# **Special Issue**

## Ultrashort Ultra-Intense (Petawatt) Laser

### Message from the Guest Editors

This Special Issue invites manuscripts that introduce the recent advances in "ultrashort ultra-intense (petawatt) laser". All theoretical, numerical, and experimental papers are accepted. Topics include, but are not limited to, the following:

- Ultra-broadband/ultra-short laser generation and amplification;
- Pulse stretching, compression and measurement;
- Precision dispersion compensation and measurement;
- Temporal contrast enhancement and measurement;
- Beam propagation and wavefront detection and control;
- Beam pointing, smoothing, combination, and focusing;
- Spatio-temporal/spectral coupling analysis, measurement, compensation, and control;
- Plasma methods for peak-power/intensity enhancement;
- Plasma methods for contrast enhancement;
- High average-power laser technology;
- Progress in high-quality optics, e.g., gratings, coatings, crystals, etc.;
- Optical damage mechanism, measurement, and improvement.

#### **Guest Editors**

Prof. Dr. Zhaoyang Li Zhangjiang Laboratory, Shanghai, China

Prof. Dr. Yuxin Leng Shanghai Institute of Optics and Fine Mechanics (SIOM), Chinese Academy of Sciences (CAS), Shanghai 201800, China

#### Deadline for manuscript submissions

closed (15 November 2023)



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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.

### Editor-in-Chief

Prof. Dr. Nelson Tansu School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

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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).