

LIST OF PUBLICATIONS

3. **A. Craciun**, O.V. Grigore, "Superposition of vortex beams generated by polarization conversion in uniaxial crystals," *Sci. Rep.* **12**, 8135 (2022).
2. 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).
1. **A. Craciun** and T. Dascalu, "A method to generate vector beams with adjustable amplitude in the focal plane," *Appl. Sci.* **10**(7), art. 2313 (2020).

2. COMMUNICATIONS AT INTERNATIONAL CONFERENCES

(Technical Digests, manuscripts up to 3 pages)

7. O. V. Grigore, **A. Craciun**, N. Pavel, "Thermal analysis of a passively Q-switched Nd:YAG/Cr⁴⁺:YAG laser with multiple-beam output," The 9th Tiny Integrated Laser and Laser Ignition Conference 2022, 19-21 April 2023, Pacifico Yokohama, Yokohama, Japan, presentation TILA-LICp-05 (poster presentation).
6. O. Grigore, **A. Craciun**, N. Pavel, T. Dascalu, "Vector vortex beams generated by polarization conversion in uniaxial crystals," International Conference on Laser, Plasma and Radiation - Science and Technology, June 7-10, 2022 Bucharest, Romania; poster presentation P1-06.
5. **A. Craciun**, T. Dascalu, "Accurate beam propagation methods assisted by ray-tracing," 2021 Conference on Lasers and Electro-Optics/Europe - European Quantum Electronics Virtual Conferences (CLEO@/Europe-EQEC 2021), 21-25 June 2021, presentation EJ-P.4 (poster presentation).
4. **A. Craciun**, O. Grigore, T. Dascalu, "Theoretical and experimental study of the vector beams generated with an axicon pair and uniaxial crystals," 2021 Conference on Lasers and Electro-Optics/Europe - European Quantum Electronics Virtual Conferences (CLEO@/Europe-EQEC 2021), 21-25 June 2021, presentation CL-P.5 (poster presentation).
3. O.-V. Grigore, **A. Craciun**, N. Pavel, T. Dascalu, "Exploring the topological charge and shape of an optical vortex generated with wavelength-detuned spiral phase plates," 2021 Conference on Lasers and Electro-Optics/Europe - European Quantum Electronics Virtual Conferences (CLEO@/Europe-EQEC 2021), 21-25 June 2021, presentation CA-P.15 (poster presentation).
2. **A. Craciun** and T. Dascalu, "Generation of cylindrical vector beams with adjustable diffraction pattern in the focal plane," in Conference on Lasers and Electro-Optics, OSA Technical Digest (Optical Society of America, 2020), paper JTU2F.10.
1. **A. Craciun**, T. Dascalu, D. Dragoman, "Terahertz generation in Lithium Niobate with Gaussian beams: Theoretical modelling," The 18th International Balkan Workshop on Applied Physics, 10-13 July, 2018, Constanta, Romania; Book of Abstracts, pp. 92-93; S2 P8, poster presentation.

3. PATENTS

2. **A. Craciun**, T. Dascalu, "Optical System for Generation of Vortex Beams," European patent application EP 3809188 A1; Application EP20020478.2 / 15.10.2020; Date of publication: 21.04.2021 Bulletin 2021/16.
1. **A. Craciun**, T. Dascalu, "Sistem Optic pentru Producerea de Fascicule Optice Elicolidal Vectoriale," OSIM patent application, nr. A/00657, 17.10.2019.