# Special Issue

# Recent Advances in Optical Diffraction and Imaging

## Message from the Guest Editor

This Special Issue aims to present state-of-the-art articles on both theoretical and experimental studies on generation, propagation, focusing, and measurement of light beams, and applications of structured beams. Topics include but are not limited to:

- Design, simulation, and manufacturing of optical devices for light focusing (metasurfaces, zone plates, plasmonic lenses, etc.);
- Properties of tightly focused light;
- Diffraction of various kinds of optical beams;
- Imaging techniques to obtain optical beam properties;
- Diffraction-free and propagation-invariant beams;
- Photonic nanojet;
- Light bullet;
- Overcoming the diffraction limit;
- Applications of tightly focused light;
- Singular optics;
- Generation of structured light beams;
- Beam dynamics;
- Partially coherent light beams;
- Fractional vortex beam;
- Plasmonic vortices;
- Cylindrical vector beams;
- Vector light beams:
- Orbital angular momentum;
- Topological charge;
- Spin orbital conversion;
- Applications of structured light beams.



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# About the Journal

## Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peerreviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

#### **Editor-in-Chief**

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).

