



Processing, Characterization and Testing of Alloys and Metal Matrix Composites for Biomedical Applications

Guest Editor:

Prof. Iulian Antoniac

Faculty of Materials Science and
Engineering, University
Politehnica of Bucharest,
Bucharest, Romania

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Message from the Guest Editor

Metals and their alloys have been used for biomedical applications for many years. Metallic biomaterials must meet biocompatibility requirements as well as mechanical properties and corrosion resistance. All these properties are significantly influenced by the processing technology and their resulting characteristics. Therefore, experimental studies on the relationships between processing technology, microstructure, and implant properties are essential.

Biodegradable metallic materials have played an important role in biomedical applications. The use of degradable metal matrix composite materials is an excellent alternative to solve the problems related to the faster degradation of biodegradable metals. Biodegradable metals can be successfully combined with other materials to form biodegradable metallic matrix composites for biomedical applications.

The aim of this Special Issue is to present the latest achievements in the processing technology, structure development and characterization, surface modification, and properties of various alloys and metal matrix composites for biomedical applications.





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Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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Metals Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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