



*materials*



an Open Access Journal by MDPI

## Advances in Laser Materials and Processing Technologies

Guest Editor:

**Dr. Matija Jezeršek**

Laboratory for Laser Techniques,  
Faculty of Mechanical  
Engineering, University of  
Ljubljana, Ljubljana, Slovenia

Deadline for manuscript  
submissions:

**closed (20 December 2023)**

### 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.



[mdpi.com/si/131196](https://mdpi.com/si/131196)

# Special Issue



an Open Access Journal by MDPI

## 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

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

Materials Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)