





an Open Access Journal by MDPI

# Natural and Biomimetic Architectures for Tissue Engineering and Regenerative Medicine

Guest Editors:

## Dr. Lidy Fratila-Apachitei

BioMechanical Engineering Department, Delft University of Technology, Mekelweg 5, 2628 CD Delft, The Netherlands

#### Prof. Dr. Amir A. Zadpoor

Department of Biomechanical Engineering, Faculty of Mechanical, Maritime, and Materials Engineering, Delft University of Technology (TU Delft), Mekelweg 2, 2628 CD Delft, The Netherlands

Deadline for manuscript submissions:

closed (31 October 2021)

## **Message from the Guest Editors**

Dear Colleagues,

Tissue engineering and regenerative medicine are relatively new research fields with remarkably promising results in enhancing the health status of human beings in the future.

Identifying the properties of such naturally occurring systems and understanding the underlying mechanisms by which they regulate organisms' response is of high importance for the development of synthetic analogues. Accordingly, this Special Issue aims to cover the latest advancements in the design, biofabrication, and application of natural and/or nature-inspired architectures in tissue engineering and regenerative medicine in the form of letters, reviews, and original research articles. Potential topics include but are not limited to:

- Natural/nature-inspired self-cleaning or antifouling surfaces;
- Naturally occurring bactericidal surfaces;
- Regenerative architectures (ECM) inspired from nature;
- Enabling technologies for biofabrication of such structures;
- Cell-biomaterial interactions in nature-inspired architectures.



Dr. Lidy Fratila-Apachitei Prof. Dr. Amir A. Zadpoor Guest Editors

**Special**sue









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

**Journal Rank:** JCR - Q1 (Engineering, Biomedical) / CiteScore - Q2 (Biomedical Engineering)

#### **Contact Us**