Special Issue

Structure and Properties of Aluminium Alloys 2024

Message from the Guest Editor

The main prerequisite for the future success of aluminium and its alloys is the continuous improvement of existing aluminium alloys and the development of new ones. In addition to conventional fabrication methods (casting, forming, powder metallurgy), additive manufacturing technologies provide additional opportunities for tailoring the microstructure of the alloys and designing new combinations of properties. In this Special Issue, we welcome original research articles and reviews. The research areas should include the relationships between the manufacturing methods, structure, and properties of aluminium alloys. Specifically, the properties of aluminium alloys are based on their structure, which can be modified using different manufacturing routes. Articles dealing with the effect of microstructure and properties on carbon footprints are highly desirable. The papers presented in this Special Issue should provide an overview of the scientific and technological state of the art of aluminium alloys in 2024. Your contribution to this 2024 account will be highly valuable and appreciated. We look forward to receiving your contributions.

Guest Editor

Prof. Dr. Franc Zupanič
Faculty of Mechanical Engineering, University of Maribor, Smetanova 17, SI-2000 Maribor, Slovenia

Deadline for manuscript submissions

closed (10 May 2025)

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/205681

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