Special Issue

Novel Insights into Comprehensive Utilization of Metallurgical Resources

Message from the Guest Editors

The comprehensive utilization of metallurgical resources has become a crucial strategy in addressing global resource scarcity and environmental challenges. This Special Issue focuses on innovative approaches to maximize the value of metallurgical by-products, waste streams, and secondary raw materials through advanced recycling technologies, material recovery processes, and sustainable extraction methods. We encourage submissions exploring the following topics:

- Innovation processes, tools, and methods relating to metallurgical resource utilization;
- Technical, societal, economic, business, and policy aspects of strategies to improve the sustainability and productivity of resource use;
- Low-energy extraction techniques;
- Characterization and optimization of recycled materials;
- Digital solutions (e.g., Al) for resource tracking and process control.

Guest Editors

Prof. Dr. Juncheng Li

Dr. Chuanming Du

Dr. Shichao Wu

Deadline for manuscript submissions

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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

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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).