



LABORATORY OF SOLID-STATE QUANTUM ELECTRONICS

LIST OF PAPERS: 2016

1. V. Lupei and A. Lupei, "Nd:YAG at its 50th anniversary: Still to learn," *J. Lumin.* **169** (Part B), 426-439 (2016).
2. V. Lupei, A. Lupei, C. Gheorghe, and A. Ikesue, "Spectroscopic and de-excitation properties of (Cr,Nd):YAG transparent ceramics," *Opt. Mat. Express* **6**(2), 552-557 (2016).
3. G. Salamu, F. Jipa, M. Zamfirescu, and N. Pavel, "Watt-Level Output Power Operation from Diode-Laser Pumped Circular Buried Depressed-Cladding Waveguides Inscribed in Nd:YAG by Direct Femtosecond-Laser Writing," *IEEE Photonics Journal*, **8**(1), art. 1500209 (2016).
4. V. Lupei, A. Lupei, C. Gheorghe, A. Ikesue, "Emission sensitization processes involving Nd³⁺ in YAG," *J. Lumin.* **170**(2), 594-601 (2016).
5. E.S. Barca, M. Filipescu, C. Luculescu, R. Birjega, V. Ion, M. Dumitru, L.C. Nistor, G. Stanciu, M. Abrudeanu, C. Munteanu, and M. Dinescu, "Pyramidal growth of ceria nanostructures by pulsed laser deposition," *Applied Surface Science* **363**, 245-251 (2016).
6. A. C. Ianculescu, C. A. Vasilescu, L. Trupina, B. S. Vasile, R. Trusca, M. Cernea, L. Pintilie, and A. Nicoara, "Characteristics of Ce³⁺-doped barium titanate nanoshell tubes prepared by template-mediated colloidal chemistry," *J. Europ. Ceram. Soc.* **36**(7), 1633-1642 (2016).
7. D. Avram, B. Cojocaru, M. Florea, and C. Tiseanu "Advances in luminescence of lanthanide doped Y₂O₃: case of S₆ sites," *Opt. Mater. Express* **6**(5), 1635-1643 (2016).
8. L. Gheorghe, F. Khaled, A. Achim, F. Voicu, P. Loiseau, and G. Aka, "Czochralski Growth and Characterization of Incongruent Melting La_xGd_ySc_z(BO₃)₄ (x + y + z = 4) Nonlinear Optical Crystal," *Cryst. Growth Des.* **16**(6), 3473-3479 (2016).
9. C. Gheorghe, A. Lupei, S. Hău, F. Voicu, L. Gheorghe, A. M. Vlaicu, "Compositional dependence of optical properties of Sm³⁺-doped Y₃Sc_xAl_{5-x}O₁₂ polycrystalline ceramics," *J. Alloys Compd.* **683**, 547-553 (2016).
10. G. Salamu and N. Pavel, "Power scaling from buried depressed-cladding waveguides realized in Nd:YVO₄ by femtosecond-laser beam writing," *Opt. & Laser Technol.* **84**, 149-154 (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).
12. D. Avram, I. Porosnicu, B. Cojocaru, M. Florea and C. Tiseanu, "Time-gated down/up-conversion emission of Ho-CeO₂ and Ho, Yb-CeO₂ nanoparticles," *J. Lumin.* **179**, 265-271 (2016).
13. M. Florea, D. Avram, B. Cojocaru, I. Tiseanu, V. Parvulescu and C. Tiseanu, "Defects induced tunable near infrared emission of Er-CeO₂ by heterovalent co-dopants," *Phys. Chem. Chem. Phys.* **18**(27), 182668-18277 (2016).
14. T. Dascalu, G. Croitoru, O. Grigore, N. Pavel, "High-peak power passively Q-switched Nd:YAG/Cr⁴⁺:YAG composite laser with multiple-beam output," *Photonics Research*, **4**(6), 267-271 (2016).
15. A. Stefan, O. Toma, S. Georgescu, "Upconversion luminescence in CaSc₂O₄ doped with Er³⁺ and Yb³⁺," *J. Lumin.* **180**, 376-383 (2016).



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16. G. Stanciu, N. D. Scarisoreanu, V. Ion, M. Dumitru, E. Andronescu, and M. Dinescu, "Structure and dielectric properties of Ca doped $\text{Sr}_{0.5}\text{Ba}_{0.5}\text{Nb}_2\text{O}_6$ ceramic compositions", Romanian Journal of Materials **46**(1), 70-74 (2016).
17. G. Stanciu, N. D. Scarisoreanu, R. Birjega, A. Moldovan, E. Andronescu, and M. Dinescu, "Structural and morphological properties of $\text{Sr}_{0.5}\text{Ba}_{0.5}\text{Nb}_2\text{O}_6$ thin films deposited by RF-PLD technique on Pt:Si and MgO substrates", U.P.B. Sci. Bull., Series B, **78**(3), (2016); ISSN 1454-2331 (2016).
18. F. Khaled, P. Loiseau, G. Aka, and L. Gheorghe, "Rise in power of Yb:YCOB for green light generation by self-frequency doubling," Opt. Lett. **41**(15), 3607-3610 (2016).