and Yb<sup>3+</sup>," Physica B **413**, 55-58 (2013).
26. A. M. Voiculescu, S. Georgescu, S. Nastase, C. Matei, D. Berger, C. Matei, A. Stefan, and O. Toma, "Upconversion luminescence of Er<sup>3+</sup>/Yb<sup>3+</sup> co-doped nanolangasite synthesized by a modified Pechini route," J. Sol-Gel Sci. Technol. **64** (3), 667-672 (2012).

25. L. Petrescu, O. Cinteza, A.M. Voiculescu, T. Rosu, I. Enculescu, E. Matei, S. Georgescu, R. Birjega, S. Avram, and D. Mihailescu, "Interaction of NaYF<sub>4</sub>:Er:Yb Nanoparticles with Phospholipid Monolayers as Models of Biological Membranes," *Revista de Chimie* **63** (9), 956-961 (2012).
24. S. Georgescu, A. M. Voiculescu, O. Toma, S. Nastase O. Toma, C. Matei, R. Birjega, "Effect of aluminum substitution on the phase stability and luminescence properties of Eu-doped langanite nano-powders synthesized by a citrate sol-gel method," *Rom. Reports Phys.* **64** (3), 737-742 (2012).
23. S. Georgescu, O. Toma, A. M. Voiculescu, C. Matei, and R. Birjega, "Infrared-excited bright green and red luminescence in La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub> doped with erbium and ytterbium," *Physica B -Condensed Matter* **407** (7), 1124-1127 (2012).
22. S. Georgescu, O. Toma, A. M. Voiculescu, L. Gheorghe, A. Achim, "Energy level scheme of Eu<sup>3+</sup>:La<sub>3</sub>Ga<sub>5</sub>SiO<sub>14</sub> (langasite)," *Optoelectronics and Advanced Materials - Rapid Communication*, **6** (2), 22-24 (2012).
21. S. Georgescu, O. Toma, A. M. Voiculescu, "Effects of the thermal treatment on the luminescence of YVO<sub>4</sub>:Er<sup>3+</sup> nanocrystals", *Optoelectronics and Advanced Materials - Rapid Communications*, **5** (11), 1207-1209 (2011).
20. A. M. Voiculescu, S. Georgescu, O. Toma, S. Nastase, R. Birjega, L. Petrescu, I. Enculescu, E. Matei, "Upconversion luminescence of Er, Yb-doped nanolanganite powders synthesized by a citrate sol-gel method", *Optoelectronics and Advanced Materials - Rapid Communications*, **5** (11), 1170-1173 (2011).
19. S. Georgescu, A. M. Voiculescu, O. Toma, L. Gheorghe, A. Achim, "<sup>5</sup>D<sub>0</sub> luminescence in europium-doped langanite", *Optoelectronics and Advanced Materials - Rapid Communications*, **5** (11), 1139 -41 (2011).
18. 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).
17. S. Georgescu, A.M. Voiculescu, G. Salamu, H. Niciu, D. Niciu, M. Popescu, A. Lörcinzi, A. Velea, I. D. Simandan, "Synthesis and luminescence properties of Nd-doped chalcogenide glass (Ge<sub>5</sub>As<sub>2</sub>S<sub>13</sub>)(NdCl<sub>3</sub>)<sub>x</sub>(x=0.3%, 0.5%)," *Chalcogenide Letters* **7** (11), 621-624 (2010).
16. S. Georgescu, A. M. Voiculescu, O. Toma, S. Nastase, C. Matei, M. Osia, "Luminescence of Eu-doped langanite nanopowders synthesized by citrate sol-gel method," *J. Alloys & Compounds* **507** (2), 470-474 (2010).
15. S. Georgescu, E. Cotoi, A. M. Voiculescu, O. Toma, C. Matei, "Reflectance spectra of YVO<sub>4</sub>:Eu<sup>3+</sup> synthesized by direct precipitation," *Romanian Journal of Physics* **55** (7-8), 750-757 (2010).
