Special Issue

Polymer-Based Materials in Biomedical Applications

Message from the Guest Editors

This Special Issue, "Polymer-Based Materials in Biomedical Applications", aims to explore the latest developments in functional biomaterials and their integration into innovative biomedical technologies. The scope of this Special Issue includes, but is not limited to, the design, synthesis, functionalization, characterization, and application of polymer-based materials such as polymers, composites, hydrogels, biofunctional coatings, and hybrid systems for next-generation biomedical platforms.

We welcome contributions on material development, biofabrication techniques, device integration, and performance evaluation in diagnostics, therapeutics, regenerative medicine, and real-time physiological monitoring. This Special Issue seeks to highlight cross-disciplinary approaches that connect diverse polymer-based materials with various biomedical technologies. By garnering perspectives from materials science, bioengineering, nanotechnology, and clinical translation, it aims to explore emerging trends, address common challenges, and foster collaborations that may accelerate innovation in healthcare solutions.

Guest Editors

Dr. Chang Liu

Department of Biomedical Engineering, University of Houston, Houston, TX 77204-4005, USA

Dr. Ran An

- 1. Department of Biomedical Engineering, University of Houston, Houston, TX 77204-4005, USA
- 2. Department of Biomedical Sciences, University of Houston, Houston, TX 77204-4005, USA

Deadline for manuscript submissions

28 February 2026



Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/251258

Journal of Functional Biomaterials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 jfb@mdpi.com

mdpi.com/journal/jfb





Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 6.8 Indexed in PubMed





Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the Journal of Functional Biomaterials (JFB) is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. JFB seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

Editor-in-Chief

Prof. Dr. Pankaj Vadgama

School of Engineering and Materials Science, Queen Mary University of London, London, UK

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, Embase, Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Biomedical) / CiteScore - Q2 (Biomedical Engineering)

