Special Issue

Selective Separation and Comprehensive Recovery of Valuable Metals

Message from the Guest Editors

The role of metals in human life is, undoubtedly, very significant. In recent years, recovery of metals has become increasingly important due to the potential supply risk of strategic raw materials and environmental concerns. Increasing global demand for metals has increased their extraction from natural minerals. This results in significant reductions in the grade and quality of the ores in the exploitable mineral deposits. Huge amounts of waste are produced through mining and metallurgical activities. Selective separation could help alleviate critical metal shortages. Potential challenges to future metal extraction technologies include accelerating climate change, rising energy prices, and a lack of clean water. The need to use resources efficiently and comprehensively while protecting the environment necessitates the research and development of the latest technologies for the recovery and recycling of metals. The aim of this Special Issue is to focus on the latest ideas and new methods. processes, and information in the production of precious metals from a variety of sources. Papers that discuss the above-mentioned challenges are invited for this Special Issue.

Guest Editors

Dr. Firat Burat

Department of Mineral Processing Engineering, Istanbul Technical University, Istanbul 34469, Turkey

Prof. Dr. Gülay Bulut

Department of Mineral Processing Engineering, Istanbul Technical University, 34469 Istanbul, Turkey

Deadline for manuscript submissions

closed (31 December 2023)



Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/157938

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).

