Special Issue

Ultrafast Laser Irradiation in Surface Engineering and Tribology

Message from the Guest Editors

Ultrafast lasers in various engineering applications are attractive. Power density and irradiation duration can be controlled via the smart regulation of machining parameters and the assisted fields or mediums. Additionally, potentially targeted materials could include metals, alloys, ceramics, polymers, composites, and biological tissues. These processes have complex mechanisms involving laser physics interactions with targeted substances, not limited to melt, solidification, vaporization, plasma formation, or the adjustment of their effective functions of proportion. This Special Issue aims to promote the generation, transmission, modulation, signal processing, and switching control of industrial lasers, and various applications of laser machining technology both in simulations and experiments. Research areas may include (but are not limited to) the following: laser physics, laser control, beam shaping, measurement, laser machining (e.g., cleaning, polishing, peening, texturing, cutting, drilling, welding, and cladding), and applied technologies in surface engineering and tribology.

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Deadline for manuscript submissions

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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 peer-reviewed 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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