

Special Issue

Jarosites: Structure, Formation, Leaching, Environmental, Applications

Message from the Guest Editors

Jarosites are used to control the content of iron, sulfates, alkalis and other metals in hydrometallurgical circuits. However, jarosite-type compounds, resulting from the oxidation of mineral sulfides, are also related to the recovery of noble metals that contain or are associated with them. An important application of jarosite-, beudantite- or alunite-type materials has been in the prevention of the environmental impact of different elements, such as arsenic or lead, contained in soils, in water or in different hydrometallurgical processes. On the other hand, studies by different authors have shown that jarosites can play an important role in the inhibition of copper minerals during some leaching process with or without the presence of bacteria (bioleaching processes). Finally, due to their characteristics, jarositic materials can find applications in pigments, fillers, catalytic materials, etc. The Special Issue aims to include articles on both fundamental issues related to jarosites: structure, formation, thermodynamics, kinetics, and on applied issues that include laboratory information but also the application of industrial plants.

Guest Editors

Prof. Dr. Antoni Roca

Retired Professor, Departament de Ciència de Materials i Química Física, Facultat de Química, Universitat de Barcelona, Martí i Franquès 1, 08028 Barcelona, Spain

Prof. Dr. Montserrat Cruells

Departament de Ciència de Materials i Química Física, Universitat de Barcelona, 08028 Barcelona, Spain

Deadline for manuscript submissions

closed (31 January 2023)



Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/91909

Metals

Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

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





Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



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



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 18.7 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 2025).