

# Special Issue

## Recent Advances in Quantum Interferometry, Imaging and Sensing

### Message from the Guest Editors

Recent advances in single-photon detectors has sparked a renewed interest for quantum metrology, interferometry, imaging and sensing. We are excited to expand and consolidate the progresses made within this enticing field and we are thrilled to announce a Special Issue fully dedicated to quantum-based photonics in the single- and low-photons regimes. The scope of this Special Issue spans a wide horizon, including, but not limited to, the following facets:

- Single-photon detectors;
- Biophotonics;
- Optical coherence tomography in the low-photon regime;
- Fiber-optic spectroscopy and sensing in the low-photon regime;
- Quantum optics;
- Quantum cryptography;
- Entangled states preparation and distribution;
- Nonlinear optical techniques for sensing;
- Ultrafast laser-based sensing in the low-photon regime;
- Quantum metrology and interferometry;
- Photonic crystal sensors;
- Biochemical sensing using photonics;
- Integrated quantum photonics;
- Remote quantum-based sensing;
- Optical instrumentation and measurement;
- Photonic devices for sensing and measurement;

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### Deadline for manuscript submissions

15 July 2025



## Photonics

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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 peer-reviewed 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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#### Rapid Publication:

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