

## Special Issue

# How to Recover Efficiently Critical Metals from Their Secondary Resources

### Message from the Guest Editors

Metals are primary yet finite commodities, necessary for the continued growth of modern society, and are at the forefront of the green economy transition. However, the mining rates of most metals are at a historical maximum, while their recovery from waste, where these metals are newly concentrated and can therefore be considered as urban ores, remains low. The imbalance between supply and demand, compounded by the unequal geographical concentration of exploitable deposits, results in an unsustainable situation. For this Special Issue in *Metals*, we welcome innovative contributions in the area of metal recycling and recovery using any metallurgical processing route. Articles addressing either the theoretical or practical understanding of metal processing are encouraged, as well as a critical comparison of process options and literature reviews. We would also appreciate receiving articles dealing with the wider context of metal recovery and criticality, such as global flows of critical metals or the environmental impacts of recycling using life cycle assessment methodology.

---

### Guest Editors

Dr. Lenka Švecová

Dr. Helena Passos

Dr. Nicolas Schaeffer

---

### Deadline for manuscript submissions

closed (28 February 2022)



## Metals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 4.9



[mdpi.com/si/46657](https://mdpi.com/si/46657)

*Metals*

MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[metals@mdpi.com](mailto:metals@mdpi.com)

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





# Metals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 4.9



[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, CAPIus / 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 17.8 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2024).