Special Issue

Structure and Properties of Aluminium Alloys 2023

Message from the Guest Editor

The annual world production of aluminium and aluminium alloys has been increasing over recent decades. The aluminium primary aluminium even increased in 2021, known as the corona year. This industry's future perspective is bright, as the applications of Al and its alloys have enormously diversified in automotive, aerospace, building, and other industries. The main prerequisite for the future success of aluminium and its alloys is improving existing aluminium alloys and developing new ones. In addition to conventional fabrication methods (casting, forming, powder metallurgy), additive manufacturing technologies enable additional tailoring of the microstructure of alloys and designing a new combination of properties. The properties of aluminium alloys are based on their structure; from the atomic scale to the macrostructure seen by a naked eye. It is also of great importance to predict macroproperties from nano- and microproperties. This Special Issue of *Metals* focuses on relationships between the structure and properties of aluminium alloys.

Guest Editor

Prof. Dr. Franc Zupanič

Faculty of Mechanical Engineering, University of Maribor, Smetanova 17, SI-2000 Maribor, Slovenia

Deadline for manuscript submissions

closed (1 January 2024)

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/76849

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