Special Issue

Novel Ultraviolet Laser: Generation, Properties and Applications

Message from the Guest Editors

Ultraviolet optical sources are the only means of providing some unique optical properties which are critical for the development of many emerging techniques. These novel techniques further promote the development of a wide range of applications in multiple disciplines. The aim of this Special Issue is to encourage researchers to report their latest achievements in the generation of novel ultraviolet laser sources or the exploration of new properties and the potential applications of these novel ultraviolet lasers. The scope of this Special Issue includes, but is not limited to, the following topics:

- Fourth to sixth harmonic generation for UV laser generation;
- UV laser-based micro and nanofabrication;
- Super resolution imaging and tomography using UV laser;
- Application of Ultraviolet Laser Working in Cold Ablation;
- Heat-affected zone minimization;
- Nano particle and graphene synthesis using UV laser;
- Nano-resolution additive manufacturing using UV polymerization;
- DUV disinfection and sterilization;
- UV spectroscopies for material characterization;
- UV breakdown spectroscopy for environmental monitoring;

Guest Editors

Dr. Hao Li

Prof. Dr. Houkun Liang

Prof. Dr. Xia Yu

Deadline for manuscript submissions

closed (15 January 2025)



Photonics

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



mdpi.com/si/185513

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



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 peerreviewed 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).

