

Special Issue

Smart Exploration of Critical Minerals: Integrating Multi-Source Data for Enhanced Mineral Prospectivity Mapping

Message from the Guest Editors

The global demand for critical minerals, driven by technological advances and the shift to renewable energy, necessitates innovative exploration techniques. Traditional methods often fall short in addressing the complexities of locating these essential resources. Smart mineral exploration, utilizing cutting-edge technologies, offers a solution by integrating multi-source data to enhance mineral prospectivity mapping.

Guest Editors

Dr. Amirabbas Karbalaeiramezanali

New Brunswick Department of Natural Resources and Energy Development, Fredericton, NB E3B 5H1, Canada

Dr. Jeff Harris

Mineral Exploration Research Centre, Harquail School of Earth Sciences, Laurentian University, 935 Ramsey Lake Road, Sudbury, ON P3E 2C6, Canada

Deadline for manuscript submissions

closed (30 September 2025)



Minerals

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.4



mdpi.com/si/213459

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

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





Minerals

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.4



[mdpi.com/journal/
minerals](https://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), GEOBASE, 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 17.7 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).