



LIST OF PAPERS: 2008

1. C. Gheorghe, S. Georgescu, V. Lupei, A. Lupei, "Absorption intensities and emission cross section of Er³⁺ in Sc₂O₃ transparent ceramics," *J. Appl. Phys.* **103** (8), 083116 (2008).
2. C. Gheorghe, S. Georgescu, V. Lupei, A. Lupei, A. Ikesue, "Judd-Ofelt analysis of the Er³⁺ (4f¹¹) absorption intensities in Er³⁺-doped Sc₂O₃," *J. Optoelectron. Adv. Mater.* **10** (2), 359-362 (2008).
3. S. Georgescu, O. Toma, A. M. Chinie, L. Gheorghe, A. Achim, A. S. Stefan, "Excited state dynamics of Eu³⁺ in the partially disordered crystals La₃Ga₅SiO₁₄ and La₃Ga_{5.5}Ta_{0.5}O₁₄," *J. Lumin.* **128** (5-6), 741-743 (2008).
4. S. Georgescu, O. Toma, A. M. Chinie, L. Gheorghe, A. Achim, A.S. Stefan, "Spectroscopic characteristics of langasite (La₃Ga₅SiO₁₄) and langatate (La₃Ga_{5.5}Ta_{0.5}O₁₄) crystals doped with Eu³⁺," *Opt. Mat.* **30** (6), 1007-1012 (2008).
5. V. Lupei, A. Lupei, C. Gheorghe, A. Ikesue, "Comparative high-resolution spectroscopy and emission dynamics of Nd-doped GSGG crystals and transparent ceramics," *J. Luminesc.* **128** (5-6), 885-887 (2008).
6. V. Lupei, A. Lupei, C. Gheoghe, A. Ikesue, "Spectroscopic characteristics of Tm³⁺ in Tm and Tm, Nd, Yb:Sc₂O₃ ceramic," *J. Lumin.* **128** (5-6), 901-904 (2008).
7. A. Lupei, V. Lupei, C. Gheorghe, A. Ikesue, "Excited state dynamics of Er³⁺ in Sc₂O₃ ceramic," *J. Luminesc.* **128** (5-6), 918-920 (2008).
8. C. Tiseanu, A. Gessner, M. Kumke, B. Gagea, V. Parvulescu, J. Martens, "Luminescence spectra and dynamics of lanthanides doped microporous- mesoporous materials," *J. Lumin.* **128** (5-6), 751-753 (2008).
9. Tiseanu, C., Parvulescu, V.I., Geßner, A., Kumke, M.U., Gagea, B., and Martens, J., "Europium(3+) - an efficient luminescence probe for the Si to Al ratio and silylation effects in microporous-mesoporous Zeogrid materials," *J. Phys. Chem. B* **112** (34), 10552-10562 (2008).
10. Tiseanu, C., Lorenz- Fonfria, V.A., Gessner, A., Kumke, M. and Parvulescu, V.I., "Photoluminescence study of terbium-exchanged USY zeolites: Number of species, luminescence decays and decay-associated spectra," *J. Appl. Phys.* **104**, 033530 (1-9) (2008).
11. Tiseanu, C., Geßner, A. and Kumke, M.U., "Dehydration and rehydration effects on the photoluminescence properties of terbium-exchanged MFI-type materials," *J. Non-Cryst. Solids*, **354** (18), 1969-1975 (2008).
12. A. Lupei, V. Lupei, C. Gheoghe, L. Gheorghe, C. Aka, D. Vivien, "Cationic disorder effects in complex oxide laser materials and phosphors," *Opt. Mat.* **30** (11), 1677-1681 (2008).
13. J. Legendziewicz, M. Guzik, J. Cybińska, A. Stefan, V. Lupei, "Concentration dependence of luminescence properties in praseodymium and praseodymium/ytterbium-doped lutetium double phosphates," *Opt. Mat.* **30** (11), 1667-1771 (2008).
14. V. Lupei, A. Lupei, A. Ikesue, "Transparent polycrystalline ceramic laser materials," *Opt. Mat* **30** (11), 1781-1786 (2008).
15. A. Achim, L. Gheorghe, V. Lupei, A. Lupei, C. Gheorghe, "Co-doping effects on SrWO₄: Nd³⁺ crystals for RAMAN lasers," *J. Optoelectron. & Advanced Mat.* **10** (6), 1353-1356 (2008).



LABORATORY OF SOLID-STATE QUANTUM ELECTRONICS

16. V. Lupei, A. Lupei, G. Boulon, A. Jouini, A. Ikesue, "Assessment of the distribution of the Yb³⁺ ions in Sc₂O₃ ceramics from cooperative absorption and emission," *J. Alloys and Comp.* **451** (1-2), 179-181 (2008).
17. N. Pavel, C. Kränkel, R. Peters, K. Petermann, and G. Huber, "In-band pumping of Nd-vanadate thin-disk lasers," *Appl. Phys. B* **91** (3-4), 415-419 (2008).
18. V. Lupei, "Comparative spectroscopic investigation of rare earth doped oxide transparent ceramics and single crystals," *J. Alloys Comp.* **451** (1-2), 52-55 (2008).
19. J. Legendziewicz, M. Guzik, J. Cybinska, A. Stefan, V. Lupei, "Optical behaviour of praseodymium-doped and praseodymium/ytterbium-co-doped double phosphates," *J. Alloys and Comp.* **451** (1-2), 158-164 (2008).
20. A. Lupei, V. Lupei, C. Gheorghe, L. Gheorghe, A. Achim, "Multicenter structure of the optical spectra and the charge-compensation mechanisms in Nd:SrWO₄ laser crystals," *J. Appl. Phys.* **104** (8), 083102 (2008).
21. N. Pavel, "In-band pumping of Nd-based solid-state lasers," *Rom. Reports in Physics* **60** (4), 995-1012 (2008).
22. S. Georgescu, E. Cotoi, A. M. Voiculescu, O. Toma, "Effects of particle size on the luminescence of YVO₄:Eu nanocrystals," *Rom. Reports in Physics* **60** (4), 947-955 (2008).
23. T. Dascalu, "Edge-pump high power microchip Yb:YAG laser," *Rom. Reports in Physics* **60** (4), 977-994 (2008).
24. E. Borca, M. Bercu, S. Georgescu, S. Hodoroaea, and E. Cotoi, "XRD and FTIR characterization of nanocrystalline YVO₄:Eu derived by coprecipitation process," *Zeitschrift fur Kristallographie, Suppl.* **27**, 121-126 (2008).