

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

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Deadline for manuscript submissions

closed (28 February 2025)



Journal of Functional Biomaterials

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/142676

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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
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