14. A. M. Voiculescu, E. Cotoi, O. Toma, S. Georgescu, S. Constantinescu, I. Bibicu, "Optical and Mössbauer spectroscopy studies on YVO<sub>4</sub>:Eu nanophosphor," *Rom. Reports in Physics* **62** (1), 121-127 (2010).
13. S. Georgescu, A. M. Voiculescu, C. Matei, O. Toma, L. Gheorghe, A. Achim, "Reflectance measurements on Europium-doped Langasite, Langanite and Langatate powders," *Rom. Reports in Physics* **62** (1), 128-133 (2010).
12. S. Georgescu, E. Cotoi, A. M. Voiculescu, O. Toma, M. N. Grecu, E. Borca, S. Hodorozea, "Optical and EPR investigations of the thermal treatment effects on YVO<sub>4</sub> nanocrystals", *Optoelectronics and Advanced Materials - Rapid Communications*, **3** (12), 1383-1387 (2009).
11. S. Georgescu, A. M. Voiculescu, O. Toma, C. Tiseanu, L. Gheorghe, A. Achim, C. Matei, "Eu-doped langasite, langatate and langanite - possible new red phosphors", *Optoelectronics and Advanced Materials - Rapid Communications*, **3** (12), 1379-1382 (2009).
10. S. Georgescu, E. Cotoi, A. M. Voiculescu, O. Toma, "Effects of particle size on the luminescence of YVO<sub>4</sub>:Eu nanocrystals," *Rom. Reports in Physics* **60** (4), 947-955 (2008).
9. S. Georgescu, O. Toma, A. M. Chinie, L. Gheorghe, A. Achim, A. S. Stefan, "Excited state dynamics of Eu<sup>3+</sup> in the partially disordered crystals La<sub>3</sub>Ga<sub>5</sub>SiO<sub>14</sub> and La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub>," *J. Lumin.* **128** (5-6), 741-743 (2008).
8. S. Georgescu, O. Toma, A. M. Chinie, L. Gheorghe, A. Achim, A.S. Stefan, "Spectroscopic characteristics of langasite (La<sub>3</sub>Ga<sub>5</sub>SiO<sub>14</sub>) and langatate (La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub>) crystals doped with Eu<sup>3+</sup>," *Opt. Mat.* **30** (6), 1007-1012 (2008).

7. S. Georgescu, A. M. Chinie, A. Stefan, O. Toma, "Spectroscopy of Eu:YAG nanopowders," *Phys. Stat. Sol. (c)* **4** (3), 280-283 (2007).
6. S. Georgescu, O. Toma, L. Gheorghe, A. Achim, A. M. Chinie, A. Stefan, "Disorder effects in the fluorescence spectra of Eu<sup>3+</sup> in langatate (La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub>) crystals," *Opt. Mat.* **30**, 212-215 (2007).
5. S. Constantinescu, S. Georgescu, I. Bibicu, A. M. Chinie, A. S. Stefan, O. Toma, "Mössbauer and optical investigation of EU:YAG nanocrystals synthesized by a sol-gel method," *Romanian J. of Physics* **52** (3-4), 295-307 (2007).
4. A.M. Chinie, S. Georgescu, A. Mateescu, A. Stefan, "Thin films of YAG:Er," *Romanian J. of Physics* **51** (7-8), 827-831 (2006).
3. A.M. Chinie, A. Stefan, S. Georgescu, O. Toma, E. Borca and M. Bercu, "Structural and spectroscopic characterization of Re<sup>3+</sup>(Er<sup>3+</sup>, Eu<sup>3+</sup>, Tb<sup>3+</sup>) doped nanocrystalline of YAG produced by a sol-gel method," *Journal of Optoelectronics and Adv. Mat.* **8**, (1) 95-98 (2006).
