

## Special Issue

# Laser Applications in Micromachining and Surface Functionalization of Materials

### Message from the Guest Editors

Laser micromachining and surface functionalization of materials by laser processes have increasingly attracted the attention of scientists and technologists. Various approaches provide remarkable capabilities for processing several classes of materials. Of particular significance is the possibility of using higher laser powers and peculiar beam de-flection systems to speed up laser processes in view of their industrial scalability. This so-called functional laser texturing arose in recent years and represents a very powerful tool for attaining advanced surface properties by creating well-defined surface patterns with micro- and nanometer resolution. In this Special Issue, modern trends of laser micromachining approaches will be highlighted and discussed. The focus is directed on laser-based surface functionalization for a wide set of applications. This explicitly includes use cases from industrial environments. It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and re-views are all welcome.

*Guest Editor*

---

### Guest Editors

Dr. Tim Kunze

Fusion Bionic GmbH, Winterbergstraße 28, 01277 Dresden, Germany

Dr. Sabri Alamri

Fusion Bionic GmbH, Winterbergstraße 28, 01277 Dresden, Germany

---

### Deadline for manuscript submissions

closed (20 July 2022)



## Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/72275](https://mdpi.com/si/72275)

*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto:materials@mdpi.com)

[mdpi.com/journal/  
materials](https://mdpi.com/journal/materials)





# Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/journal/  
materials](https://mdpi.com/journal/materials)



## About the Journal

### 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

---

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