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Disciplina	541.345
Soggetti	Ceramics Glass Composites (Materials) Composite materials Physical chemistry Amorphous substances Complex fluids Nanotechnology Inorganic chemistry Optical materials Electronic materials Ceramics, Glass, Composites, Natural Materials Physical Chemistry Soft and Granular Matter, Complex Fluids and Microfluidics Nanotechnology and Microengineering Inorganic Chemistry Optical and Electronic Materials
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	A Sol and a Gel, What They Are? -- From the Precursor to a Sol -- Sol-to-Gel Transition: The Models -- From Silicate Oligomers to Gelation -- Measuring the Sol to Gel Transition -- Probing the Sol-to-Gel Transition in the GeL Structure -- Conclusion.

Sommario/riassunto

This book provides an in-depth introduction to the sol to gel transition in inorganic and hybrid organic-inorganic systems, one of the most important chemical-physical transitions and the basis of the sol-gel process. Familiarity with the fundamental chemistry and physics of this transition is essential for students in chemistry and materials science through academic and industry researchers working on sol-gel-related applications. The book features a didactic approach, using simple and clear language to explain the sol to gel transition and the accompanying processes. The text is also suitable for use in short courses and workshops for graduate students as well as professionals.
