

## Special Issue

# Advanced Hydrogel and Biopolymer: Synthesis, Characterization and Applications

### Message from the Guest Editor

For several years, biopolymer materials have been enjoying the growing interest of researchers and various fields of industry. The great advantages of biopolymers are their natural origin, biodegradability, and biocompatibility. This is why they are used in medicine, pharmacy, cosmetics, food production, agriculture, etc. A large group of biopolymer materials are hydrogels—hydrophilic polymer networks. Hydrogels made of appropriately selected biopolymers may have very specific properties and the ability to respond to different stimuli. Thus, they can be applied as, e.g., wound dressings, systems for the controlled delivery of active substances, or scaffolds for cell culture. Thus, new sources of biopolymers and more effective and less expensive methods for the preparation of the materials, as well as modern areas of applications, are still investigated. It is my pleasure to invite you to submit a manuscript to this Special Issue. Full research papers, communications, as well as reviews related to the synthesis, characterization, and applications of hydrogels and biopolymer materials are all warmly welcome.

### Guest Editor

Dr. Joanna Skopinska-Wisniewska

Faculty of Chemistry, Nicolaus Copernicus University in Torun, Torun, Poland

### Deadline for manuscript submissions

closed (20 April 2022)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/90270](https://mdpi.com/si/90270)

*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)