Special Issue

Short and Ultra-Short Laser Materials Processing – Advantages and Applications

Message from the Guest Editor

Short and ultra-short lasers have been widely used as advanced tools for precise and efficient fabrication of micro/nanostructures with unique optical, thermo-mechanical, and chemical properties, surface microprocessing, and micromachining in transparent bulk materials.

- Nano-/microprocessing of solid materials by short and ultra-short lasers;
- Micromachining in transparent bulk materials;
- Laser-induced melting and ablation of solid targets;
- Laser-induced nanoparticle production and synthesis;
- Nano-/microstructuring of dielectric, semiconductor, and metallic surfaces;
- Optical, thermo-mechanical, and chemical properties of laser-processed materials;
- Theoretical and computational modeling of laser-induced modifications.

Guest Editor

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Deadline for manuscript submissions

closed (20 November 2023)

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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