2. S. Georgescu, A. M. Chinie, A. Stefan, O. Toma, "Effects of thermal treatment on the luminescence of YAG:Eu nanocrystals synthesized by a nitrate-citrate sol-gel method," *Journal of Optoelectronics and Adv. Mat.* **7** (6), 2985- 2990 (2005).
1. A.M. Chinie, A. Stefan, S. Georgescu, "Synthesis by a citrate sol-gel method and characterization of Eu<sup>3+</sup>-doped yttrium aluminum garnet nanocrystals," *Romanian Rep. Phys.* **57** (3), 412-417 (2005).

## 2. PROCEEDINGS OF INTERNATIONAL CONFERENCES

(Presentations at International Meetings published in extended version)

8. S. Georgescu, A. M. Voiculescu, C. Matei, A. G. Stefan, and O. Toma, "Upconversion luminescence in La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub> codoped with Er<sup>3+</sup> and Yb<sup>3+</sup>," *Proc. SPIE 8882, ROMOPTO 2012: Tenth Conference on Optics: Micro- to Nanophotonics III*, 888204 (June 10, 2013); doi: 10.1117/12.2032265; <http://dx.doi.org/10.1117/12.2032265>
7. S. Georgescu, A. M. Voiculescu, E. Cotoi, O. Toma, L. Gheorghe, A. Achim, C. Matei, I. Enculescu, E. Matei, and M. Osiac, "Optical and morphologic properties of YVO<sub>4</sub>:Eu phosphor," *Proc. SPIE 7469, Micro- to Nano-Photonics II - ROMOPTO 2009 Conference*, August 31 - Sept. 03, 2009, Sibiu, Romania; paper 74690C (2010).
6. A. M. Voiculescu, E. Cotoi, O. Toma, S. Georgescu, S. Constantinescu, I. Bibicu, "Optical and Mössbauer spectroscopy studies on YVO<sub>4</sub>:Eu nanophosphor," *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, 670-672 (2009).
5. O. Toma, S. Georgescu, A. M. Voiculescu, E. Cotoi, "Dynamics of the upconversion laser emission at 850 nm in Er:YLiF<sub>4</sub>," *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, 681-684 (2009).
4. E. Cotoi, A. M. Voiculescu, S. Georgescu, O. Toma, T. Rosu, L. Bran, E. Borca, S. Hodoroagea, "Synthesis and spectroscopic characterization of upconversion nanophosphor NaYF<sub>4</sub> doped with erbium and codoped with ytterbium," *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, 689-692 (2009).
3. S. Georgescu, O. Toma, A. Achim, A.M. Chinie, L. Gheorghe, A. Stefan, "Optical studies of the partially disordered crystals langasite (La<sub>3</sub>Ga<sub>5</sub>SiO<sub>14</sub>) and langatate (La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub>) doped with Eu<sup>3+</sup>," *Proc. SPIE Vol. 6785, [6785-08]* (2007), *ROMOPTO 2006: Eighth Conference on Optics (V. I. Vlad Editor)*, Sibiu, Romania, 28-31 August 2006.

2. S. Georgescu, S. Constantinescu, A.M. Chinie, A. S. Stefan, O. Toma, I. Bibicu, "Optical and Mössbauer studies on YAG:Eu nanocrystals synthesized by a sol-gel method," Proc. SPIE Vol. **6785**, [6785-09] (2007), ROMOPTO 2006: Eighth Conference on Optics (V. I. Vlad Editor), Sibiu, Romania, 28-31 August 2006.
1. A.M. Chinie, S. Georgescu, C. Stoicescu, C, "Synthesis and characterization of Eu<sup>3+</sup>- doped orthosilicates (Y<sub>2</sub>SiO<sub>5</sub>) nanocrystalline powders," Proc. SPIE Vol. **6606** [L6060] (2007), International Conference Advanced Laser Technologies (Editors: D. C. Dumitras, M. Dinescu, V. I. Konov), Brasov, Romania, 8-12 September 2006.

