

Special Issue

Selective Disintegration of Ores and Physicochemical Properties of Minerals Under High-Power Electromagnetic Pulses and Other High Pulsed Powers Effects

Message from the Guest Editors

This Special Issue aims to contribute to the disclosure of all the applications of nontraditional (nonmechanical) high-energetic (pulsed power) methods and technologies that should be created based on the intensification of the current and new approaches to mineral extraction from rebellious ore and mining waste, using the latest achievements of basic sciences and by combining physical, physicochemical, dressing, chemical and metallurgical processes.

- pulsed power technologies in mineral processing and extractive metallurgy
- selective disintegration and surface modification of geomaterials (rocks, minerals and ores)
- high-power (voltage) nanosecond electromagnetic pulses
- low-temperature plasma of dielectric barrier discharge
- precious metals mineral complexes, recovery, sulfides
- flotation, surface, physicochemical and technological properties of minerals
- future development

Guest 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.

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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 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).