Special Issue

Design and Synthesis Composites for Biomedical Application

Message from the Guest Editors

The treatment of bone defects caused by trauma, inflammation, or tumor resection is still a challenge in the field of orthopedics. Various natural or synthetic biological materials used in clinical applications cannot fully replicate the structure and performance of raw bone. Therefore, the development of scaffolds and implants with multiple functions and biological properties is highly expected for practical applications. These novel biomaterials can effectively enhance bone regeneration and thus have a significant impact on individual patients and health care systems. In this Special Issue, we would like to present an innovative perspective for the scaffolds and implants for bone regeneration. Relevant topics include, but are not be limited to, the following: scaffold design and fabrication; biodegradability and biomineralization; cells' responses to implants; interplay between cells and scaffold; cell microenvironment regulation; antibacterial behavior; and scaffold-based drug delivery. Both original research articles and reviews are welcome.

Guest Editors

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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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