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

(Technical Digests, manuscripts up to 3 pages)

42. A. M. Voiculescu, S. Hau, G. Stanciu, C. Gheorghe, "Synthesis by solid state reaction and luminescence properties of LaAlO<sub>3</sub> perovskite phosphor doped with Rare Earths", TIM 20-21 Physics Conference, 11-13 November 2021, Timișoara, Romania; poster presentation CMP - P10.
41. 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).
40. C. Matei, S. Georgescu, A. M. Voiculescu, O. Toma, "Spectroscopic characterization of LaGaO<sub>3</sub>:Er synthesized by solid state reaction," The 16<sup>th</sup> International Balkan Workshop on Applied Physics, 7-9 July, 2016, Constanta, Romania; Book of Abstracts, p. 70 (S1 P66, poster presentation).
39. M. Voiculescu, C. Matei, C. Stanciu, S. Georgescu, "Synthesis and characterization of SrY<sub>2</sub>O<sub>4</sub> samples doped with rare earth ions," The 16<sup>th</sup> International Balkan Workshop on Applied Physics, 7-9 July, 2016, Constanta, Romania; Book of Abstracts, pp. 29-30 (S1 P4, poster presentation).
38. C. Matei, S. Georgescu, C. Vasilescu, G. Stanciu, A.-M. Voiculescu and A. Stefan, "Synthesis and characterization of Eu<sup>3+</sup> doped SrY<sub>2</sub>O<sub>4</sub> phosphor," TIM 14 Physics Conference - Physics without frontiers, 20-22 November 2014, Timisoara, Romania; presentation CM-P17 (poster presentation).
37. A. Stefan, S. Georgescu, O. Toma, A.M. Voiculescu, and C. Matei, "Synthesis by solid state reaction and luminescence properties of calcium scandate (CaSc<sub>2</sub>O<sub>4</sub>) doped with Ho<sup>3+</sup> and Yb<sup>3+</sup>," 5th International Student Conference on Photonics, Orastie, Romania, 23-26 September 2014; presentation P.24 (poster presentation).
36. A. M. Voiculescu, S. Georgescu, C. Matei, A. Stefan, and O. Toma, "Synthesis and Characterization of La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub> Doped with Holmium and Ytterbium," The 14<sup>th</sup> International Balkan Workshop on Applied Physics, July 2-4, 2014, Constanta, Romania, presentation S2-P20, Book of Abstracts p. 127 (poster presentation).
35. C. Matei, S. Georgescu, A. M. Voiculescu, A. Stefan, and O. Toma, "Luminescence Properties in Langatate Ceramics Doped with Tm<sup>3+</sup> and Yb<sup>3+</sup>," The 14<sup>th</sup> International Balkan Workshop on Applied Physics, July 2-4, 2014, Constanta, Romania, presentation S2-OP2, Book of Abstracts p. 111 (oral presentation).
34. C. Matei, S. Georgescu, A. M. Voiculescu, and A. Stefan, "Blue upconversion luminescence in Langanite and Langatate doped with Tm and Yb," The 13<sup>th</sup> International Balkan Workshop on Applied Physics, 4-6 July 2013, Constanta, Romania, poster presentation S1-P01, Book of Abstracts, p. 47.
33. A.M. Voiculescu, S. Georgescu, C. Matei, A. Stefan, and S. Nastase, "Upconversion processes in Langasite nanopowders doped with Thulium and Ytterbium," The 13<sup>th</sup> International Balkan Workshop on Applied Physics, 4-6 July 2013, Constanta, Romania, poster presentation S1-P02, Book of Abstracts, pages 47-48.
32. A. M. Voiculescu, S. Georgescu, C. Matei, A. Stefan, O. Toma, F. Voicu, and R. Birjega, "Synthesis and characterization of La<sub>3</sub>Ga<sub>5.5</sub>Ta<sub>0.5</sub>O<sub>14</sub> doped with Yb and Tm for upconversion luminescence", Materials, Methods & Technologies, 15th Int. Symposium, 10-14 June 2013, Sunny Beach, Bulgaria, poster presentation - P66.
