# Special Issue

# State-of-the-Art in Optical Materials

### Message from the Guest Editors

Research at the forefront of optical technology has led to the development of new material configurations that can be fabricated into circuits and structures, including planar nanophotonics and three-dimensional structures. Optical nonlinearities are of particular interest for generating light, particularly at otherwise difficult to reach wavelengths, and in non-centrosymmetric crystals, where the refractive index can be electrooptically reconfigured for programmable control. This Special Issue aims to present the state-of-the-art research in optical materials, from novel materials and fabrication techniques, to functional and multicomponent optical devices, with applications ranging from light generation and detection, to sensing, storage and control. The topics include, but are not limited to, the following:

- Nonlinear materials
- Two-dimensional materials
- Photonic crystals
- Metamaterials/metasurfaces
- Phase-change materials
- Novel fabrication techniques
- Biodegradable materials for photonics

### **Guest Editors**

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### Deadline for manuscript submissions

closed (10 June 2025)



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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.

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