

Special Issue

Physico-Chemical Modification of Materials for Biomedical Application

Message from the Guest Editors

We cordially invite you to contribute to this Special Issue by showcasing your achievements in material modifications for biomedical applications. Despite the development of technology, new and better solutions that could be used in medicine are still being sought.

Various types of materials, including polymers, carbon-based materials, and nanoparticles, are attracting interest for their use in medical diagnostics and therapy. In this Special Issue, we focus on new ideas and perspectives for material modification methods, such as plasma treatment, exposure to SXR/EUV/UV radiation, laser processing, chemical modification, surface coating, and grafting with nanoparticles.

Functionalization with various molecules and drugs in order to improve the effectiveness of disease detection and treatment is also within the scope of this issue. It is our pleasure to invite you to contribute an original research paper, a short communication, or a review to this issue.

Guest Editors

Prof. Dr. Bernadeta Dobosz

Functional Materials Physics Division, Faculty of Physics, Adam Mickiewicz University in Poznań, Uniwersytetu Poznańskiego 2, 61-614 Poznań, Poland

Dr. Joanna Czwartos

Biomedical Engineering Centre, Institute of Optoelectronics, Military University of Technology, 2 Kaliskiego St., 00-908 Warsaw, Poland

Deadline for manuscript submissions

20 November 2025



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/197531

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)