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Nota di contenuto	Front Cover; Contents; Foreword; Preface; About the Authors; Acknowledgments; Chapter 1: State of the Art in Polymer Concrete; Chapter 2: Polymer Concrete Based on a Vulcanized Polybutadiene Matrix; Chapter 3: Polymer Concrete Based on an Organo-Silicate Matrix; Chapter 4: Nonisocyanate Polyurethanes Based on Cyclic Carbonates; Chapter 5: Crack-Resistant and Anticorrosive Coatings Based on Vulcanized Water Dispersion of Chlorosulfonated Polyethylene; Chapter 6: Epoxy-Rubber Coatings with Nano-Heterogenic Structure; Chapter 7: Nanostructured Binder for Acid-Resistant Building Materials Chapter 8: Waterborne Fire-Protective and Heat-Stability Coating CompositionsTerms; Back Cover
Sommario/riassunto	Preface: At the beginning of the twenty-first century, nanoscale engineering has become a driving force for discovery and innovation, not only in electronics and medicine, but also in materials and civil engineering. In the past 25 years, technology for corrosion protection has been advanced by the development of more corrosion-resistant structure materials and protective coatings. The authors of this book are well-known scientists in this area. Professor Oleg Figovsky is a

leading inventor with more than 500 patents in the area of materials and civil engineering. The authors have published a lot of articles on these topics in the last 10 years, but a complete book was not published. This book was written for engineers, students, and others who are interested in advanced materials, and reports the current status of advanced polymer and silicate polymer concretes and compounds. The scope of this book includes rubber concrete based on nanostructured polybutadiene binder and silicate polymer concretes based on nanostructured organosilicate binder. It examines their physical, mechanical, and technological properties, their behavior upon exposure to harsh environmental factors, and the issues of durability and reliability. Additionally, the scope of this book includes novel polymer and silicate polymer coatings for corrosion and fire protection. One of the more important parts of this book is the chapter in which the authors present data regarding non-isocyanate polyurethane material for monolithic flooring and protective coating--the first nanostructured environment-friendly polyurethane coatings. The emphasis in this book is on the service abilities of novel concretes and protective compounds for various environments, such as those involving water, pollutants, and acid--
