Special Issue

Ultrafast Laser Nonlinear Dynamics

Message from the Guest Editor

Dear colleagues, We are pleased to announce this Special Issue dedicated to “ultrafast laser nonlinear dynamics”, which has served as a foundation for not only ground-breaking scientific findings but also enabling numerous practical applications. Novel light sources continuously enhance human’s perception capability with the shortest event created by leveraging high harmonic generation. For further real-world application, integrating ultrafast laser nonlinear dynamics into other fields would generate novel solutions for disease diagnosis/treatment, material processing, optical sensing, etc. We invite interested researchers to disseminate your innovative work in this Special Issue. This Special Issue accepts both original research papers and review papers. Theoretical, numerical, and experimental works are accepted. The topics include, but are not limited to, the following:

- Nonlinear material design, fabrication, and characterization.
- Novel laser material.
- Ultrafast laser generation.
- Frequency conversion.
- Ultrafast laser imaging/bio-imaging.
- Ultrafast laser machining.

We look forward to your valuable contributions!

Guest Editor

Dr. Xinyang Liu
Russell Centre for Advanced Lightwave Science (RCALS), Hangzhou, China

Deadline for manuscript submissions

30 April 2026

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

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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