

## Special Issue

# Biopolymer-Based Materials for Biomedical Engineering (Second Volume)

### Message from the Guest Editors

This Special Issue will focus on the biopolymer-based materials currently used for biomedical applications in tissue engineering and regenerative medicine (TERM), the emerging scaffolding strategies and manufacturing techniques, as well as nanotools for biopolymer functionalization, material–cell interactions, and its biological performance assessment.

Submissions can cover the following topics (but are not limited to them):

- Natural-based polymers for biomedical applications;
- Nanobiomaterials for controlled and targeted drug/gene delivery;
- Hydrogels for drug and cell delivery and imaging;
- Polysaccharides and proteins for TERM;
- Functionalization of biopolymers;
- Synthetic polymers for TERM;
- Biopolymers for TE scaffolding;
- Processing of biopolymers;
- Bioinks for Bio 3d printing;
- Biopolymer–cell interactions and in vivo biological performance assessment.

We kindly invite you to submit a manuscript(s) for this Special Issue. Full papers, communications, and reviews are all welcome.

### Guest Editors

Dr. Joaquim Miguel Oliveira

1. 3B's Research Group, I3Bs—Research Institute on Biomaterials, Biodegradables and Biomimetics, University of Minho, Headquarters of the European Institute of Excellence on Tissue Engineering and Regenerative Medicine, AvePark, Parque de Ciência e Tecnologia, Zona Industrial da Gandra, Barco, 4805-017 Guimarães, Portugal

2. ICVS/3B's—PT Government Associate Laboratory, Braga, 4805-017 Guimarães, Portugal

Prof. Dr. Rui L. Reis

1. 3B's Research Group, I3Bs—Research Institute on Biomaterials, Biodegradables and Biomimetics, University of Minho, Headquarters of the European Institute of Excellence on Tissue Engineering and Regenerative Medicine, AvePark, Parque de Ciência e Tecnologia, Zona Industrial da Gandra, Barco, 4805-017 Guimarães, Portugal

2. ICVS/3B's—PT Government Associate Laboratory, Braga, 4805-017



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/144042](https://mdpi.com/si/144042)

*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)