Special Issue

Interaction Between Biomaterials and Biological Systems

Message from the Guest Editor

Biomaterials currently have enormous importance in biomedicine, including biomedical devices, tissue engineering implants, drug delivery systems, and antibacterial material. Biomaterial-cell and biomaterialtissue interactions in implant materials represent key issues to address in both initial and long-term implant integration. An understanding of these interactions will guide structural design and surface modification in biomaterials. With this Special Issue, we hope to inspire researchers and academics to explore the interactions between biomaterials and various biological systems and contribute to the design, development, application, and evaluation of biomaterials. For this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Immune response to implants;
- Soft tissue management around implants;
- Cell incorporation in three-dimensional scaffolds:
- Interactions between nanomaterials and cells and tissues:
- Bacteria-surface interactions.

Guest Editor

Prof. Dr. Jimin Guo

College of Materials Sciences and Engineering, Beijing University of Chemical Technology, Beijing 100029, China.

Deadline for manuscript submissions

20 March 2026



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/216920

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





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

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 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)