

IMPACT FACTOR 4.8





an Open Access Journal by MDPI

# Molecular Mechanisms and Biological Procedures of Biomaterials in Medical Applications

Guest Editor:

## Dr. Yi Zhang

Department of Minerals Processing and Bioengineering, Central South University, Changsha, China

Deadline for manuscript submissions:

30 October 2024

# **Message from the Guest Editor**

Dear Colleagues,

Biomaterials have emerged as a potentially powerful paradigm in clinical medicine due to their unique physicochemical properties. Many efforts have been made various avenues to process for medical nanomaterials applications, including regenerative medicine, therapeutic delivery and additive manufacturing. Intriguingly, many studies have identified the existence of bio-nano interactions, which play important roles in biological procedures. Furthermore, biomaterials with diverse physical and/or chemical characteristics will induce different biological effects.

The molecular mechanisms and biological procedures of biomaterials in medical applications include the technologies for processing biomaterials, techniques for characterizing physiochemical properties and analyzing bio–nano interactions, biological behaviors and mechanisms, indications for medical applications etc.

This Special Issue aims to collect articles on topics that include, but are not limited to, biological procedures induced by biomaterials, interactions between biomaterials and biological cells, medical applications of biomaterials etc.













an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Pankaj Vadgama

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

# **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 physicochemical 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.

### **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, Inspec, CAPlus / SciFinder, AGRIS, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Biomedical*) / CiteScore - Q2 (*Biomedical Engineering*)

#### **Contact Us**