



LIST OF PAPERS: 2015

1. S. Georgescu, O. Toma, C. Matei, A.M. Voiculescu, and A. Ștefan, "Judd-Ofelt analysis of Tm^{3+} in $La_3Ga_{5.5}Ta_{0.5}O_{14}$ ceramic with granular structure," *J. Lumin.* **157**, 35-38 (2015).
2. T. Dascalu, G. Salamu, O. Sandu, M. Dinca, and N. Pavel, "Scaling and passively Q-switch operation of a Nd:YAG laser pumped laterally through a YAG prism," *Opt. & Laser Techn.* **67**, 164-168 (2015).
3. R. G. Ungureanu, O. V. Grigore, M. P. Dinca, G. V. Cojocaru, D. Ursescu, and T. Dascalu, "Multiple THz pulse generation with variable energy ratio and delay," *Laser Phys. Lett.* **12**(4), 045301 (2015).
4. D. Avram, B. Cojocaru, M. Florea, V. Teodorescu, I. Tiseanu, and C. Tiseanu, "NIR to Vis - NIR up - conversion and X-ray excited emission of Er doped high Z BiOCl," *Opt. Mater. Express* **5**(5), 951-962 (2015).
5. C.A. Brandus, L. Gheorghe, T. Dascalu, "Efficient laser operation at 1.06 μm in co-doped Lu^{3+} , Nd^{3+} :GdCa₄O(BO₃)₃ single crystal," *Opt. Mat.* **42**, 376-380 (2015).
6. 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).
7. S. Georgescu, A. Ștefan, A. M. Voiculescu, O. Toma, "Judd-Ofelt analysis of ceramic $La_3Ga_{5.5}Ta_{0.5}O_{14}$ doped with Er^{3+} ," *J. Lumin.* **162**, 168-173 (2015).
8. S. Georgescu, A. Ștefan, O. Toma, A. M. Voiculescu, "Judd-Ofelt analysis of Ho^{3+} doped in ceramic $CaSc_2O_4$," *J. Lumin.* **162**, 174-179 (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 $La(Ca_{1-x}Sr_x)_4O(BO_3)_3$ single crystals," *CrystEngComm.* **17**, 4098-4101 (2015).
10. D. Avram, M. Florea, I. Tiseanu, and C. Tiseanu, "Time delay and excitation mode induced tunable red/near-infrared to green emission ratio of Er doped BiOCl," *J. Phys. D: Appl. Phys.* **48**(35), 355501 (2015).
11. D. Avram, M. Sanchez-Dominguez, B. Cojocaru, M. Florea, V. Parvulescu, and C. Tiseanu, "Toward a Unified Description of Luminescence – Local Structure Correlation in Ln Doped CeO_2 Nanoparticles: Roles of Ln Ionic Radius, Ln Concentration and Oxygen Vacancies," *J. Phys. Chem. C* **119**(28), 16303-16313 (2015).
12. A. Lupei, V. Lupei, S. Hau, C. Gheorghe, F. Voicu, "Structure and temperature effects on Nd^{3+} spectra in polycrystalline mixed scandium aluminum garnets $Y_3Sc_xAl_{5-x}O_{12}$," *Opt. Mat.* **47**, 465-472 (2015).
13. D. Avram, A. Urda, B. Cojocaru, I. Tiseanu, M. Florea, and C. Tiseanu, "Pure and almost pure NIR emission of Tm and Tm, Yb - CeO_2 under UV, X - ray and NIR up - conversion excitation: Key roles of level selective antenna sensitization and charge - compensation," *Phys. Chem. Chem. Phys.* **17**, 30988-30992 (2015).
14. V. I. Parvulescu and C. Tiseanu, "Local structure in CeO_2 and $CeO_2 - ZrO_2$ nanoparticles probed by Eu luminescence," *Catal. Today*, **253**, 33-39 (2015).
15. S. Georgescu, A. Ștefan, A.M. Voiculescu, and O. Toma, "Judd-Ofelt analysis of Tm^{3+} doped in $CaSc_2O_4$ ceramic samples," *J. Lumin.* **166**, 130-136 (2015).



16. S. Georgescu, A. Stefan, and O. Toma, "Judd–Ofelt and energy-transfer analysis of Er^{3+} doped in CaSc_2O_4 ceramic samples," *J. Lumin.* **167**, 186-192 (2015).
17. A. M. Voiculescu, S. Georgescu, C. Matei, A. Stefan, and O. Toma, "Synthesis and characterization of $\text{La}_3\text{Ga}_{5.5}\text{Ta}_{0.5}\text{O}_{14}$ doped with holmium and ytterbium," *Rom. J. Phys.* **60**(3-4), 495-501 (2015).
18. M. Mernea, A. Ionescu, I. Vasile, C. Nica, G. Stoian, T. Dascalu, and D. F. Mihailescu, "In vitro human serum albumin glycation monitored by Terahertz spectroscopy," *Opt. Quantum. Electron.* **47**(4), 961-973 (2015).
19. G. Stanciu, A. Achim, N. D. Scarisoareanu, 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).
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21. A. C. Ianculescu, C. A. Vasilescu, M. Crisan, M. Rsileanu, B.S. Vasile, M. Cslugaru, D. Crisan, N. Dragan, L. Curecheriu, and L. Mitoşeriu, "Formation mechanism and characteristics of lanthanum-doped BaTiO_3 powders and ceramics prepared by the sol–gel process," *Materials Characterization* **106**, 195-207 (Aug. 2015).
22. N. Pavel, T. Dascalu, G. Salamu, M. Dinca, N. Boicea, and A. Birtas, "Ignition of an automobile engine by high-peak power $\text{Nd}:\text{YAG}/\text{Cr}^{4+}:\text{YAG}$ laser-spark devices," *Opt. Express* **23**(26), 33028-33037 (2015).
23. O. Grigore, O. Calborean, G. Cojocar, R. Ungureanu, M. Mernea, M.P. Dinca, S. Avram, D.F. Mihailescu, and T. Dascalu, "High-intensity THz pulses application to protein conformational changes," *Rom. Rep. Physics* **67**(4), 1251–1260 (2015).