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Autore	Rao C. N. R (Chintamani Nagesa Ramachandra), <1934->
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Title Page; Copyright Page; Contents; Author Biographies; Preface; Chapter 1 Introduction; References; Chapter 2 Common Reactions Employed in Synthesis; 2.1 Soft-Chemistry Routes; References; Chapter 3 Ceramic Methods; References; Chapter 4 Decomposition of Precursor Compounds; References; Chapter 5 Combustion Synthesis; References; Chapter 6 Arc and Skull Methods; References; Chapter 7 Reactions at High Pressures; References; Chapter 8 Mechanochemical and Sonochemical Methods; 8.1 Mechanochemistry; 8.2 Sonochemistry; References; Chapter 9 Use of Microwaves; References Chapter 10 Soft Chemistry Routes10.1 Topochemical Reactions; References; 10.2 Intercalation Chemistry; References; 10.3 Ion Exchange Reactions; References; 10.4 Use of Fluxes; References; 10.5 Sol-Gel Synthesis; References; 10.6 Electrochemical Methods; References; 10.7 Hydrothermal, Solvothermal and Ionothermal Synthesis; References; Chapter 11 Nebulized Spray Pyrolysis; References; Chapter 12 Chemical Vapour Deposition and Atomic Layer Deposition; References; Chapter 13 Nanomaterials; 13.1 Nanoparticles; 13.1.1 Use of Microemulsions; 13.1.2 Thermal Decomposition 13.1.3 Hydrothermal and Solvothermal Synthesis13.1.4 Sol-Gel Method; 13.1.5 Phase-Transfer Method; 13.1.6 Microwave Synthesis; 13.1.7 Use of the Liquid-Liquid Interface; 13.2 Core-Shell Nanocrystals;

13.3 Nanowires; 13.3.1 Metals; 13.3.2 Elemental Semiconductors; 13.3.3 Metal Oxides; 13.3.4 Metal Chalcogenides; 13.3.5 Metal Pnictides and Other Materials; 13.3.6 Oriented Attachment; 13.3.7 Coaxial Cables and Other Hybrid Nanostructures; 13.4 Inorganic Nanotubes; 13.5 Graphene-like Structures of Layered Inorganic Materials; References; Chapter 14 Materials
 14.1 Metal Borides, Carbides and NitridesReferences; 14.2 Metal Chalcogenides; References; 14.3 Metal Halides; References; 14.4 Metal Silicides and Phosphides; References; 14.5 Intergrowth Structures and Misfit Compounds; 14.5.1 Intergrowth Structures; 14.5.2 Misfit Compounds; References; 14.6 Intermetallic Compounds; References; 14.7 Superconducting Compounds; References; 14.8 Porous Materials; 14.8.1 Mesoporous Silica Materials; 14.8.2 Aluminophosphates ; 14.8.3 Metal Organic Frameworks (MOFs); References; Index; Supplemental Images; EULA

Sommario/riassunto

"Provides an introduction to inorganic materials synthesis. Covers common reactions employed in synthesis, ceramic procedures, decomposition of precursor compounds, combustion synthesis, arc and skull methods, reactions at high pressures, mechanochemical methods, use of microwaves, soft chemistry routes, topochemical reactions, intercalation chemistry, ion-exchange methods of fluxes, sol-gel synthesis, electrochemical methods, hydro-, solvo- and iono-thermal methods, nebulized spray pyrolysis, CVD and ALD, nanomaterials, nanoparticles, nanowires, nanotubes, graphene-like layered structures, materials, metal borides, carbides and nitrides, metal oxides and chalcogenides, metal fluorides, metal silicides, phosphides, intergrowth structures, metal-rich compounds and intermetallics, superconducting compounds, and porous materials, including meal-organic frameworks"

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2. Record Nr.	UNIORUON00424737
Autore	Kellman, Steven G.
Titolo	The Self-begetting novel / Steven G. Kellman
Pubbl/distr/stampa	London, : Macmillan, 1980
Descrizione fisica	161 p. ; 22 cm.
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