



Archaeological Crystalline Materials

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Message from the Guest Editors

Dear Colleagues,

The crystalline state of archaeological materials from bioarchaeological and paleontological materials (bones, seeds, etc.) to building remains (pigments, wall paintings, mosaics, furnishings), and other archaeological records (ceramics, sculptures, lithic materials, etc.) undergo changes in lattice parameter and crystalline domain size because of diagenetic alteration or exposure to the atmosphere. To study these alterations, portable instruments and non-destructive analyses are preferable. Recently, the quality of the data output of these new portable systems has become competitive with the conventional benchtop methods. Moreover, data science and machine learning (e.g., the predictive modelling of multivariate analysis, multivariate regression algorithms) have been adopted to address open questions dealing with provenance, technological features, and state of conservation.

This Special Issue on “Archaeological Crystalline Materials” offers researchers in the field of heritage science the opportunity to present new analytical approaches and tools able to identify and quantify the transformation of crystalline phases in archaeological records.





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Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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