



LIST OF PAPERS: 2014

1. 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 (2014).
2. O. Toma and S. Georgescu, "Judd-Ofelt analysis of Er³⁺ ions in calcium lithium niobium gallium garnet," *J. Lumin.*, **147**, 259-264 (2014).
3. D. Avram, C. Rotaru, B. Cojocaru, M. Sanchez-Dominguez, M. Florea, and C. Tiseanu, "Heavily impregnated ceria nanoparticles with europium oxide: spectroscopic evidences for homogenous solid solutions and intrinsic structure of Eu³⁺- oxygen environments," *J. Mater. Sci.*, **49** (5), 2117-2126 (2014).
4. C. Gheorghie, A. Lupei, F. M. Voicu, and C. Tiseanu, "Emission properties and site occupation of Sm³⁺ ion doped Lu₂O₃ translucent ceramics," *J. Alloys Compd.*, **588**, 388-393 (2014).
5. G. Salamu, F. Jipa, M. Zamfirescu, and N. Pavel, "Laser emission from diode-pumped Nd:YAG ceramic waveguide lasers realized by direct femtosecond-laser writing technique," *Opt. Express*, **22** (5), 5177-5182 (2014).
6. V. Lupei, N. Pavel, and A. Lupei, "Improved laser efficiency by direct diode laser pumping of the radiation-resistant Nd:Gadolinium-Scandium-Gallium Garnet," *Laser Physics*, **24** (4), 045801 (2014).
7. G. Salamu, F. Jipa, M. Zamfirescu, and N. Pavel, "Cladding waveguides realized in Nd:YAG ceramic by direct femtosecond-laser writing with a helical movement technique," *Opt. Mater. Express*, **4** (4), 790-797 (2014).
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9. C. Tiseanu, V. Parvulescu, D. Avram, B. Cojocaru, N. Apostol, A. V. Vela-Gonzalez, and M. Sanchez-Dominguez, "Structural down- and phase selective up- conversion emission properties of mixed valent Pr doped into oxides with tetravalent cations," *Phys. Chem. Chem. Phys.*, **16** (12), 5793-5802 (2014).
10. C. Maxim, D. Branzea, C. Tiseanu, M. Rouzieres, R. Clérac, M. Andruh, N. Avarvari, "Cyanomethylene-bis(phosphonate) Based Lanthanides Complexes: Structural, Photophysical and Magnetic Investigations," *Inorg. Chem.*, **53** (5), 2708-2717 (2014).
11. N. Pavel, G. Salamu, F. Voicu, F. Jipa, and M. Zamfirescu, "Cladding waveguides realized in Nd:YAG laser media by direct writing with a femtosecond-laser beam," *Proceedings of the Romanian Academy Series A - Mathematics Physics Technical Sciences Information Science*, **15** (2), 151-158 (2014).
12. O. Toma and S. Georgescu, "Excited-state absorption in erbium-doped calcium lithium niobium gallium garnet," *J. Lumin.*, **154**, 553-558 (2014).
13. S. Georgescu, A. M. Voiculescu, C. Matei, A. Stefan, O. Toma, R. Birjega, "Upconversion luminescence in langatate ceramics doped with Tm³⁺ and Yb³⁺," *J. Lumin.*, **154**, 74-79 (2014).
14. S. Georgescu, A. Stefan, A. M. Voiculescu, O. Toma, C. Matei, R. Birjega, "Peculiarities of the Ho³⁺ → Yb³⁺ energy transfer in CaSc₂O₄:Ho:Yb," *J. Lumin.*, **154**, 142-147 (2014).



15. M. Mernea, O. Calborean, O. Grigore, T. Dascalu, and D. F. Mihailescu, "Validation of protein structural models using THz spectroscopy: a promising approach to solve three-dimensional structures," *Opt. Quantum. Electron.*, **46** (4), 505-514 (2014).
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17. C. Tiseanu, V. Parvulescu, D. Avram, B. Cojocaru, M. Sanchez-Dominguez, "Exceptional capability of CeO₂-ZrO₂ to "dissolve" europium oxide established by X-ray Diffraction, Raman and time-resolved luminescence spectroscopy," *Dalton Trans.*, **43** (20) 7622-7630 (2014).
18. D. Avram, C. Gheorghe, C. Rotaru, B. Cojocaru, M. Florea, V. Parvulescu, and C. Tiseanu "Lanthanide - lanthanide and lanthanide - defect interactions in co-doped ceria revealed by luminescence spectroscopy," *J. Alloys Compds.*, **616**, 535-541 (2014).
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21. I. Bibicu, S. Constantinescu, L. Diamandescu, A. M. Voiculescu, E. Cotoi, "Mössbauer spectroscopy on YVO₄:Eu luminescent material," *Rom. Reports Phys.*, **66** (4), 1012-1017 (2014).