1. Record Nr. UNINA9910298636903321

Autore	Brigante Domenico
Titolo	New composite materials : selection, design, and application / / Domenico Brigante
Pubbl/distr/stampa	Cham [Switzerland] : , : Springer, , 2014
ISBN	3-319-01637-7
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (xvi, 179 pages) : illustrations (some color)
Collana	Gale eBooks
Disciplina	620.11 620.14 691
Soggetti	Composite materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Composite Materials -- Manufacturing Processes -- Choice of the Composite System -- Strengthening of Existing Structures -- Technical Standards -- Strengthening of Reinforced and Pre-Stressed Reinforced Concrete Structures -- Strengthening of Masonry Structures -- Strengthening of Steel Structures -- Characterization and Monitoring -- Application Techniques -- Examples of Application.
Sommario/riassunto	This timely volume presents a range of critical topics on the use of composite materials in civil engineering; industrial, commercial, and residential structures; and historic buildings. Structural strengthening techniques based on composite materials, including, but not limited to, fiber-reinforced polymers, fiber-reinforced glasses, steel-reinforced polymers, and steel-reinforced glasses represent a practice employed internationally and have become an important component in the restoration of buildings impacted by natural hazards and other destructive forces. New Composite Materials: Selection, Design, and Application stands as a highly relevant and diverse effort, distinct from other technical publications dealing with building issues. The book focuses extensively on characterization of techniques employed for structural restoration and examines in detail an assortment of materials such as concrete, wood, masonry, and steel. This book also: Provides engineers and architects a lucid explanation of how to easily design an innovative system of structural reinforcement with composite materials

Presents detail for readers to readily assess the feasibility of reinforcement applications Includes a section for construction managers written to facilitate installation of composite structural reinforcement materials with maximum efficiency and cost-benefit Features many examples of applications and construction details to help engineers and architects realize their projects Offers a comparative analysis among various international technical standards.