Special Issue

Advances in Mineral Beneficiation Methods

Message from the Guest Editors

The exhaustion of easy-to-treat and high-grade ores has led to the reliance and beneficiation of complex low-grade resources for their valuable minerals. In some cases, urban mining has been considered as an alternative to augment the supply of extraction of minerals. With gangue minerals forming the bulk of such complex low-grade primary ores and secondary resources, preconcentration strategies have been employed to reject the significant fraction of such wastes. These processes exploit the differences in the physical (i.e., magnetic, specific gravity, electrical, and size) and physicochemical properties of valuable and gangue minerals. Preconcentration of valuable minerals through physical beneficiation strategies such as magnetic, gravity, electrostatic, desliming, and froth flotation promotes enhanced value recovery whilst decreasing reagents and energy consumption during downstream extraction processes. These preconcentration strategies are in continuous adaptation for different ores and downstream process requirements. However, slimes and unliberated value minerals present real problems during preconcentration processes.

Guest Editors

Dr. George Blankson Abaka-Wood

Dr. Clement Owusu

Prof. Dr. Daniel Saramak

Deadline for manuscript submissions

closed (30 April 2023)

Minerals

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.1

mdpi.com/si/125316

Minerals
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
minerals@mdpi.com

mdpi.com/journal/minerals

Minerals

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.1

mdpi.com/journal/minerals

About the Journal

Message from the Editor-in-Chief

Minerals welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

Editor-in-Chief

Prof. Dr. Leonid Dubrovinsky
Bayerisches Geoinstitut, University Bayreuth, D-95440 Bayreuth, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Mineralogy) / CiteScore - Q2 (Geology)

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 2024).

MDPI