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Soggetti	Materials - Analysis Materials Chemistry Solid state chemistry Polymers Ceramic materials Nanotechnology Materials Characterization Technique Materials Chemistry Solid-State Chemistry Ceramics
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Nota di contenuto	1. What is Materials Chemistry? -- 2. Solid-State Chemistry -- 3. Metals -- 4. Semiconductors -- 5. Polymeric Materials -- 6. Nanomaterials -- 7. Materials Characterization -- Appendices I, II, III.
Sommario/riassunto	This award-winning textbook delivers an earnest and comprehensive treatment of the rapidly evolving field of Materials Chemistry. It addresses inorganic-, organic-, and nano-based materials from a structure vs. property treatment, providing a suitable breadth and depth coverage of the field—in a concise and accessible format. The updated 4th edition features significant updates to glasses and ceramics, solid-state impurities, nanomaterial toxicity, as well as

materials used in energy storage, photovoltaic, and electronics applications. Advanced fabrication techniques such as additive manufacturing (3-D printing) and dynamic light scattering (DLS) characterization of suspended nanoparticles are now also included. This new edition also expands the coverage of sustainability and life cycle analysis, of increasing importance for a world plagued with the effects of climate change. Recognized by a 2008 Textbook Excellence Award from the Text and Academic Authors Association (TAA), Fahlman's Materials Chemistry is ideal for upper-level undergraduate students, as well as first-year graduate students in chemistry, physics, or engineering fields, and may also serve as a valuable reference to industrial researchers. Each chapter concludes with a section that describes important materials applications and an updated list of thought-provoking questions.
