

Special Issue

Emerging Topics in High-Power Laser and Light-Matter Interactions

Message from the Guest Editors

The aim of this Special Issue is to provide a platform for researchers to demonstrate their latest research on high-power laser and light-matter interaction techniques, with a focus on high-power lasers, advanced imaging techniques, fiber-optics, adaptive optics, and computational laser systems. The scope of this Special Issue covers the latest advances in the experimental, theoretical, and computational aspects of light propagation in media and its applications in optical imaging. Topics of interest include, but are not limited to, the following:

- High-power laser technology and applications;
- Optical neural networks and machine learning in optics;
- Fiber-optic sensing and communication;
- Adaptive optics and wavefront shaping;
- Short pulse laser generation via non-linear optics;
- Brillouin scattering and its applications;
- Solid-state laser systems and their applications;
- Spectral imaging and its applications;
- Quantum imaging and quantum optics.

We look forward to receiving your contributions.

Guest Editors

Dr. Zhaohong Liu

Dr. Jiawei Sun

Dr. Sensen Li

Deadline for manuscript submissions

closed (30 June 2024)



Photonics

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.5



mdpi.com/si/170326

Photonics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
photonics@mdpi.com

[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)





Photonics

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.5



[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)



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.

Editor-in-Chief

Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q2 (Instrumentation)

Rapid Publication:

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).