1. Record Nr. UNINA9910967543003321

Titolo Electroceramics : production, properties and microstructures / / edited

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Pubbl/distr/stampa London, : Institute of Materials, 1994

ISBN 9781040278390

Edizione [1st ed.]

Descrizione fisica 1 online resource (354 p.)

Collana British ceramic proceedings, , 0268-4373;; no. 52

Book;;564

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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.

Nota di bibliografia Includes bibliographical references and indexes.

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

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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.