

Special Issue

Ultrafast Lasers and Nonlinear Optics

Message from the Guest Editors

The field of ultrafast lasers has undergone enormous growth in recent years, leading to the development of new scientific and industrial applications. At the same time, the exploration of nonlinear optical phenomena has opened new frontiers in the development of novel light-generating sources, implementing and refining techniques ranging from frequency conversion and mixing to high-harmonic generation. This Special Issue, titled “Ultrafast Lasers and Nonlinear Optics”, seeks to present cutting-edge research and developments in the design, implementation, and application of ultrafast laser systems, as well as the exploration of nonlinear optical effects. We welcome original research articles, reviews, and case studies that contribute to the advancement of this dynamic field. The topics of interest include, but are not limited to, the following:

- Ultrafast solid-state laser design;
- Ultrafast fiber laser design;
- Ultrafast lasers for spectroscopy applications;
- Ultrafast lasers for imaging applications;
- Nonlinear harmonic generation;
- Nonlinear frequency conversion and mixing;
- Novel sources based on nonlinear optics.

Guest Editors

Dr. Dario Giannotti

Dr. Francesco Canella

Dr. Riccardo Gotti

Dr. Sara Pizzurro

Deadline for manuscript submissions

30 April 2025



Photonics

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 2.6



mdpi.com/si/217276

Photonics

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

[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)





Photonics

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 2.6



[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)



About the Journal

Message from the Editor-in-Chief

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,
CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Optics)

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 2.6
days (median values for papers published in this journal in
the first half of 2024).