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Nota di contenuto	Progress in Nanotechnology; Contents; Introduction; Synthesis Methods for Powders; Freeze Casting as a Nanoparticle Material-Forming Method; Preparation of a Nanoscale/SOFC-Grade Yttria-Stabilized Zirconia Material: A Quasi-Optimization of the Hydrothermal Coprecipitation Process; Synthesis of Nanosize Tin Dioxide by a Novel Liquid-Phase Process; Fabrication of Nanocomposite Powders of Carbon Nanotubes and Montmorillonite; Synthesis of Highly Dispersed Barium Titanate Nanoparticles by a Novel Solvothermal Method; Continuous Production and Harvesting of Inorganic-Ceramic Nanoparticles Nanocrystalline Scandia Powders Via Oxalate Precipitation: The Effects of Solvent and Solution pH A Pulse Combustion-Spray Pyrolysis Process for the Preparation of Nano- and Submicrometer-Sized Oxide Particles;

One-Step Synthesis of Luminescent Nanoparticles of Complex Oxide, Strontium Aluminate; Nano -Al₂O₃ Powder Preparation by Calcining an Emulsion Precursor; Lanthanum Strontium Manganite Powders Synthesized by Gel-Casting for Solid Oxide Fuel Cell Cathode Materials; Preparation of Matrix-Type Nickel Oxide/Samarium-Doped Ceria Composite Particles by Spray Pyrolysis
 Novel Low-Temperature Synthesis of Ferroelectric Neodymium-Doped Bismuth Titanate Nanoparticles
 Hydrothermal Synthesis of CdMoO₄ Nano-Particles; Chromium-Doped Forsterite Nanoparticle Synthesis by Flame Spray Pyrolysis; Formation of Al₂O₃-TiC Composite Nano-Particles Synthesized from Carbon-Coated Precursors; Synthesis of Sm_{0.5}Sr_{0.5}CoO_{3-x} and La_{0.6}Sr_{0.4}CoO_{3-x} Nanopowders by Solution Combustion Process; Colloidal Processing and Sintering of Nano-ZrO₂ Powders Using Polyethylenimine; Synthesis of High Purity -SiAlON Nanopowder from a Zeolite by Gas-Reduction-Nitridation
 A Novel Supercritical CO₂ Synthesis of Amorphous Hydrous Zirconia Nanoparticles, and Their Calcination to Zirconia
 Praseodymium-Doped Photo-Luminescent Strontium Indate Nanoparticles by Ultrasonic Spray Pyrolysis; Nano-Blast Synthesis of Nano-size CeO₂-Gd₂O₃ Powders; Sol-Gel Processing and Characterization of Phase-Pure Lead Zirconate Titanate Nano-Powders; Synthesis of AlN Nanopowder from .-Al₂O₃ by Reduction-Nitridation in a Mixture of NH₃-C₃H₈; Membranes, Films, and Coatings; Microporous ZrO₂ Membrane Preparation by Liquid-Injection MOCVD
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 Two Phase Monazite/Xenotime 30LaPO₄-70YPO₄ Coating of Ceramic Fiber Tows; Template-Free Self-Assembly of a Nanoporous TiO₂ Thin Film; Nano-Sized Hydroxyapatite Coatings on Ti Substrate with TiO₂ Buffer Layer by E-beam Deposition; Sol-Gel Routes to Nanostructured Patterned Ferroelectric Thin Films with Novel Electronic and Optical Functions; Preparation and Properties of Hydrothermally Stable -Alumina-Based Composite Mesoporous Membranes
 Synthesis and Tribological Behavior of Silicon Oxycarbonitride Thin Films Derived from Poly(Urea)Methyl Vinyl Silazane

Sommario/riassunto

This edition of Progress in Ceramic Technology series contains a select compilation of articles on the topic of nanomaterials processing of powders; thin films, wires and tubes; and composites that were previously published in The American Ceramic Society Bulletin, Journal of the American Ceramic Society, International Journal of Applied Ceramic Technology, Ceramic Engineering and Science Proceedings (CESP) and Ceramic Transactions (CT).