

## Special Issue

# Advances in Solid-State Laser Technology and Applications

### Message from the Guest Editor

Since the revolutionary invention of the laser in 1960, solid-state lasers have emerged as one of the most significant advancements in photonics technology. In addition to the ongoing efforts to improve laser performance, such as output power, beam quality, wavelength tunability, and operational stability, researchers are actively exploring novel laser technologies to further expand the capabilities of solid-state lasers. For instance, the manipulation of solid-state lasers in higher optical dimensions through advanced laser designs holds potential to provide compact light sources for cutting-edge application fields, including quantum simulations, artificial intelligence, information encryption, advanced manufacturing, and ultra-high-sensitivity detection. As these developments emerge and mature, solid-state lasers are poised to exert a profound influence on the field of photonics technology. This Special Issue aims to publish papers reporting on novel solid-state laser technologies and related applications. Original research articles and reviews are welcome to be submitted.

### Guest Editor

Dr. Zhen Qiao

School of Optical-Electrical and Computer Engineering, University of Shanghai for Science and Technology, Shanghai, China

### Deadline for manuscript submissions

30 September 2025



## Photonics

an Open Access Journal  
by MDPI

Impact Factor 1.9  
CiteScore 3.5



[mdpi.com/si/230747](https://mdpi.com/si/230747)

*Photonics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[photonics@mdpi.com](mailto: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).