Record Nr. UNINA9910454060703321 High-performance construction materials [[electronic resource]]: **Titolo** science and applications / / editors, Caijun Shi, Y.L. Mo Pubbl/distr/stampa Singapore; ; Hackensack, NJ, : World Scientific, 2008 **ISBN** 1-281-94814-4 9786611948146 1-61344-050-2 981-279-736-X Descrizione fisica 1 online resource (448 p.) Collana Engineering materials for technological needs;; v. 1 Altri autori (Persone) ShiCaijun MoY. L Disciplina 624.1/8 Soggetti Building materials - Research Composite materials - Research Structural engineering - Research Strength of materials Electronic books. 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 Preface; Contents; Biographical Sketch for each Author; Chapter 1; Chapter 2; Chapter 3; Chapter 4; Chapter 5; Chapter 6; Chapter 7; Chapter 8; Chapter 9; Chapter 1 Introduction Caijun Shi and Y. L. Mo; 1.1 Historical Development of Construction and Uses of Construction Materials; 1.1.1 Stone age habitats; 1.1.2 River valley civilizations -The first steps in permanence: 1.1.3 Construction in ancient Egypt: 1.1.4 Construction in the Greek Era; 1.1.5 Construction in the Romans times; 1.1.6 The early industrial age (18th-19th Century) 1.1.7 Constructions in the 20th century - High rise steel structures/buildings1.1.7.1 High rise steel structures/buildings; 1.1.7.2 High rise concrete buildings; 1.2 Recent Construction - High Performance Construction Materials; 1.3 Design Codes and Specifications for Use of High Performance Construction Materials; 1.4

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Sommario/riassunto

This book describes a number of high-performance construction materials, including concrete, steel, fiber-reinforced cement, fiber-reinforced plastics, polymeric materials, geosynthetics, masonry materials and coatings. It discusses the scientific bases for the manufacture and use of these high-performance materials. Testing and application examples are also included, in particular the application of relatively new high-performance construction materials to design practice. Most books dealing with construction materials typically address traditional materials only rather than high-performance m