applied sciences

IMPACT FACTOR 2.5

CITESCORE 5.5

an Open Access Journal by MDPI

Ultrashort Pulses: Generation and Applications

Guest Editors:

Dr. Rebeca Martinez Vazquez
Istituto di Fotonica e Nanotecnologie, CNR & Dipartimento di Fisica Politecnico di Milano, Piazza Leonardo da Vinci 32, 20133 Milan, Italy

Dr. Anna Gabriella Ciriolo
Istituto di Fotonica e Nanotecnologie, CNR & Dipartimento di Fisica Politecnico di Milano, Piazza Leonardo da Vinci 32, 20133 Milan, Italy

Deadline for manuscript submissions:
closed (30 April 2021)

Message from the Guest Editors

In the last few decades, ultrafast laser technology has undergone great development with an increasing number of applications. Nowadays, the use of such sources is well consolidated in various fields of research that range from ultrafast optics and metrology to microfabrication techniques. The key to the success of ultrafast sources consists of the possibility that they offer to explore light–matter interaction regimes that are inaccessible with other laser sources, enabling access to the ultrashort temporal scale and to extremely high pulse energy.

In this Special Issue, we aim to provide an overview of the state of the art in ultrashort pulse generation techniques and their applications to cutting-edge research fields. Topics of interest include, but are not limited to, the following:

- Novel tools and techniques for ultrafast laser development towards the scaling of pulse temporal duration, energy, and spectrum;
- Time-resolved spectroscopy and imaging;
- Ultrashort pulse applications for the manipulation and control of the optical and electronic properties of matter;
- High-order harmonic generation and attosecond science.

applied sciences

IMPACT FACTOR 2.5

CITESCORE 5.5

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
𝕏@Applsci