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Mantle Xenoliths

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Deadline for manuscript submissions: closed (15 May 2021)

Message from the Guest Editors

Mantle xenoliths often bear mineral assemblages in thermodynamic equilibrium which allow pressure and temperature estimates according to established mineralogical geothermobarometers. If a given xenolith suite adequately represents the lithospheric column, a xenolith-based paleogeotherm can be calculated.

Mantle xenoliths sometimes host exotic minerals, such as hydrous-silicate or carbonate phases, which can be either ascribed to interaction with the host magma or to metasomatic events deep within the mantle. The highpressure allotrope of the carbon, diamond, can be one of these exotic minerals, especially in xenoliths from kimberlite pipes.

This Special Issue on mantle (and lower-crustal) xenoliths accepts research papers with both regional and general relevance, review papers, datasets, and viewpoint articles, which deal to the aforementioned topic.









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Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherentset of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientificallybased political decisions.

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