



Ti:Sapphire Lasers and Their Applications

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Deadline for manuscript
submissions:

closed (31 March 2022)

Message from the Guest Editors

Dear Colleagues,

Ti:sapphire laser technology has matured, with many commercial ‘turn-key’ systems available to end-users. This has increased adoption in many application fields, such as multiphoton microscopy for biomedicine, Terahertz generation, and micromachining, as well as cutting-edge quantum optics research. Despite this maturity, new original developments of Ti:sapphire laser technology are still progressing rapidly. New pumping sources, such as (In)GaN laser diodes and LEDs, show promise to replace traditionally expensive frequency-converted Nd:YAG lasers. Advances in chirped pulse amplification have brought Ti:sapphire to the extreme intensities of Petawatt-class systems for nuclear fusion and fundamental physics research.

This Special Issue, entitled “Ti:Sapphire Lasers and Their Applications”, of *Applied Sciences* aims to gather original research manuscripts within a broad scope covering both laser development and applications, as well as a select choice of review articles.

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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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