Topical Collection

Advances in Comminution: From Crushing to Grinding Optimization

Message from the Collection Editors

Comminution—encompassing crushing and grinding—is a foundational step in the mineral processing industry. This inherently energy-intensive process aims to achieve optimal mineral liberation from gangue, delivering material with a suitable particle size distribution for downstream operations. Mounting energy and economic pressures, driven by increasingly complex orebodies and declining ore grades, make advancing energy-efficient comminution technology critically important for enhancing resource utilization, reducing operational costs, and minimizing environmental impact. This Topical Collection invites contributions spanning advanced methodologies, fundamental liberation mechanisms, and industrial optimizations. We seek cutting-edge research and practical innovations that demonstrate significant potential to transform comminution efficiency and sustainability.

Collection Editors

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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)

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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).

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