



## Structure and Properties of Aluminium Alloys 2023

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)**

### Message from the Guest Editor

Dear Colleagues,

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.





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](http://www.mdpi.com)

[mdpi.com/journal/metals](http://mdpi.com/journal/metals)  
[metals@mdpi.com](mailto:metals@mdpi.com)  
[X@Metals\\_MDPI](https://twitter.com/Metals_MDPI)