Special Issue

Phase Transitions and Physical Properties of Minerals under Extreme Conditions of Pressure and Temperature

Message from the Guest Editors

Dear colleagues. The fast-past discovery of exoplanets and novel materials at high pressure challenge researchers to expand the pressure-temperature range to probe material properties under extreme conditions. There have been significant advances in static and dynamic compression techniques and increasing prediction power by first-principles simulations. In this Special Issue, we invite researchers to contribute papers related to phase transitions and physical properties of minerals under extreme conditions of pressure and temperature. We welcome contributions on high-pressure method development, results from both static and dynamic compression experiments, theoretical predictions, and modelling. Accepted manuscripts will be published immediately and collected together on the Special Issue homepage.

Guest Editors

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Deadline for manuscript submissions

closed (31 March 2025)



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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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Author Benefits

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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).

