



an Open Access Journal by MDPI

## Laser Materials Processing and Hybrid Approaches

Guest Editor:

### Prof. Frank Brückner

Fraunhofer Institute for Material  
and Beam Technology IWS, D-  
01277 Dresden, Germany

Deadline for manuscript  
submissions:

**closed (31 May 2020)**

### Message from the Guest Editor

This Special Issue addresses the broad spectrum of laser materials processing along the process chain, taking into account:

- process observations and fundamental research;
- simulation and modeling in LMP;
- novelties in system technology and hybrid approaches;
- new material solutions, ranging from single to multimaterial processing;
- aspects of commercialization and industrial case studies, as well as
- solutions for digitalization.

We would like to invite you to submit a manuscript for this special issue on LMP. Full papers as well as letters are highly welcome!

### Keywords

- Process phenomena in laser materials processing
- Laser beam interaction with matter
- Additive manufacturing, e.g., laser metal deposition, laser powder bed fusion/selective laser melting
- Hybrid manufacturing, in combination with conventional manufacturing routes
- Macro- and microtechnology
- Joining
- Laser ablation and cutting
- Digitalization in laser materials processing
- Theoretical aspects and modeling
- Future perspectives of laser materials processing



[mdpi.com/si/29934](https://mdpi.com/si/29934)

# 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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
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)