

## Special Issue

# Ultrafast Laser Science and Advanced Technologies

### Message from the Guest Editor

Ultrashort light pulses are indispensable in micromachining, metrology and medical instrumentation, amongst other applications. Likewise, outstanding research closely linked to the field has been recognized by numerous prestigious awards. Ultrashort light pulses are subject of an extraordinary success story. It began in the early 1960s, shortly after the invention of the laser, and has not lost any of its excitement. Novel technologies are developed and new applications emerge, ranging from fundamental science to market-ready products. This Special Issue targets a collection of innovative research papers that cover the great variety of ultrafast laser science and technology. The topics include, but are not limited to:

- Generation and amplification of ultrashort pulses;
- Solid-state and fiber ultrafast lasers;
- Carrier-envelope phase stabilization and ultrafast frequency combs;
- Ultrafast lasers at large-scale facilities;
- Ultrafast secondary sources;
- Characterization of ultrashort pulses;
- Ultrafast nonlinear optics;
- Spectroscopy and microscopy with ultrashort pulses;
- Communications with ultrashort pulses;
- Fundamental science with ultrafast lasers.

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### Guest Editor

Dr. Marcus Seidel

1. Helmholtz-Institute Jena, Jena, Germany
2. GSI Helmholtzzentrum für Schwerionenforschung GmbH, Darmstadt, Germany
3. Deutsches Elektronen-Synchrotron DESY, Hamburg, Germany

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### Deadline for manuscript submissions

closed (30 April 2024)



## Photonics

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

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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.

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### 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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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the second half of 2025).