1. Record Nr. UNINA9910299694003321

Titolo	Materials for Construction and Civil Engineering : Science, Processing, and Design / / edited by M. Clara Gonçalves, Fernanda Margarido
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-08236-1
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (938 p.)
Disciplina	691
Soggetti	Building materials Ceramics Glass Composite materials Building Materials Structural Materials Ceramics, Glass, Composites, Natural 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	Hydraulic Binders -- Renders -- Gypsum Plasters -- Concrete -- Bituminous Materials -- Steel -- Ceramics -- Glasses -- Ornamental Stones -- Polymers -- Wood -- Cork -- Nano -- Corrosion -- Structural Adhesives -- Organic Coatings -- Environmental Impact -- Certification -- Aggregates.
Sommario/riassunto	This expansive volume presents the essential topics related to construction materials composition and their practical application in structures and civil installations. The book's diverse slate of expert authors assemble invaluable case examples and performance data on the most important groups of materials used in construction, highlighting aspects such as nomenclature, the properties, the manufacturing processes, the selection criteria, the products/applications, the life cycle and recyclability, and the normalization. Civil Engineering Materials: Science, Processing, and Design is ideal for practicing architects; civil, construction, and structural engineers, and serves as a comprehensive reference for

students of these disciplines. This book also: · Provides a substantial and detailed overview of traditional materials used in structures and civil infrastructure · Discusses properties of natural and synthetic materials in construction and materials' manufacturing processes · Addresses topics important to professionals working with structural materials, such as corrosion, nanomaterials, materials life cycle, not often covered outside of journal literature · Diverse author team presents expect perspective from civil engineering, construction, and architecture · Features a detailed glossary of terms and over 400 illustrations .