Special Issue

Advances in Laser Materials and Processing Technologies

Message from the Guest Editor

Laser materials processing enables many unique advantages due to the special properties of laser light, such as the use of a high-intensity laser beam at the micrometer scale, ultrashort pulses of energies, and almost zero mass of processing tools, which results in fast and flexible movement for the laser beam over the processing area. With the development of new laser systems, the horizon of usability and variety of innovative applications is constantly expanding. This Special Issue covers recent advances in basic and applicative research and the development of laser processing technologies. The topics of interest include but are not limited to laser processing of advanced materials for e-mobility, energy storage, tribology, soft robotics, and medicine. The issue will cover a broad spectrum of technologies, such as well-established welding, cutting, and drilling, as well as advanced laser-based 3D printing, micro- and nanostructuring, and cleaning techniques. In addition, progress reports in laser optics for beam guiding and focusing, process monitoring, and real-time control are also highly welcome.

Guest Editor

Prof. Dr. Matija Jezeršek

Faculty of Mechanical Engineering, University of Ljubljana, 1000 Ljubljana, Slovenia

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials

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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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