

Special Issue

Geochronological, Petrological and Geochemical Studies of Basaltic Rocks from Oceanic Crust

Message from the Guest Editors

The basaltic rocks from the oldest oceanic crust in today's oceans can only provide evidence of the geological evolution of oceanic crust younger than ca. 200 Ma; however, such igneous rocks, found, for instance, in ophiolitic complexes and in many paleo-sutures/orogens, can provide key clues for the evolution of oceanic crust (e.g., Tethys oceans) or for the multiple assembly and dispersal history of supercontinents during several billion years. Basalts, used as a 'probe' for igneous processes, play a key role in understanding regional and global tectonic evolution, deciphering deep magmatic processes, developing global tectonic theories (e.g., plate tectonics and mantle plumes), and exploring mineral resources...This Special Issue welcomes manuscripts that present research progress in any of these aspects, including the age and mineralogical, petrological, and geochemical compositions of volcanic rocks (basalts and more differentiated rocks) from key tectonic settings from mid-oceanic ridges via intraplate setting (LIP and seamounts/guyots) to subduction zones.

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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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