# Special Issue

# Advances in Ultrafast Optics: From Fundamental Science to Applications

## Message from the Guest Editors

Since the first attempts to generate and control laser pulses in the femto/atto seconds time scale, ultrafast optics has developed and become a mature and autonomous branch of optics. In this research field, several sub-branches have developed, becoming extremely interconnected between one another. Lightmatter interaction can be exploited to probe the behaviour of exotic materials and to control chemical reaction channels. The control and measurement of polarization of ultrashort pulses has introduced a new freedom degree in the design of experiments. Moreover, interconnections with quantum computing and quantum communications are intriguing, as are the production and the applications of squeezed light states. This Special Issue, entitled "Advances in Ultrafast Optics: From Fundamental Science to Applications", aims to collect the most recent advances in this very interconnected research field, in the form of both regular and review papers.

### **Guest Editors**

Dr. Luca Poletto

Institute of Photonics and Nanotechnologies, National Research Council of Italy, via Trasea 7, I-35131 Padova, Italy

Dr. Fabio Frassetto

National Research Council, Institute of Photonics and Nanotechnologies, Padova, Italy

## Deadline for manuscript submissions

closed (15 November 2024)



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

mdpi.com/journal/photonics





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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.

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Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

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