Special Issue

Functional and Protective Coatings for Implants and Tissue Engineering Formulations

Message from the Guest Editors

The impressive multitude of implants and prosthetics along with their contribution to medicine and cosmetology are unquestionable, but there are still major complications. Adverse responses of the immune system to foreign substances, microbial attacks, biofilm formation and overall stability and durability issues of the insets impede wider implementation.

In order to address these problems, a new branch for developing case-specific coatings has emerged. In this framework, a wide variety of antibiofilm and protective layers has evolved. Furthermore, formulations that promote favorable interactions with the relevant cells and integration with the surrounding tissues are growingly produced. The latter may also operate as controlled release carriers or hosts of ingredients that are sensitive to temperature, pH, and other critical factors. In this manner, they may create stimuli-sensitive surfaces and smart devices that induce important supplementary functionalities. The scope of this Special Issue is to provide a medium for the promotion of cutting-edge research in the field and the presentation of the already-achieved advancement in the form of reviews.

Guest Editors

Dr. Michael Arkas

National Centre for Scientific Research "Demokritos", Institute of Nanoscience and Nanotechnology, 15310 Athens, Greece

Dr. Sara M. Soto

Barcelona Institute for Global Health (ISGlobal), Universitat de Barcelona, 08036 Barcelona, Spain

Deadline for manuscript submissions

closed (31 March 2024)



Journal of Functional Biomaterials

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/175605

Journal of Functional Biomaterials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ifb@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





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, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Biomedical) / CiteScore - Q2 (Biomedical Engineering)

