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Subduction and Exhumation of the Lithosphere: The Contribution of Structural Geology, Petrology and Geochronology

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Deadline for manuscript submissions:
closed (20 September 2020)

Message from the Guest Editors

Dear colleagues,

Deformed rocks, showing the overprinting of several tectonic and metamorphic episodes, commonly record different stages of the subduction and exhumation of the lithosphere. Such rocks are frequently exposed in crystalline basement complexes and carry fundamental insights on processes and their rates, acting during the evolution of the Lithosphere. Starting from the pioneering studies carried out on mountain belts, different approaches and techniques were developed to decipher and constrain this complex tectono-metamorphic history.

Detailed structural–geological field mapping, integrated with meso- and microstructural investigations, petrofabric analysis, petrochronology, and petrologic modeling are fundamental tools to infer information on the pressure–temperature–deformation–composition of the system–time–fluid activity-path of crystalline rocks. All information is fundamental for the building up of tectonic models.

In this Special Volume, contributions dealing with structural–geological mapping, microstructural analyses, metamorphic petrology, geochronology, and thermochronology concerning basement rocks are welcome.

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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.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

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