

## Special Issue

# The Application of Biomaterials in Surgery

### Message from the Guest Editor

The current evolution of nanomedicine and new materials has an outstanding impact on new applications in medicine. Of particular significance is the possibility of using such materials in various fields of surgery.

Biomaterials can act as a substitute for certain anatomical structures, but also as a replacement for the healing process or even for an organ. Bioengineering performed impressive steps in the development of new technologies with an important impact in current medicine.

The main topics of this Special Issue are to be covered include implantable devices, scaffolds for tissue engineering, 3D organ bioprinting, microelectronic devices, and also developments of new materials used for special applications in surgery: metals, ceramics, synthetic polymers, biopolymers, or nanostructures with special properties.

In this context, I am pleased to invite you to submit a manuscript (original research article, communication, or review) for this Special Issue of Materials MDPI “The Application of Biomaterials in Surgery”.

---

### Guest Editor

Prof. Dr. Graur Florin

1. University of Medicine and Pharmacy “Iuliu Hatieganu”, Cluj-Napoca, Romania
2. Regional Institute of Gastroenterology and Hepatology “Octavian Fodor”, Cluj-Napoca, Romania

---

### Deadline for manuscript submissions

closed (10 August 2022)



## Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/98442](https://mdpi.com/si/98442)

*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 Editorial Board

*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.

---

### Editors-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

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

---

### 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)