Special Issue

Recent Progress in the Processing of Rare-Earth Ore

Message from the Guest Editors

Rare earth elements (REEs) are of immense importance and are known as “industrial vitamins”. They are widely used in the production of magnets, alloys, catalysts, batteries, medical equipment, superconductors, etc. The REEs comprise 17 elements, including lanthanide elements (La, Ce, Pr, Nd Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu), scandium (Sc), and yttrium (Y), which are generally divided into three categories (with the exception of Sc and Pm) on the basis of the solubility of rare earth sulfate: light rare-earth elements (LREEs—La, Ce, Pr, Nd), middle rare-earth elements (MREEs—Sm, Eu, Gd, Tb, Dy), and heavy rare-earth elements (HREEs—Ho, Er, Tm, Yb, Lu, Y). REEs are derived from different kinds of minerals, including monazite, bastnaesite, and weathered crust elution-deposited rare-earth ores (WREOs). This Special Issue seeks to addresses emerging technical and industrial challenges critical to the rare earth ore industry, including green and efficient mining technologies, innovative hydrometallurgical methods, and recycling and circular economy.

Guest Editors

Prof. Dr. Fang Zhou

Dr. Yuefei Zhang

Prof. Dr. Zhao Cao

Deadline for manuscript submissions

30 November 2025

Minerals

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.4

mdpi.com/si/235218

Minerals
Editorial Office
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 4.4

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 (Mining and Mineral Processing) / CiteScore - Q1 (Geology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.2 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