

Special Issue

Titanium-Based Implants: Advances in Materials and Applications

Message from the Guest Editor

Titanium alloys have shown a long history of successful use as dental and orthopedic implants due to providing strategic combinations of advantageous mechanical properties, excellent corrosion resistance in physiological environments, biocompatibility with surrounding cells and tissues, and the ability to osseointegrate with growing bone. Following this long successful history, a number of recent advancements in implant designs, alloy manufacturing processes, and application specific surface modifications promise an even brighter future for titanium-based implants. This Special Issue will host papers related to recent developments in implant design, manufacturing processes, and application-specific surface modifications which are applicable to titanium-based implants. Topics will include, but not be limited to, advancements in manufacturing processes, including additive manufacturing, implant designs, alloy development, and surface modifications to improve bacterial response and osseointegration.

Guest Editor

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Deadline for manuscript submissions

closed (20 January 2025)



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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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