Special Issue

Frontiers in Ultrafast Spectroscopy Techniques Applied to Novel Materials

Message from the Guest Editor

Over the past decades, there has been tremendous progress in the field of ultrafast laser spectroscopy. State-of-the-art ultrafast spectroscopic techniques, based on fs lasers, allow us to disentangle complex kinetic processes by providing great temporal resolution, high accuracy and broadband spectral coverage of the photogenerated species. Nowadays, ultrafast time-resolved spectroscopy is a valuable tool for investigating ultrafast light–matter interactions and for evaluating the nature and dynamics of the excited states in a great variety of materials for applications in photovoltaic cells, LEDs, transistors, sensors, etc. This Special Issue aims to show recent advances in ultrafast spectroscopy focusing on novel materials and techniques. Contributions are welcome from leading scientists and researchers and should concern various fields of ultrafast spectroscopy such as: Techniques: transient absorption, transient fluorescence, fs IR spectroscopy, photon echo, FSRS, photoelectron spectroscopy, etc. Materials: chromophores, donor-acceptor systems, polymers, biomolecules, self-assembly, perovskites, quantum dots, 2D materials, semiconductors, etc.

Guest Editor

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Deadline for manuscript submissions

closed (31 May 2022)

Optics

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Impact Factor 1.6
CiteScore 2.6

mdpi.com/si/84689

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Optics (ISSN 2673-3269) aims at establishing *Optics* as a leading journal for publishing high impact fundamental research and applications in optics field with a fast processing time and high quality service. The journal particularly welcomes both theoretical (simulation) and experimental research within our journal's scope. We encourage scientists to publish their experimental and theoretical results in as much detail as possible. So, there is no restriction on the length or pages of the papers. The full experimental details must be provided so that the results can be reproduced. Electronic files and software regarding the full details of the calculation or experimental procedure, if unable to be published in a normal way, can be deposited as supplementary electronic material.

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