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Book of Abstracts

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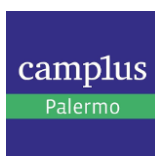
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Multi-analytical approach to the study of the glyptic collection of the Musei di Arte Antica of the Municipality of Ferrara (Italy)

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This research aims to analyse the evolution of gem carving (glyptic) and the historical use of precious stones in ancient Rome, with a specific focus on the collection of the Civic Museums of Ancient Art in Ferrara. Through detailed documentation and cataloguing of the exhibits, the aim is to enhance not only their material value, but also the historical and cultural context that defines them as symbols of wealth, prestige and artistic skill. These artefacts, admired for their aesthetic and symbolic value, highlight the mastery of Roman lapidaries in working quartz varieties such as chalcedony and carnelian, as well as rarer materials such as amethyst and lapis lazuli.

The study, conducted on a sample of 25 artefacts, takes an interdisciplinary approach by combining petrographic-mineralogical microanalysis, archaeology and art history to investigate the materials and techniques used in the production of carvings and cameos. The petrographic-mineralogical analyses were carried out through advanced optical microscopy observations, using a HIROX 3D Digital and Confocal Microscope, supplemented with Scanning Electron Microscopy (SEM-EDS) and μ -Raman spectroscopy techniques. These instruments made it possible to determine the chemical-mineralogical composition of the gems, to identify any artificial treatments or imitations, and to accurately characterise the quality and origin of the materials.

The result of this study is the creation of a digital archive of the analysed gems, useful for certification, conservation and future evaluation purposes. This research, focused on the provenance and sophisticated manufacture of the Ferrara collection, contributes to a deeper understanding of ancient lapidary techniques, emphasising their relevance for the conservation of cultural heritage and for the development of analytical methodologies applied to cultural assets.



Anguipes in armour with snake kegs.