Special Issue

Biodegradable Metals

Message from the Guest Editor

The interest in biocompatible and biodegradable metals, such as magnesium, is mainly related to their potential use as structural material for orthopedic and cardiovascular applications where a temporary medical device is required. However, in the case of magnesium, in vivo experiments have clearly shown that the corrosion degradation rate of magnesium and its alloys is too high and, hence, results in producing gas cavities that can promote the danger of gas embolism, tissue separation, and premature loss of mechanical integrity. The aim of this Special Issue on Biodegradable Metals is to explore and introduce innovative strategies to overcome the current limitations of magnesium. Papers relating to other potential biodegradable metals, such as Iron and Zinc, are also welcome.

Guest Editor

Prof. Dr. Eli Aghion

Stephen and Edith Berger Chair in Physical Metallurgy, Department of Materials Engineering, Ben-Gurion University, P.O. Box 653, Beer-Sheva 84105, Israel

Deadline for manuscript submissions

closed (31 January 2018)

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/7870

Metals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

mdpi.com/journal/metals

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/journal/metals

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.

Editors-in-Chief

Prof. Dr. Hugo F. Lopez
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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Metals and Alloys)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

MDPI