

Special Issue

Remote Sensing-based Mineral Exploration

Message from the Guest Editors

Multispectral and hyperspectral remote sensing data have been used for mineral identification and exploration for decades. This development has been driven, on one hand, by a need to discover new ore deposits, and, on the other hand, by technological developments, such as the miniaturization of instruments. In recent years, unmanned aerial vehicle (UAV)-based remote sensing has gained momentum as an intermediate-scale and flexible solution that offers both high spatial resolution and the ability to cover large and inaccessible areas. Albeit limited to areas with no extensive vegetation or sediment cover, optical spectroscopy offers a non-destructive and potentially cost-effective means of optimizing mineral exploration strategies and identifying new ore deposits. This Special Issue will give an overview of the latest trends in remote sensing-based mineral exploration. Papers from all perspectives relevant to the topic are welcome, including those that report new advances in laboratory-based hyperspectral imaging. In particular, papers that explore the use of recent and emerging technologies, such as deep learning algorithms and UAVs, are welcome.

Guest Editors

Dr. Kati Laakso

Harald Herlin Learning Centre, Aalto University, Otaniementie 9, 02150 Espoo, Finland

Dr. Maarit Middleton

Environmental Solutions, Geological Survey of Finland, Lähteentie 2, P.O.Box 77, 96101 Rovaniemi, Finland

Dr. Veronika Kopačková-Strandová

Czech Geological Survey, 118 21 Prague, Czech Republic

Deadline for manuscript submissions

closed (16 July 2021)



Minerals

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.4



mdpi.com/si/52443

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), 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).