1. Record Nr. UNINA9910141047003321

Titolo	Advances in electroceramic materials II [[electronic resource] /] / edited by K. M. Nair, Shashank Priya
Pubbl/distr/stampa	Hoboken, N.J., : Wiley [Westerville, Ohio], : American Ceramic Society, c2010
ISBN	0-470-93091-8 1-283-91585-5 0-470-93096-9
Descrizione fisica	1 online resource (278 p.)
Collana	Ceramic transactions ; ; v. 221
Altri autori (Persone)	NairK. M <1933-> (K. Manikantan) PriyaShashank
Disciplina	620.1/4/0287 620.14
Soggetti	Electronic ceramics Ceramic materials Electronic books.
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 index.
Nota di contenuto	Advances in Electroceramic Materials II; Contents; Preface; DESIGN, SYNTHESIS AND PROPERTIES; Barium Titanate Stannate Functionally Graded Materials: Choosing of the Ti/Sn Concentration Gradient and the Influence of the Gradient on Electrical Properties; Barium Titanate and Cobalt Ferrite Nano-Particles Decorated SiCN/MWCNT Nanotubes: Synthesis and Microstructural Characterization; Synthesis, Structural and Electrical Properties of the Na0.5Bi0 5TiO3-K0.5Bi0.5TiO3 Ceramic System; Improvement of Electric Properties of (K,Na)NbO3 and (K,Na)(Nb,Ta)O3 Based Lead-Free Piezoelectrics Structural and Electrical Characterization of Lead-Free (1-x)(Na1/2Bi1/2)TiO3-xBaTiO3 Piezoelectric CeramicsTemperature Dependences of Piezoelectric Properties of Textured (Bi1/2K1/2)TiO3-BaTiO3 Lead-Free Piezoelectric Ceramics; Structure and Dielectric Properties of Tellurium Oxide-Based Materials; Dielectric Anisotropy of Ferroelectric Single Crystals in Microwave C-Band by Cavity Vectorial Perturbation Method; Characterization and Microstructure Evolution in

Er-Doped BaTiO3 Ceramics

Improvement of the Dielectric Properties of Tunable (Ba,Sr)TiO3-MgO Composites by Decreasing Heterogeneous DiffusionHigh Thermal Conductivity AIN Materials; Metal-Encapsulation of Ferromagnetic Nanoparticles; APPLICATIONS AND DEVICES; Optical and Electrical Single Crystals for UV/VUV Applications; Microanalyses for Piezoresistive Effect on Actual and Modeled Interfaces of Ru02-Glass Thick Film Resistors; Lead-Free Piezoelectric Materials for Sensors, Capacitors, and Actuators; Processing Issues in Pulse DC Sputtering of Vanadium Oxide Thin Films for Uncooled Infrared Detectors Semiconducting Metal Oxides as Oxygen SensorIntroduction of Embossed Diaphragm in an Integrated Optical and Electronic Sensor; Optical Line Width in Quantum Dots and Nanodevices; DuPontTM Green TapeTM 9K7 Low Temperature Co-fired Ceramic (LTCC) Low Loss Dielectric System for High Frequency Microwave Applications; Polyvinylidene Fluoride (PVDF) Piezoelectric for Intravascular Monitoring of Blood Pressure and Arterial Blood Flow Rate; Indirect Template Method of Magnetic Field Assisted Assembly; Recent Developments in Thermoelectric Metrology at NIST; Author Index

Sommario/riassunto

During the past decades, understanding of the science and technology powering electronic materials has played a major role in satisfying social needs by developing electronic devices for automotive, telecommunications, military, and medical applications. This volume contains a collection of selected papers from the international symposia on Advanced Dielectric Materials and Electronic Devices and Ferroelectrics and Multiferroics presented during the Material Science and Technology conference held in Pittsburgh in October 2009. It is a one-stop resource for academics on the most important issue