

## Special Issue

# Future Mines: Intelligent and Digital Methods for Mine Safety, Mining Optimization, and Mineral Materials Application

### Message from the Guest Editors

The development of mines trends to be digital and intelligent will be a hot research area in the coming decades. The safety and optimization of mines is closely related to modern techniques and their application. For example, artificial intelligent (AI) methods such as machine learning (ML) and deep learning have been applied in optimization and beneficiation in mines. Additionally, digital methods have been used in the identification and modeling of mineral materials. Many researchers have performed basic research in recent years and numerous important ideas and outputs have already been established. There is no doubt that collecting and summarizing these advanced techniques and application cases is significant. Combining AI and digital methods for future mines is a frontier that will promote and lead the development of techniques in mines in the next generation. This Special Issue calls for papers that are related to intelligent and digital methods for mine safety, mining optimization, and mineral materials application. Lead

### Guest Editors

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### Deadline for manuscript submissions

closed (30 June 2023)



## 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

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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).