

Special Issue

Magnesium Alloys: Microstructure, Mechanical Properties and Biomedical Application

Message from the Guest Editor

In recent years, magnesium and magnesium alloys have been the subject of much research for their potential use in biomedical applications. Mg alloys can be used for making bio-degradable implants, which would gradually degrade in the body and thus, would eliminate the need for secondary surgeries for implant removal. However, there are many challenges in this way that need further focus and research. In this Special Issue, original research articles and reviews are welcome. Research areas and topics are related to Mg and Mg alloys for biomedical applications, and may include (but are not limited to) the following:

- Production, processing and recycling techniques.
- Alloy development.
- In vivo and in vitro cell studies.
- Correlation between microstructure and properties (Mechanical, degradation, cellular).
- Mechanical properties, more interestingly evaluated in psychological environments.
- Biodegradable Mg devices, including temporary implants and batteries.
- Application and properties of coatings on these alloys

Guest Editor

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About the Journal

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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