

Special Issue

Applications of Raman Spectroscopy and X-Ray in Archaeological Research

Message from the Guest Editors

This Special Issue aims to address the challenges of a multidisciplinary approach in archaeological studies. Among the non-invasive methods, Raman spectroscopy and X-ray techniques stand out for their capacity to analyze artifacts' material compositions without damaging them. Raman spectroscopy and X-ray techniques, such as X-ray fluorescence (XRF) and X-ray diffraction (XRD), are two powerful tools that provide valuable insights into knowledge of the composition and structure of materials involved in archaeological objects. These methods offer non-destructive ways of monitoring the condition of objects, assessing the degradation of materials over time, and distinguishing between original components and modern restorations. Your contribution could explore the applications of these techniques in archaeology, emphasizing their ability to identify pigments, ceramics, metals, and organic materials, while preserving the integrity of the artifacts. The presentation of case studies will highlight their role in uncovering technological processes, trade routes, and conservation efforts.

Guest Editors

Dr. Gioacchino Tempesta

Department of Earth and Geoenvironmental Sciences, University of Bari "Aldo Moro", Milan, Italy

Dr. Giovanna Fioretti

Earth and Geoenvironmental Science Department, University of Bari ALdo Moro, Bari, Italy

Deadline for manuscript submissions

closed (31 December 2025)



Heritage

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.7



mdpi.com/si/219375

Heritage
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
heritage@mdpi.com

[mdpi.com/journal/
heritage](https://mdpi.com/journal/heritage)





Heritage

an Open Access Journal
by MDPI

Impact Factor 1.9
CiteScore 3.7



[mdpi.com/journal/
heritage](https://mdpi.com/journal/heritage)



About the Journal

Message from the Editorial Board

Heritage is an international, peer-reviewed, open access journal that focuses on knowledge, conservation, interpretation and management of cultural and natural heritage, by presenting and enabling novelty and advances in sensing technologies, novel methods, best practices and policies. *Heritage* has the ambition to become a “cultural forum”, where scientists and experts offer answers to significant issues affecting cultural and natural heritage, by creating a knowledge bridge between different technological and social disciplines. *Heritage* has an Editorial Board of eminent international leaders and this ensures rigorous peer-review processing for high quality and novel papers. We strongly recommend *Heritage* for the rapid and professional publication of your innovative research and case studies.

Editors-in-Chief

Dr. Francesco Soldovieri

National Research Council of Italy (CNR), Institute for Electromagnetic Sensing of the Environment (IREA), Via Diocleziano 328, 80124 Napoli, Italy

Prof. Dr. Nicola Masini

1. CNR-ISPC (Institute of Heritage Science), 85050 Tito, Italy
2. School of Architecture, University of Basilicata, Potenza, Italy

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), CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (Archeology (Arts and Humanities))