Special Issue

Novel Insights into Wrought Magnesium Alloys

Message from the Guest Editors

Magnesium (Mg) and its alloys are currently the lightest structural metals in engineering applications, with characteristics of high specific strength/stiffness, good damping performance, and excellent electromagnetic shielding performance. Also, it is an important material selection for lightweight components in aerospace, defense, and military industries. At present, many highend manufacturing industries have put forward the demands for the use of Mg alloys with uniform high strength and toughness. It has been proven an effective method to prepare Mg alloys with high comprehensive mechanical properties through fine-grained strengthened mechanisms by plastic deformation. Furthermore, the mechanical properties of Mg alloys can be further improved by regulating the size/distribution of the second phase and weakening the texture.

Guest Editors

Dr. Zhaoming Yan

School of Materials Science and Engineering, North University of China, Taiyuan, China

Prof. Dr. Yong Xue

School of Materials Science and Engineering, North University of China, Taiyuan, China

Deadline for manuscript submissions

28 February 2026



Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/213954

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



About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

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).