31. C. Matei, S. Georgescu, A. M. Voiculescu, F. Voicu, and R. Birjega, "Upconversion luminescence of Tm, Yb - doped langanite ceramic synthesized by solid state reaction", Materials, Methods & Technologies, 15th International Symposium, 10-14 June 2013, Sunny Beach, Bulgaria, poster presentation - P67.

30. C. Matei, S. Georgescu, A. M. Voiculescu, A. Stefan, and R. Birjega, "Synthesis by solid state reaction and luminescence properties of langanite doped with  $Tm^{3+}$  and  $Yb^{3+}$ ," International Conference "MODERN LASER APPLICATIONS" Third Edition, INDLAS 2013, 20-24 May 2013 Bran, Romania, poster presentation - P2.
29. A. M. Voiculescu, S. Georgescu, C. Matei, A. Stefan, and R. Birjega, "Upconversion luminescence properties of  $La_3Ga_{5.5}Ta_{0.5}O_{14}$  doped with Yb and Tm," International Conference "MODERN LASER APPLICATIONS" Third Edition, INDLAS 2013, 20-24 May 2013 Bran, Romania, poster presentation - P5.
28. A. M. Voiculescu, S. Georgescu, C. Matei, A. Stefan, O. Toma, and S. Nastase, "Synthesis and characterization of Europium-doped nano Langasite," 3rd International Conference on RARE EARTH MATERIALS (REMAT) Advances in Synthesis, Studies and Applications, 26-28 April 2013, Wroclaw, Poland (poster presentation).
27. C. Matei, S. Georgescu, A. M. Voiculescu, and S. Nastase, "Synthesis by Pechini method of  $Eu^{3+}$ : nanolangasite," Physics Conf. TIM-12, Timisoara, 27<sup>th</sup>-30<sup>th</sup> November 2012, Abstract Book, pg.14, poster presentation.
26. A. M. Voiculescu, S. Georgescu, C. Matei, and S. Nastase, "Upconversion luminescence of nanolangasite doped with  $Er^{3+}$  and  $Yb^{3+}$ ," Physics Conf. TIM-12, Timisoara, 27<sup>th</sup>-30<sup>th</sup> November 2012 (oral presentation-API, F205), Abstract Book, pg.14.
25. 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, oral presentation I.I.6.
24. A.M. Voiculescu, S. Georgescu, L. Gheorghe, A. Achim, C. Matei, A. Stefan, "Infrared-excited red, green, violet and UV luminescence from langasite crystal doped with Erbium and Ytterbium," The 3rd International Conference on the Physics of Optical Materials and Devices, 3-6 September, 2012, Belgrade, Serbia; poster presentation P1.2-31, Book of Abstract ISBN: 978-86-7306-116-0, (pg. 145).
23. A.M. Voiculescu, S. Georgescu, S. Nastase, O. Toma, C. Matei, and A. Stefan, "Upconversion processes in langasite nanopowders doped with erbium and ytterbium," 8th International Conference on f-Elements", Udine, Italy, August 26-31, 2012, poster presentation OPT 32P.
22. C. Matei, S. Georgescu, D. Berger, S. Nastase, , A.M. Voiculescu, and A. Stefan, "Luminescence properties in  $ZrO_2$  nanoparticles doped with Er and Yb," 8th International Conference on f-Elements, Udine, Italy, August 26-31, 2012, poster presentation OPT 31P.
21. A.M. Voiculescu, S. Georgescu, S. Nastase, C. Matei, and 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.
20. 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, poster presentation PO3-21, Europhysics Conference Abstracts Volume 36D, ISBN No 2-914771-77-0, (pg. 97).
