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Titolo	Nanotechnologies in the Conservation of Cultural Heritage : A compendium of materials and techniques / / by Piero Baglioni, David Chelazzi, Rodolico Giorgi
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Soggetti	Nanotechnology Archaeology Measurement Measuring instruments Soft condensed matter Surfaces (Technology) Thin films Cultural property Measurement Science and Instrumentation Soft and Granular Matter Surfaces, Interfaces and Thin Film Cultural Heritage
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface -- About the Authors -- Innovative Nanomaterials: Principles, Availability and Scopes -- Consolidation of Wall Paintings and Stones -- Cleaning of Wall Paintings and Stones -- Cleaning of Easel Paintings -- Deacidification of Paper, Canvas and Wood.
Sommario/riassunto	This book presents novel applications of nanotechnology for the preservation of artistic and historical artifacts. It explains the scientific

principles behind numerous nanomaterials and discusses their applications to different types of common movable and fixed artistic substrates. It starts with an overview of the nano-tools developed over the last three decades, such as dispersions of nanoparticles, micellar solutions, microemulsions and gels. Compared to traditional methods, these new tools have the benefit of considerably less impact on both the operators and the environment. Each chapter is dedicated to a specific type of cultural heritage material (wall and easel paintings, stone, paper, canvas and wood) starting with the main degradation paths and discussing protocols for the application of innovative nanomaterials-based tools for cleaning, consolidation, or deacidification, which represent the majority of the case studies encountered in restoration facilities, workshops and ateliers. The book provides step-by-step descriptions that are meant to support conservators in the application of these novel materials and methods. The aim of the book is to equip end-users and conservators with essential information and knowledge on the availability and applicability of different nano-materials and dispersed systems. While the book's focus is on the practical aspects, interested readers will also find references to the relevant advanced colloid and material science literature. Main audience: Expert conservators, restorers and technical staff at conservation institutes and museums, students at conservation and restoration schools, and scientists who are new to the field of conservation of artistic and historical artifacts.
