Special Issue

Metals and Alloys for Biomedical Application

Message from the Guest Editors

Currently, metallic biomaterials are the class of materials with the largest use in the orthopedics, dental, and cardiac fields. Standard surgical implant materials include stainless steels, CoCr alloys, and titanium (Ti) alloys. These metallic biomaterials show a good combination of good corrosion resistance, biocompatibility, and mechanical properties. However, the basic functions that these materials played are still very simple, such as supporting, fixation, and protecting. The lack of bio-functions limits their further applications. Therefore, the development of metallic biomaterials not only focuses on the improvement of mechanical behavior, but also aims to functionalize them and enhance their bioactivity. For instance, various surface treatments have been developed to improve the osseointegration of stainless steels and Ti alloys. In addition, biodegradable metals, such as magnesium, zinc, and iron alloys, are considered potential ideal choices to deal with some specific clinical problems. It is our great pleasure to invite you to submit a manuscript focusing on the design, fabrication, functionalization, and application of metallic biomaterials.

Guest Editors

Dr. Dapeng Zhao
College of Biology, Hunan University, Changsha 410082, China

Prof. Dr. Hong Wu
State Key Laboratory of Powder Metallurgy, Central South University, Changsha, China

Dr. Jing Bai
School of Materials Science and Engineering, Southeast University, Nanjing 211189, China

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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

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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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