



Smart Biomaterials for Soft and Hard Tissue Repair and Regeneration

Guest Editors:

Dr. Catarina F. Santos

**Prof. Dr. Maria Helena
Fernandes**

Dr. Joana Marques Marto

Deadline for manuscript
submissions:
closed (20 December 2022)

Message from the Guest Editors

Nowadays, there is a huge need for a new generation of biomaterials, smart biomaterials, which can be designed according to the demands of the human body. Although there is a panoply of different commercially available natural and synthetic biomaterials for the treatment of soft and hard tissues, few are able to replicate the hierarchical complexity of biological tissues.

In this Special Issue, we would like to present an innovative perspective for the treatment of soft and hard tissues using smart biomaterials, with the intention to overcome drawbacks and use new manufacturing strategies by modulating their architecture and functionalities. Contributions (reviews and/or original papers) on smart biomaterials for hard and soft tissue repair and regeneration are very welcome.

Keywords

- bone healing
- wound regeneration
- additive manufacturing (3D printing)
- smart biomaterials
- biological characterization





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 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.

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](#), [CAPus / SciFinder](#), [AGRIS](#), and other databases.

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

Contact Us

Journal of Functional Biomaterials
Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/jfb
jfb@mdpi.com
[X@JFB_MDPI](#)