

Special Issue

Advanced Nanomaterials for Biomedical Applications

Message from the Guest Editor

The development of advanced materials for biological and medical applications has increasingly received attention over the last several years. This Special Issue covers broad aspects from biosensors and diagnostic agents with diversified and specific characteristics in terms of composition and functionality, to fundamental concepts of biosensing using nanomaterials; their synthesis; engineering their sensing properties based on optical, electrochemical, magnetic, acoustic, and thermal transduction; their integration with biological elements; the design of biosensing devices; the evaluation of their sensing performance; and the exploration of their broad applications from medical diagnostics, industry, environmental control, food analysis, and defense applications. I invite potential authors to focus on recent progress in the development of new approaches for the synthesis of these advanced nanomaterials for biosensing with different chemical compositions (metals, semiconductors, metal-oxides, polymers, graphene, DNA, enzymes, etc.), nanoscale dimensions and morphologies (particles, pores, wires, tubes, rods, etc.), and the characterization of their sensing properties.

Guest Editor

Prof. Dr. Stefano Bellucci
INFN-Laboratori Nazionali di Frascati, 00044 Frascati, Italy

Deadline for manuscript submissions

closed (30 December 2022)



Journal of Functional Biomaterials

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/123383

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)