Special Issue

Advances and Applications of Solid State Lasers

Message from the Guest Editors

Since the invention of the laser, solid-state lasers have constantly pushed the boundaries of feasible parameters, breaking records in terms of peak power, average power, pulse duration, wavelength, bandwidth, and creating potential in a wide variety of applications. This Special Issue aims to present the latest advances in the field of solid-state lasers and their applications, including but not limited to: Advances in:

- High-average-power lasers;
- High-peak power lasers;
- Ultrafast lasers;
- Laser amplifiers;
- Ytterbium lasers;
- Neodymium lasers;
- Mid-IR lasers;
- UV lasers;
- Crystalline waveguide lasers;
- Laser materials;
- Thermal effects investigation and mitigation;
- Parametric conversion and high-harmonic generation.

Applications in:

- Industry;
- Medicine;
- Lab;
- Space.

Guest Editors

Dr. Ivan I. Kuznetsov

A.V. Gaponov-Grekhov Institute of Applied Physics of the Russian Academy of Sciences, 603950 Nizhny Novgorod, Russia

Dr. Ivan Buchvarov

Physics Department, Sofia University "St. Kliment Ohridski", 5 J. Bourchier Blvd., BG-1164 Sofia, Bulgaria

Deadline for manuscript submissions

closed (31 May 2024)



Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



mdpi.com/si/176375

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

mdpi.com/journal/

photonics





Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



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).