

Special Issue

Mineral Dissolution and Precipitation in Geologic Porous Media

Message from the Guest Editors

In this Special Issue we invite manuscripts from all related fields that contribute to a better understanding of the science and engineering of mineral dissolution and precipitation in geologic porous media. Our focus will be centered on the following areas: (1) experimental or/and computational works in investigating the reactive transport mechanisms of mineral dissolution and precipitation and the evolution of aqueous phase–mineral interfaces, ranging from the pore-scale to field-scale; (2) abiotic and biotic crystal growth dynamics in rock pore spaces and the influencing factors; (3) novel techniques of characterizing and quantifying the structure, morphology, and fate of stable and metastable mineral phases in the pore spaces during dissolution and precipitation processes; (4) multiphysics and multiscale processes during mineral dissolution and precipitation in geologic porous media; and (5) review of recent advances in investigating the dissolution and precipitation in geologic porous media.

Guest Editors

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Deadline for manuscript submissions

closed (31 July 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.

Editor-in-Chief

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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).