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Titolo	Metakaolin-Based Geopolymers : Design, Mechanisms and Performance // by Dongming Yan, Shikun Chen, Yi Liu
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Descrizione fisica	1 online resource (XXXVI, 290 p. 152 illus., 109 illus. in color.)
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Soggetti	Concrete Ceramic materials Corrosion and anti-corrosives Materials Ceramics Corrosion Materials Engineering
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Geopolymerization of MKG -- Composition-dependent Mechanical Performance of MKG -- Drying shrinkage of MKG -- Sulfate corrosion of MKG -- Heat resistance of MKG -- Freezing-thawing resistance of MKG -- Aggregate influence on MKG concrete -- Reinforcement bonding of MKG concrete.
Sommario/riassunto	This book offers a comprehensive overview of the design, mechanisms, and performance of metakaolin-based geopolymers (MKG), with a focus on uncovering the underlying mechanisms that differentiate MKG from ordinary Portland cement (OPC). Covering a wide range of topics surrounding MKG, from the early stages of geopolymerization to the final mechanical performance of MKG concrete, this book provides fundamental insights into the performance of MKG-based materials and their relationship with the composition and microstructure of MKG. The findings presented in this book may serve as a guide for the design and application of MKG in civil engineering constructions. Targeted at scientists and engineers in materials science and civil engineering, this book is intended for those interested in adopting MKG as a sustainable

technology for a greener future. .
