



### LIST OF PAPERS: 2021

1. N. A. Safronova, R. P. Yavetskiy, O. S. Kryzhanovska, M. V. Dobrotvorska, A. E. Balabanov, I. O. Vorona, A. V. Tolmachev, V. N. Baumer, I. Matolínov, D. Yu. Kosyanov, O. O. Shichalin, E. K. Papynov, **S. Hau, C. Gheorghe**, "A novel IR-transparent  $\text{Ho}^{3+}:\text{Y}_2\text{O}_3\text{-MgO}$  nanocomposite ceramics for potential laser applications," *Ceram. Int.* **47**(1), 1399-1406 (2021).
2. A. Enachi, O. Toma, S. Georgescu, "Luminescent  $\text{E}^{r3+}$  centers in  $\text{CaSc}_2\text{O}_4:\text{Er}^{3+}:\text{Yb}^{3+}$  upconversion phosphor," *J. Lumin.* **231**, 117816 (2021).
3. R. P. Yavetskiy, A. E. Balabanov, S. V. Parkhomenko, O. S. Kryzhanovska, A. G. Doroshenko, P. V. Mateychenko, A. V. Tolmachev, Jiang Li, Nan Jiang, **L. Gheorghe**, M. Enculescu, "Effect of starting materials and sintering temperature on microstructure and optical properties of  $\text{Y}_2\text{O}_3:\text{Yb}^{3+}$  5 at% transparent ceramics," *J. Adv. Ceram.* **10**(1), 49-61 (2021).
4. C. A. Brandus, M. Greculeasa, A. Broasca, F. Voicu, L. Gheorghe, and N. Pavel, "Diode-pumped bifunctional Nd:LGSB laser passively Q-switched by a  $\text{Cr}^{4+}:\text{YAG}$  saturable absorber," *Opt. Mater. Express* **11**(3), 685-694 (2021).
5. O.-V. Grigore, A. Craciun, "Method for exploring the topological charge and shape of an optical vortex generated by a spiral phase plate," *Opt. & Laser Techn.* **141**, 107098 (2021).
6. P. C. Logofatu, **N. T. Vasile**, "Image resampling by interpolation guided by sensor geometry," *Rom. Rep. Phys.* **73**(1), art. 402 (2021).
7. N. T. Vasile, N. Pavel, "Multi-point laser-induced ignition of air-methane mixtures by a high peak-power passively Q-switched Nd:YAG/ $\text{Cr}^{4+}:\text{YAG}$  laser," *Opt. & Laser Techn.* **141**, 107169 (2021).
8. M. Botea, I. Pintilie, V.A. Surdu, **C.A. Stanciu**, R.D. Trusca, B.S. Vasile, R. Patru, M. Udrea, A.C. Ianculescu, L. Pintilie, "Structural, functional properties and enhanced thermal stability of bulk graded (Ba,Sr)TiO<sub>3</sub> structures obtained by spark plasma sintering," *J. Mater. Res. Technol.-JMRTT* **12**, 2085-2103 (2021).