metals

an Open Access Journal by MDPI

IMPACT FACTOR 2.6

CITESCORE 4.9

Microstructure Evolution and Mechanical Properties of Magnesium Alloys—2nd Edition

Guest Editor:

Dr. Bo Song
School of Materials and Energy, Southwest University, Chongqing 400715, China

Deadline for manuscript submissions:
31 December 2024

Message from the Guest Editor

Dear Colleagues,

Magnesium alloys have attractive properties such as high specific strength, high specific stiffness, and recyclability. Because of these characteristics, magnesium alloys are increasingly used in automotive, aviation, aerospace, electronics, and other consumer products. This also places a great demand on the mechanical properties of magnesium alloys.

The mechanical properties of magnesium alloys are closely related to their microstructure, including grain size, texture, precipitates, alloying elements, etc. In order to obtain the expected performance, a large number of scholars have devoted themselves to the development of new alloys and new processing technologies (including casting technology, plastic processing technology, powder metallurgy, 3D printing, etc.) to tailor these microstructures.

The aim of this Special Issue is to provide an open platform to share the latest research results in the development of high-performance magnesium alloys. This Special Issue covers original research and review articles on recent advances in alloy design, microstructure modification, processing technology, deformation mechanism, and computer simulation.

metals

IMPACT FACTOR 2.6

CITESCORE 4.9

an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (*Metallurgy and Metallurgical Engineering*) / CiteScore - Q1 (Metals and Alloys)

Contact Us

Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metals
metals@mdpi.com
𝕏@Metals_MDPI