Record Nr. UNINA9910824655403321 Electroceramics [[electronic resource]]: production, properties and **Titolo** microstructures / / edited by W.E. Lee and A. Bell Pubbl/distr/stampa London, : Institute of Materials, 1994 **ISBN** 1-907625-56-9 Descrizione fisica 1 online resource (354 p.) Collana British ceramic proceedings, , 0268-4373;; no. 52 Book;;564 Altri autori (Persone) LeeW. E BellA Disciplina 620.1404297 Soggetti Electronic ceramics Ceramic materials Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Symposium held in conjunction with Condensed Matter and Materials Physics Conference, 20-23 December 1993, University of Leeds. Includes bibliographical references and indexes. Nota di bibliografia Nota di contenuto Contents; Introductory Statement; The Influence of Crystal Chemistry on the Ferroelectric and Piezoelectric Properties of Perovskite Ceramics; Influence of Structural Defects on Properties of Zirconium Titanate Based Microwave Ceramics; Simulation of the Dielectric Function of Pb (Mg1/3Nb2/3)O3 from the Superparaelectric Model; Chemical Synthesis and Processing of Bismuth Titanate (Bi4Ti3O12)Electroceramics in Thin-Layer Form by a Sol-Gel Method: Sol-Gel Ferroelectric PZT Thin Films for Non-Volatile Memory Applications Effect of Thermal Processing Conditions on the Structure and Properties of Sol-Gel Derived PZT Thin LayersFerroelectric Thin Films for Integrated Device Applications; Sol-Gel Derived PLZT Thin Layers Crystallised with Epitaxy on Surface-Modified Platinum Electrodes: Thin Films of PZT and Ca-Pt Prepared by a Sol-Gel Method; Aqueous and Sol-Gel Synthesis of Submicron PZT Materials and Development of Tape Casting Systems for Multilayer Actuator Fabrication: Dielectric Properties and Ageing of Fe-doped PZT Ceramics Prepared by the **EDTA-Gel Method** Preparation of PLZT Powder by a Citrate Gel TechniqueCitrate Gel Route Processing of ZnO Varistors; Suppression of Zinc Interstitial Ion

Migration in ZnO Due to the Presence of Sodium Ions; Dielectric

Properties of A and B Site Substituted Lead Magnesium Niobate; The Effect of Hot Isostatic Pressing on the Microstructure of Hydrothermally Processed PbTiO 3 Ceramics; Hot Isostatic Pressing of Aurivillius Compounds for High-Temperature Device Applications; Investigation of High-Temperature Piezoelectric Ceramics; 0-3 Piezoceramic-Thermoplastic Polymer Composites

The Morphology of Barium Titanate Powders Produced by the Barium Carbonate-Titanium Dioxide ReactionAqueous Processing of Barium Titanate Powders; The Effect of ZnO Additions on the Structure and Properties of Sr2Nb2O7 Ceramics; Structural and Electrical Characterisation of a New Bismuth Vanadium Oxide; Structure and Electrical Properties of Ceria Based Oxide Ion Conductors Prepared at Low Temperatures: Development and Evaluation of Oxide Cathodes for Ceramic Fuel Cell Operation at Intermediate Temperatures Hydrothermal Synthesis of Strontium Hexaferrite: Powder Composition, Morphology and Magnetic Properties Properties of Reaction Sintered Manganese-Zinc Ferrites; Electrically Conducting Composite Ceramics Produced by Hydrothermal Synthesis; Glass-Ceramic Coatings for Stainless Steel; The Use of Nonlinear Ferroelectric Ceramic Dielectrics in High-Voltage Pulsed Power: D.C. Pre-Breakdown Photon Emission from an Alumina Insulator in Vacuum; Monitoring the Integrity of MOS Gate Oxides: Index: Author Index

Sommario/riassunto

Proceedings of the Symposium held as part of the Condensed Matter and Materials Conference in 1993. Contents include: ferroelectric thin films for integrated device applications; effect of thermal processing conditions on the structure and properties of sol-gel derived PZT thin layers; citrate gel-route processing of ZnO varistors; development and evaluation of oxide cathodes for ceramic fuel cell operation at intermediate temperatures; monitoring the integrity of MOS gate oxides.