Special Issue

Scaffolds and Implants for Bone Regeneration

Message from the Guest Editors

Bone defects caused by trauma, tumor, infection and a variety of congenital diseases are among the most common orthopedic disorders, and the clinical management of non-union bone defects is still a challenge for orthopedic surgeons. In recent years, bone implants based on metals, ceramics, and polymers have been widely utilized and helped millions of patients. In order to get further development of effective strategies for bone reconstruction and regeneration, the development of scaffolds and implants with new compositions, three-dimensional configurations, proper mechanical properties, and particular interactions with cells is highly expected. These new biomaterials may effectively promote 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. Topics will include but not be limited to: scaffold design and fabrication; biocompatibility and biodegradability; host response to implants; cell–scaffold interactions; and scaffold-based drug delivery.

Guest Editors

Dr. Kunyu Zhang

Dr. Qian Feng

Dr. Yongsheng Yu

Dr. Boguang Yang

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Journal of Functional Biomaterials
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jfb@mdpi.com

mdpi.com/journal/jfb

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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

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