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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	13th International Ceramics Congress - Part A; Preface; Table of Contents; Chapter 1: Powder Synthesis and Characterization; Preparation of Protonic Conductor BaZr _{0.5} Ce _{0.3} Ln _{0.2} O ₃ - (Ln=Y, Sm, Gd, Dy) by Using a Solid State Reactive Sintering Method; High Energy Milling of Zirconia: A Systematic Critical Review on the Phase Transformation; Structural and Electrical Properties of (1-x)Pb (Zry Ti _{1-y})O ₃ -xSm(Fe _{3+0.5} , Nb _{5+0.5})O ₃ Ceramics Prepared by Conventional Solid State Synthesis and Sintered at Low Temperature Structural and Electrical Properties of Ca ²⁺ Substituted Pb[(Zr _{0.52} Ti _{0.48}) _{0.98} (Cr _{3+0.5} , Ta _{5+0.5}) _{0.02}] _{0.96} Pb _{0.04} O ₃ Ceramics Soft Synthesis of FAU Nanozeolites and Microporous Membranes; Characteristic and Sinterability of Alumina-Zirconia-Yttria Nanoparticles Prepared by Different Chemical Methods; Ultradispersed Powdery Y ₂ O ₃ -Bi ₂ O ₃ -ZnO Composition with High Chemical Homogeneity for Fine-Grained Ceramics; Preparation of Highly-Dispersed Powders of Cobalt, Nickel, Molybdenum and Tungsten Oxides by Modified Sol-Gel Technique

Development of Highly Dispersed Hybrid Nanoalumina with the Sol-Gel Method
Study of Gamma Alumina Synthesis - Analysis of the Specific Surface Area; Synthesis and Characterization of Nanocomposite HA/-Al₂O₃ Sol-Gel Powders for Biomedical Applications; Effect of Ammonium Sulfate on Morphology of Y₂O₃ Nanopowders Obtained by Precipitation and its Impact on the Transparency of YAG Ceramics; Segregation and Color Change on (Cr,Ca) Codoped Nanocrystalline Tin Dioxide; Microstructural Characterization of Activated Carbon Obtained from Waste Tires

Chapter 2: Colloidal Processing, Shape Forming and Compaction Mechanisms
Transparent Tetragonal Zirconia Ceramics by Colloidal Processing of Nanoparticle Suspension; Composition - Property Relations in Shear Thickening Fluids; Thick Film Processing Challenges in the Realisation of a Co-Fired Solid Oxide Fuel Cell Roll; A Mixed SVD-Neural Network Approach to Optimal Control of Ceramic Mould Manufacturing in Lost Wax Cast Processes; Manufacturing of Porous Ceramic Spheres Using Calcium Phosphates, by a Mechanical Method without Additives or Binders; Chapter 3: Sintering and Related Phenomena

In Situ Platelet Reinforcement of Alumina and Zirconia Matrix Nanocomposites - One Concept, Different Reinforcement Mechanisms
Sol-Gel Derived Mullite-Gahnite Composite; 3D Phase-Field Simulation and Characterization of Microstructure Evolution during Liquid Phase Sintering; Influence of Alumina Addition on Low Temperature Degradation of Y₂O₃-Coated Powder Based Y-TZP Ceramics; Effect of Different Sintering Processes on Microstructure of Alumina Ceramics

Mechanical Characterization of Conventional and Non-Conventional Sintering Methods of Commercial and Lab-Synthesized Y-TZP Zirconia for Dental Applications

Sommario/riassunto

Collection of selected, peer reviewed papers from the 13th International Ceramics Congress, part of CIMTEC 2014-13th International Ceramics Congress and 6th Forum on New Materials, June 8-13, 2014, Montecatini Terme, Italy. The 27 papers are grouped as follows: Chapter 1: Powder Synthesis and Characterization, Chapter 2: Colloidal Processing, Shape Forming and Compaction Mechanisms, Chapter 3: Sintering and Related Phenomena. Temporary description, more details to follow.
