

Special Issue

Four-dimensional Biofabrication: Stimuli- responsive Mechanisms for Tissue Engineering

Message from the Guest Editor

4D biofabrication's main goal is to develop biological 3D structures, which are suitable to change their properties (e.g., stiffness, shape, volume) when triggered by a pre-defined stimulus (e.g., electricity, ionic force, light, magnetic field, pH, temperature). In this Special Issue, we will include original articles focusing on the development of automated generation of biologically functional products with structural organization, according to the four above-mentioned items. We will also cover a wide range of biofabrication processes (e.g., bioprinting, bioassembly) that bridge the gap from basic science to clinical applications. In addition, living cells, bioactive molecules, biomaterials, cell aggregates such as micro-tissues, or hybrid cell-material constructs, and subsequent tissue maturation processes will also be considered.

Guest Editor

Dr. Pedro Morouço
ESECS, Polytechnic University of Leiria, 2411 Leiria, Portugal

Deadline for manuscript submissions

closed (31 March 2019)



Journal of Functional Biomaterials

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/14084

*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)