

## Special Issue

# Functional Materials/Surfaces in Biomedical Applications

### Message from the Guest Editors

Functional materials have been developed for numerous fields, including energy, automobile, space technology, and life sciences, and can be found in many applications such as coating, particles, and block materials. In biomedicine, the need for naturally derived and/or naturally inspired materials with defined medical functionalities is growing rapidly. The functional materials are designed being applied to replace tissue functions, to improve the biocompatibility of medical devices, and to reduce the foreign body reactions especially by implantable devices, to avoid undesirable interactions in the human body, to avoid contamination, and to fulfill certain therapeutic tasks such as drug delivery. These applications require not only newly developed materials but also a thoroughly established assessment route toward the potential clinical evaluation and approval by the authorities. This Special Issue intends to publish articles on novel functional materials, functional surfaces, material engineering, design, characterization, and biological/clinical evaluations.

### Guest Editors

Prof. Dr. Rumen Krastev

Faculty of Applied Chemistry, Reutlingen University, Alteburgstraße 150,  
Reutlingen, Germany

Dr. Xin Xiong

NMI Natural and Medical Sciences Institute, University of Tübingen,  
Reutlingen, Germany

### Deadline for manuscript submissions

closed (20 December 2022)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/56600](https://mdpi.com/si/56600)

*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)