19. C.E. Matei, S. Georgescu, A.M. Voiculescu, O. Toma, and S. Nastase, "Luminescence properties of Eu-doped  $La_2(Ga_{1-x}Al_x)Nd_{0.5}O_{14}$  nano-powders syntetized by a citrate sol-gel method," Physics Conference TIM-11, 24-27 November 2011, Timisoara, Romania; Abstract Book, ISBN 978-973-125-354-1, presentation API-P12 (pg. 138).
18. A.M. Voiculescu, S. Georgescu, O. Toma, C. Matei, R. Birjega, and L. Petrescu, "Luminescence properties of  $La_3G_{5.5}Ta_{0.5}O_{14}$  doped with erbium and ytterbium," Physics Conference TIM-11, 24-27 November 2011, Timisoara, Romania; Abstract Book, ISBN 978-973-125-354-1, presentation API-P26 (pg. 149).
17. A.M. Voiculescu, S. Georgescu, R. Birjega, O. Toma, C. Matei, L. Petrescu, I. Enculescu, E. Matei, "Infrared-excited bright green and red luminescence in  $La_3Ga_{5.5}Ta_{0.5}O_{14}$  doped with Erbium and Ytterbium," 12th International Balkan Workshop on Applied Physics (IBWAP), July 6-8, 2011, Constanta, Romania, presentation S1-P39; Book of Abstracts, ISBN 978-973-614-645-9, pages 67-68.
16. A. M. Voiculescu, S. Georgescu, C. Matei, O. Toma, S. Nastase, R. Birjega, "Upconversion luminescence of langanite powders doped with erbium and ytterbium", International Student Workshop on Laser Applications ISWLA 2011, 31 May 31 - 04 June, 2011, Bran, Romania.

15. C. Matei, S. Georgescu, A. M. Voiculescu, O. Toma, S. Nastase, "Luminescence properties of Eu-doped  $\text{La}_3(\text{Ga}_{1-x}\text{Al}_x)_{5.5}\text{Nb}_{0.5}\text{O}_{14}$  nano-powders synthesized by a citrate sol-gel method", International Student Workshop on Laser Applications ISWLA 2011, 31 May 31 - 04 June, 2011, Bran, Romania.
14. C. Matei, A. M. Voiculescu, S. Georgescu, S. Nastase, O. Toma, and M. Osiac, "Langatate and langanite doped with  $\text{Eu}^{3+}$  - possible new phosphors," International Student Workshop on Laser Applications, May 25 - 28, 2010, Bran, Romania.
13. A. M. Voiculescu, S. Georgescu, E. Cotoi, O. Toma, C. E. Matei, O. Sandu, "The upconversion luminescence of  $\text{Y}_2\text{O}_3:\text{Er}:\text{Yb}$  and  $\text{YVO}_4:\text{Er}:\text{Yb}$  nanophosphors," Micro- to Nano-Photonics II - ROMOPTO 2009 Conference, August 31 - Sept. 03, 2009, Sibiu, Romania, presentation III.P.2.
12. A. M. Voiculescu, S. Georgescu, L. Gheorghe, A. Achim, O. Toma, C. E. Matei, M. Osiac, "Growth and characterization of the partially disordered  $\text{La}_3\text{Ga}_{5.5-x}\text{Al}_x\text{Ta}_{0.5}\text{O}_{14}$  single crystals doped with  $\text{Eu}^{3+}$ ," Romanian Conf. on Advanced Materials, Brasov, Romania, 25-28 August 2009; Abstract Book, ISSN 1842-3574, page 23 (2009).
11. S. Georgescu, A. M. Voiculescu, O. Toma, C. Tiseanu, L. Gheorghe, A. Achim, C. Matei, "Eu-doped langasite, langatate and langanite - possible new red phosphors," Romanian Conference on Advanced Materials, Brasov, Romania, 25-28 August 2009; Abstract Book, ISSN 1842-3574, page 28 (2009).
