

## Special Issue

# Advances in Electron Microanalysis and Microscopy

### Message from the Guest Editor

Recent advances in quantitative electron probe microanalysis (EPMA) and related microscopy imaging techniques include the following: (1) a higher sensitivity and resolution for trace and light element analysis, (2) a higher spatial resolution at a low accelerating voltage with enhanced FEG electron optics, (3) standard characterization and development, (4) improved EDS and WDS detector technology, (5) advanced software algorithms for automated quantification and phase identification, and (6) artificial intelligence and machine learning techniques for standardless quantification. This Special Issue on electron probe microanalysis and microscopy will focus on recent advances in these techniques and the characterization of minerals and related synthetic materials (e.g., minerals, rocks, bones, teeth, biomaterials). The scope of this Special Issue includes, but is not limited to, electron probe microanalysis (WDS/EDS), scanning electron microscopy (SEM), transmission electron microscopy (TEM/STEM), microanalysis standards and reference materials, analytical procedures, and sample preparation methods.

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### Guest Editor

Prof. Dr. Donggao Zhao

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### Deadline for manuscript submissions

31 July 2026



## Minerals

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## 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.

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### Editor-in-Chief

Prof. Dr. Leonid Dubrovinsky

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#### 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).