



an Open Access Journal by MDPI

# Sand(stone)s Quantitative Provenance Analysis

Guest Editors:

# Prof. Emilia Le Pera

Department of Biology, Ecology and Earth Sciences, University of Calabria, Rende, Italy

#### Dr. Consuele Morrone

Department of Biology, Ecology and Earth Sciences, University of Calabria, Rende, Italy

Deadline for manuscript submissions: closed (28 February 2021)



#### **Message from the Guest Editors**

Dear Colleagues,

A basic quantitative element of sand-sized sediments and sedimentary rocks is composition, and the parent lithologies of eroded orogenic systems rest on the petrographic analysis of terrigenous sediments' detrital modes. In fact, the development of sand(stone) petrology has provided evidence for interpreting tectonic setting models, insights into (paleo)climatic conditions of the source areas, (paleo)current patterns, facies relationships of stratigraphic units, and the overall clastic unit volumes of the basins' fill.

This Special Issue invites contributions that are concerned with the petrography of modern sand-sized sediments and ancient sandstones of the Earth record. Since sand and sandstones comprise a wide mixture of source grains, their quantitative provenance analysis is often best tackled using petrographic microscopy. Moreover, the use of sand grain petrography as a tool within the Earth sciences is also expanding. Most of these studies demonstrated that the petrographic analysis of sand grains, determined accurately with a standard petrographic microscope, assisted in the location of their possible geographical source area.







an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Prof. Dr. Jesus Martinez-Frias

Instituto de Geociencias, IGEO (CSIC-UCM), C/ Del Doctor Severo Ochoa 7, Edificio Entrepabellones 7 y 8, 28040 Madrid, Spain

### 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.

# **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, ESCI (Web of Science), GeoRef, Astrophysics Data System, and other databases. **Journal Rank:** CiteScore - Q1 (*General Earth and Planetary Sciences*)

### **Contact Us**

*Geosciences* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/geosciences geosciences@mdpi.com X@Geosciences\_OA