



## Recent Advances in Diffractive Optics

Guest Editors:

**Dr. Pavel Khorin**

1. Department of Technical Cybernetics, Samara National Research University, 443086 Samara, Russia  
2. Laser Measurement Laboratory, IPSI RAS - Branch of the FSRC «Crystallography and Photonics» RAS, 443001 Samara, Russia

**Dr. Elena Kozlova**

1. Department of Technical Cybernetics, Samara National Research University, 443086 Samara, Russia  
2. Laser Measurement Laboratory, IPSI RAS - Branch of the FSRC «Crystallography and Photonics» RAS, 443001 Samara, Russia

Deadline for manuscript submissions:

**24 July 2024**

### Message from the Guest Editors

This Special Issue aims to publish high-quality papers exploring new properties of known diffractive optical elements and suggesting new types of elements. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Diffraction gratings;
- Microlens application;
- Spiral phase plates action simulation;
- Wavefront and polarization sensors;
- Application of neural networks in optics;
- Spiral microstructures;
- Multi-order diffractive optical elements;
- Diffraction-free beams;
- Vortex beams;

The ITNT-2024 conference, associated with our Special Issue, will provide international platforms for scientists and researchers from all over the world to share their scientific achievements, explore current issues, and exchange new experiences and ideas in the field of information technology and nanotechnology:

**The X International Conference and Youth School “Information Technologies and Nanotechnologies” (ITNT-2024)** will be held on May 20-24, 2024 online and offline format, Samara, Russia, <http://itnt-conf.org/>

Looking forward to receiving your contributions.

