

Special Issue

Aluminium Alloys for Additive Manufacturing: Alloy Development, Structures, Properties and Applications

Message from the Guest Editors

Additive manufacturing offers the unique capability of improving the sustainability of metallic components production by reducing the need for tooling, machining and assembling. The application of aluminium alloys for additive manufacturing has further pushed the high-strength and lightweight limits of this field through innovative structure design and integrated fabrication. However, significant challenges in the areas of alloy processability, mechanical property and available alloys are still associated with this process, which needs to be addressed with further research efforts. This Special Issue focus on the structures and properties of additively manufactured aluminum alloys. Research efforts in the field of novel alloy development, process optimization, structure, property and applications are all welcome.

Guest Editors

Dr. Qingbo Jia

School of Mechanical and Electrical Engineering, Soochow University, Suzhou 215131, China

Dr. Xiaopeng Li

School of Mechanical and Manufacturing Engineering, The University of New South Wales (UNSW Sydney), Sydney, NSW 2052, Australia

Deadline for manuscript submissions

closed (31 August 2023)



Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/136916

Metals

Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

mdpi.com/journal/

[metals](https://mdpi.com/journal/metals)





Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



[mdpi.com/journal/
metals](https://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).