Special Issue

Natural and Biomimetic Architectures for Tissue Engineering and Regenerative Medicine

Message from the Guest Editors

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.

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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

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