Special Issue

Sustainable Gold Production and Recycling

Message from the Guest Editors

Since its inception in the late 1800s, cyanidation has been the dominant process for gold production worldwide. Due to its simplicity and high cost efficiency, it nearly completely replaced all former processes. The main disadvantage of cyanide is related to environmental issues, which may occur through improper storage and transport or failed tailings management and storage. From a technical aspect, industrial gold recovery becomes more difficult, since most high-grade and easy-to-process ore deposits are already depleted. Gold producers are forced to use increasingly complex and low-grade ores. With regard to these limitations of cyanide, alternative reagents and processes often show better technical characteristics, such as a higher extraction rate, a higher selectivity and lower hazardousness.

Guest Editors

Prof. Dr. Bernd Friedrich

IME Process Metallurgy and Metal Recycling, RWTH Aachen University, 52056 Aachen, Germany

Dr. Alexander Birich

Institute of Metal Process Engineering and Metal Recycling, RWTH Aachen University, 52072 Aachen, Germany

Deadline for manuscript submissions

closed (31 July 2024)

Metals

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/148567

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

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).

MDPI