Record Nr. UNINA9910459902503321 **Titolo** 13th International Ceramics Congress: proceedings of 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. Part A / / edited by Pietro Vincenzini, World Academy of Ceramics and National Research Council, Italy; co-edited by Masahiro Yoshimura, National Cheng Kung University, Taiwan Faenza, Italy:,: TTP,, [2014] Pubbl/distr/stampa ©2014 **ISBN** 3-03826-683-3 Descrizione fisica 1 online resource (180 p.) Advances in science and technology, , 1662-8969; ; volume 87 Collana Disciplina 620.14 Soggetti Ceramics Ceramic materials Ceramic engineering Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali 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 BaZr0.5Ce0.3Ln0.2O3- (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 Ti1y)O3-xSm(Fe3+0.5, Nb5+0.5)O3 Ceramics Prepared by Conventional

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 Ti1-y)O3-xSm(Fe3+0.5, Nb5+0.5)O3 Ceramics Prepared by Conventional Solid State Synthesis and Sintered at Low Temperature Structural and Electrical Properties of Ca2+ Substituted Pb[(Zr0.52Ti0. 48)0,98(Cr3+0.5, Ta5+0.5)0,02]0,96 P0,04 O3 CeramicsSoft Synthesis of FAU Nanozeolites and Microporous Membranes; Characteristic and Sinterability of Alumina-Zirconia-Yttria Nanoparticles Prepared by Different Chemical Methods; Ultradispersed Powdery Y2O3-Bi2O3-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 MethodStudy 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 MechanismsTransparent 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
MechanismsSol-Gel Derived Mullite-Gahnite Composite; 3D PhaseField 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 13 th International Ceramics Congress, part of CIMTEC 2014-13 th International Ceramics Congress and 6 th 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.