Special Issue

Sustainability Approaches in the Recycling of Light Alloys

Message from the Guest Editors

This Special Issue aims to explore the latest advances and approaches to sustainability in light alloy recycling. Contributors to this Special Issue are invited to submit innovative research, review articles, and case studies that highlight new methods, technologies, and strategies for recycling light alloys. Topics of interest include, but are not limited to: 1) Advances in light alloy scrap sorting and separation technologies.

- 2) New melting and purification techniques to improve the quality of recycled alloys.
- 3) Life cycle assessment and environmental impact analysis of light alloy recycling.
- 4) Development of alloys designed to facilitate recycling at the end of the product life cycle.
- 5) Case studies on the implementation of circular economy principles in the light alloy industry.
- 6) New recycling processes for light alloy scrap (e.g., solid-state recycling processes).

Guest Editors

Prof. Dr. Mohamad Fl Mehtedi

Department of Mechanical, Chemical and Materials Engineering, University of Cagliari, Cagliari, Italy

Dr. Mauro Carta

Department of Mechanical, Chemical and Materials Engineering, University of Cagliari, Cagliari, Italy

Deadline for manuscript submissions

closed (30 May 2025)



Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/200983

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).