10. C. Tiseanu, A. Voiculescu, C. Matei, S. Dobroiu, S. Georgescu, V. I. Parvulescu, "Optical properties of terbium complexes bound to mesostructured silica," Romanian Conference on Advanced Materials, Brasov, Romania, 25-28 August 2009; Abstract Book, ISSN 1842-3574, page 68 (2009).
9. A. M. Voiculescu, S. Georgescu, E. Cotoi, O. Toma, C. Matei, "Reflectance spectra of  $\text{YVO}_4:\text{Eu}$  nanophosphors", 10th International Balkan Workshop on Applied Physics (IBWAP), July 6-8, 2009, Constanta, Romania, presentation S1-P66; Book of Abstracts, ISBN 978-973-614-507-0, page 88 (2009).
8. C. Tiseanu, V. I. Parvulescu, B. Cojocaru, A. Voiculescu and S. Georgescu, "Polymer-coated lanthanide's-exchanged zeolites", 10th International Balkan Workshop on Applied Physics (IBWAP), July 6-8, 2009, Constanta, Romania, presentation S1-P60; Book of Abstracts, ISBN 978-973-614-507-0, page 85 (2009).
7. C. Matei, A. M. Voiculescu, S. Georgescu, E. Cotoi, O. Toma, O. Sandu, "Visible luminescence of  $\text{Y}_2\text{O}_3:\text{Er}:\text{Yb}$  si  $\text{YVO}_4:\text{Er}:\text{Yb}$  nanophosphors excited in infrared," 10th International Balkan Workshop on Applied Physics (IBWAP), July 6-8, 2009, Constanta, Romania, presentation S1-P65; Book of Abstracts, ISBN 978-973-614-507-0, page 88 (2009).
6. S. Georgescu, A. M. Voiculescu, O. Toma, E. Cotoi, "Effects of particle size on the luminescence of  $\text{Eu}:\text{YVO}_4$  nanocrystals," Sixth International Conference on Inorganic Materials, 28-30 September 2008, Dresden, Germany.
5. S. Georgescu, E. Cotoi, A. M. Voiculescu, O. Toma, M. N. Grecu, E. Borca, S. Hodoroagea, "Optical spectroscopy and EPR investigation of the thermal treatment effects on  $\text{YVO}_4$  nanocrystals," The 2<sup>nd</sup> INDLAS International Conference Modern Laser Applications, May 20-23, 2008, Bran, Romania.
4. S. Georgescu, A. M. Voiculescu, E. Cotoi, O. Toma, C. Stoicescu, "Synthesis and luminescence properties of nanocrystalline  $\text{Eu}^{3+}$  and  $\text{Er}^{3+}$  doped yttrium orthovanadate," 8th International Balkan Workshop on Applied Physics, 5-7 July 2007, Constanta, Romania.
3. C. Tiseanu, S. Georgescu, A. Achim, E. Cotoi, O. Toma, A. M. Voiculescu, A. Leca, "Photoluminescence properties of lanthanide's-exchanged silicon/phosphate materials," 8th International Balkan Workshop on Applied Physics, 5-7 July 2007, Constanta, Romania .
2. S. Georgescu, O. Toma, A.M. Chinie, L. Gheorghe, A. Achim, A. S. Stefan, "Excited state dynamics of  $\text{Eu}^{3+}$  in the partially disordered crystals  $\text{La}_3\text{Ga}_5\text{SiO}_{14}$  and  $\text{La}_3\text{Ga}_{5.5}\text{Ta}_{0.5}\text{O}_{14}$ ," International Conference on Dynamical Processes in Excited States of Solids, DPC'07, 17-22 June 2007, Segovia, Spain.
1. S. Georgescu, A.M. Chinie, A. Stefan, O. Toma, "Spectroscopy of  $\text{Eu}:\text{YAG}$  nanopowders," 10th Europhysical Conference on Defects in Insulating Materials EURODIM, 2006, July 10-14, Milano, Italy.