

# Special Issue

## Optical and Photonic Metrology: Science and Technology

### Message from the Guest Editors

Optical measurement and metrology are essential to modern science, engineering, and industry, enabling non-contact, high-precision, and high-speed characterisation of physical, chemical, and biological systems. Optical techniques are fundamental tools across fields ranging from advanced manufacturing and surface engineering to biomedical diagnostics, micro-nano technologies, and space instrumentation.

Driven by rapid progress in photonics, imaging systems, laser sources, detectors, and computational methods, optical metrology is advancing rapidly. Modern techniques such as interferometry, digital holography, optical coherence tomography, structured light, scatterometry, and hyperspectral imaging are continually evolving. At the same time, integrating numerical modelling, inverse methods, and artificial intelligence is significantly enhancing the accuracy, robustness, and information content of optical measurements.

This Special Issue presents recent advances in optical measurement and metrology, spanning theoretical foundations, instrumentation development, data-processing methods, and emerging applications. Original research articles and high-quality review papers are welcome.

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### Guest Editors

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### Deadline for manuscript submissions

10 September 2026



## 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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### Editor-in-Chief

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