1. Record Nr. UNINA9910734896403321

Autore	Domenech-Carbo Antonio
Titolo	Electrochemistry for Cultural Heritage / / by Antonio Doménech-Carbó, María Teresa Doménech-Carbó
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-31945-1
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (387 pages)
Collana	Monographs in Electrochemistry, , 1865-1844
Disciplina	905
Soggetti	Electrochemistry Cultural property - Protection Historic preservation Cultural property Archaeology Conservation and Preservation Archaeology and Heritage
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Application of Instrumental Methods in the Analysis of Historic, Artistic and Archaeological Objects -- Electrochemical Processes and Techniques -- Voltammetry: the Essentials -- Analytical Issues -- Pigments and Paintings I -- Pigments and Paintings II -- Ceramic, Glass and Glazed Materials -- Pottery -- Organic Materials -- Metallic Heritage: Electrochemistry of Corrosion Products -- Metallic Heritage: Electrochemistry of Metal Objects -- Electrochemical Metal Dating.
Sommario/riassunto	This monograph overviews the importance of electrochemistry in the field of cultural heritage, including archaeology, conservation and restoration topics. The application of electrochemical techniques in these domains have experienced a notable growth during the last ten years, in particular with regards to the elucidation of composition, manufacturing techniques and chronology of archaeological artefacts. This book describes the application of solid state electrochemistry techniques for the use of samples at the nanogram level from paintings, metallic, ceramic, glass, glazed, wooden, and other objects,

and it also includes the description of new dating procedures for archaeological objects made of these materials. It is a valuable contribution to the field of cultural heritage and will be of great interest to archaeologists, conservators and restorers as well as to physicists and chemists working on the scientific examination of works of art.