

Special Issue

Advances in Nanomaterials for Medical Diagnostics and Biosensing

Message from the Guest Editors

Nanomaterials play a pivotal role in advancing medical diagnostics and biosensor technologies. Their exceptional properties—such as a large surface area, tunable reactivity, and enhanced sensitivity—enable the precise detection of biological markers, offering significant improvements in diagnostic speed, accuracy, and miniaturization.

This Special Issue focuses on the latest developments in the application of nanomaterials for medical testing and biosensing. It aims to cover a broad range of topics, including the synthesis and functionalization of nanomaterials, their integration into sensing platforms, and their performance in detecting biomolecules such as proteins, nucleic acids, glucose, and pathogens. Submissions addressing real-time, point-of-care, or wearable biosensors are particularly encouraged.

We welcome original research articles, reviews, and short communications that explore the intersection of nanotechnology, biomedical testing, and sensor innovation. The goal is to present state-of-the-art advancements that contribute to the development of faster, smarter, and more reliable diagnostic tools.

Guest Editors

Dr. Zied Ferjaoui

Unité de Technologies Chimiques et Biologiques pour la Santé, F-75006 Paris, France

Prof. Dr. Jing Zhao

School of Life Science, Shanghai University, Shanghai 200444, China

Deadline for manuscript submissions

31 December 2025



Journal of Functional Biomaterials

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/243170

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



[mdpi.com/journal/](https://mdpi.com/journal/jfb)

[jfb](https://mdpi.com/journal/jfb)



About the Journal

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, CAPIus / SciFinder, and other databases.

Journal Rank:

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