Special Issue

Ultrafast Laser Science, Technology and Applications

Message from the Guest Editors

Ultrafast lasers now routinely produce everyday goods, from mobile phone screens to solar cells, and are employed in medicine, such as in eye surgery. On the other hand, scientific applications of ultrafast lasers increasingly employ challenging technologies, including attosecond pulse generation, the generation of pulses in parts of the spectrum inaccessible to laser media, etc. High-energy ultrafast lasers produce multi-PW peak powers and enable leading physics experiments. New applications of ultrafast lasers are appearing in other fields, including biomedical and optical communications. All applications would benefit from being lower in cost, compact, and reliable ultrafast lasers and integrated systems that employ ultrafast lasers. This would drive progress in the areas of laser components, accessories, and general technology. In this Special Issue, we solicit original work to be published in Applied Sciences (Impact factor 2.838) on topics including, but not limited to, ultrafast laser source development, ultrafast phenomena, scientific applications, and ultrafast laser technology aspects of industrial materials processing, biomedical research, and optical communications.

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Deadline for manuscript submissions

closed (30 November 2023)



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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.

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