



Structural and Optical Properties of Cultural Heritage Crystalline Materials

Guest Editor:

Dr. Daniele Chiriu

Department of Physics, University
of Cagliari, sp 8, km 0.700, 09042
Monserrato, Italy

Deadline for manuscript
submissions:

closed (31 October 2020)

Message from the Guest Editor

Crystalline materials find applications in many fields of cultural heritage, ranging from pigments to jewels, from ceramics to sculptures. Optical properties of crystalline dielectrics and semiconductors permit an extreme variety of colours, which are often susceptible to degradation processes. However, the photochemical stability of some crystalline materials makes them good candidates for restoration and conservation. Therefore, optical and structural characterizations of appropriate materials are fundamental to address long-standing problems related to cultural heritage.

In recent years, traditional spectroscopy, as well as innovative applications of optical techniques, have assumed a key role in cultural heritage, with progress towards a new generation of imaging, stratigraphy and compositional tools. Structural analysis, on the other hand, has provided solid foundations for assessing the crystal structure and composition of investigated materials.

The aim of this Special Issue is to bring together expertise and competencies from different fields of structural characterization and optical spectroscopy, as applied to cultural heritage.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University
of Pisa, 56126 Pisa, Italy

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.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), [CAPus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Crystallography*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Crystals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/crystals
crystals@mdpi.com
[X@Crystals_MDPI](#)