Special Issue

Application of Deep Learning Approaches in Rocks Hyperspectral Imaging

Message from the Guest Editors

Spectrum analysis has been used in various fields. In the mining industry, technologies have been developed that utilize the multispectral data obtained from satellites for exploration. On the other hand, in recent years, the technological development of hyperspectral cameras has been remarkable, and it has become possible to easily measure spectra of many wavelengths in the field. While hyperspectral data contain a lot of information, their analysis and interpretation are complicated. Therefore, a methodology for more effectively analyzing hyperspectral data by utilizing deep learning, which is one of the most remarkable artificial intelligence technologies in the field of information engineering, is attracting attention. This Special Issue features research that utilizes this methodology to determine the type and properties of rocks.

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Deadline for manuscript submissions

closed (25 March 2022)

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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