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Metallic Biomaterials for Medical Applications

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Deadline for manuscript submissions: closed (10 January 2024)



Message from the Guest Editors

Metallic biomaterials are the most widely used implant materials, especially for the reconstruction of failed hard tissues. Many new alloy compositions, such as metastable Ti-Nb-, Ti-Zr-, Ti-Mo- and Ti-Ni-based shape memory alloys, biodegradable Mg-, Fe-, and Zn-based alloys, have been designed in the last decade to improve the biological and mechanical compatibility of metallic biomaterials. The development of methods for the design, production, processing, and surface modification of bulk and porous metallic biomaterials, as an opportunity to control their structure and properties, plays a decisive role in obtaining the optimal bio-functionality of final products.

This Special Issue aims at publishing research articles, reviews, and communications covering the development, production, processing, and characterization of metallic materials and structures for biomedical applications.

Therefore, we invite you to submit a manuscript to this Special Issue on the above topic.

Keywords

- Ti-based alloys
- shape memory alloys
- biodegradable alloys
- thermomechanical treatment
- powder metallurgy
- additive technologies
- surface modification

Specialsue

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Editor-in-Chief

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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 physicochemical 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.

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