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| 1. Record Nr. | UNINA9910830811403321 |
| Titolo | Developments in dielectric materials and electronic devices [[electronic resource]] : proceedings of the 106th Annual Meeting of the American Ceramic Society : Indianapolis, Indiana, USA (2004) // editors, K.M. Nair ... [et al.] |
| Pubbl/distr/stampa | Westerville, Ohio, : American Ceramic Society, c2005 |
| ISBN | 1-280-67403-2 9786613650962 1-118-40818-7 1-118-40819-5 |
| Descrizione fisica | 1 online resource (430 p.) |
| Collana | Ceramic transactions ; ; v. 167 |
| Altri autori (Persone) | NairK. M <1933-> (K. Manikantan) |
| Soggetti | Dielectric devices Dielectrics - Materials Electronics - Materials |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and indexes. |
| Nota di contenuto | Developments in Dielectric Materials and Electronic Devices; Contents; Preface; Material Design, Synthesis & Properties; Hydrothermal Synthesis and Properties of Sodium-Doped Bismuth Titanate Powders; Novel Processing of Functional Ceramic Films by CSD with UV Irradiation; Processing and Dielectric Properties of La(Zn _{1/2} Ti _{1/2})O ₃ and Nd(Zn _{1/2} Ti _{1/2})O ₃ ; Effect of Synthesis Parameters on Nanocrystalline PZT Powder; Nanocrystalline Lead Free Piezoceramic (K _x Na _{1-x})NbO ₃ Derived From Microemulsion Mediated Synthesis; Variable-Temperature Microwave Dielectric Properties of Single-Crystal Fluorides Temperature and Frequency Dependence of Dielectric Properties in BSTThe Optical and Electrical Properties of Nanocrystalline La _{0.4} Sr _{0.6} TiO ₃ Thin Films; Relationship Between Microstructure and Electrical Properties in Various Rare-Earth Doped BME Materials; Effects of Lead Stoichiometry on the Microstructure and Mechanical Properties of PZT 95/5; Microstructure Evolution and Ferroelectric Domains in Nb ₂ O ₅ |

and CaZrO₃ Doped BaTiO₃; Microstructure and Microwave Dielectric Properties of (1-x)ZnNb₂O₆-xZnTa₂O₆ Ceramics
The Synergistic Effects of Nb/Mn and Sb/Mn on the Microstructure and Electrical Characteristics of BaTiO₃ Based Ceramics
Thermoelectric Properties of Ca-Doped (ZnO)mIn₂O₃ Ceramics and Their Improvement Upon Texture; Materials for Electronic Devices; BaTiO₃: From Nanopowders to Dense Nanocrystalline Ceramics; Crystallization, Microstructure and Dielectric Properties of PbO-BaO-SrO-Nb₂O₅-B₂O₃-SiO₂ Based Glass-Ceramics; Polarization Properties and Ferroelectric Distortion of La-Substituted Bi₄Ti₃O₁₂ Ceramics: Comparisons with V- and Nb-Doped Ceramics
Dielectric Ceramics from the TiO₂-TeO₂ and Bi₂O₃-TeO₂ Systems
Origin of High Dielectric Properties of NM-Sized Barium Titanate Crystallites; Piezoelectric Properties of Bismuth Sodium Titanate Ceramics; Nonlead Perovskite Piezoelectric Materials; MEMS Device Arrays Using Thick Composite PZT Films; Thick Piezoelectric Films from Laser Transfer Process; Multilayer Devices Comprised of Piezoceramic Thin Films on Dielectric Substrates; Dielectric Properties and Tunability of (Ba_{1-x}Sr_xTiO₃:MgO Composites; Dynamic Linear Electrooptic Property Influenced by Piezoelectric Resonance in PMN-PT Crystals
Electronic Devices & Applications
Type I Base-Metal Electrode Multilayer Ceramic Capacitors; Properties of FRAM Capacitors with Oxide Electrodes; Impedance Analysis of BME Dielectric Ceramics; Electron Microscopy of Heterogeneous Interfaces in Cofired Noble and Base Metal Electrode Multilayer Ceramic Capacitors (MLCCS); Latex-Ferroelectric Composites; Comparison of Bulk and Thin-Film Ferroelectrics-A Device Perspective; Direct-Charge Capacitor Modeling; Novel BaTiO₃-Ag Composites with Ultra-High Dielectric Constants Satisfying X7R Specifications
Novel Board Material Technology for Next-Generation Microelectronic Packaging

Sommario/riassunto

Papers in this volume include topics such as materials synthesis and processing; relaxors; novel compositions; material design; materials for multilayer electronic devices; processing-microstructure-property relationship; applications; environmental issues; and economic/cost analysis of tomorrow's electronic devices. Includes 38 papers.
