1. Record Nr. UNINA9910829950703321

Titolo	Advances and applications in electroceramics [[electronic resource] /] / edited by K.M. Nair, Quanxi Jia, Shashank Priya
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, 2011
ISBN	1-283-24022-X 9786613240224 1-118-14447-3 1-118-14448-1 1-118-14445-7
Descrizione fisica	1 online resource (272 p.)
Collana	Ceramic transactions, , 1042-1122 ; ; v. 226
Altri autori (Persone)	NairK. M JiaQuanxi PriyaShashank
Disciplina	620.14 621.381
Soggetti	Electronic ceramics
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 and Applications in Electroceramics; Contents; Preface; DIELECTRIC MATERIALS AND ELECTRONIC DEVICES; Numerical Simulations of a Back Grinding Process for Silicon Wafers; Sol-Gel Processing of Single Phase BiFeO3 Ceramics: A Structural, Microstructural, Dielectric, and Ferroelectric Study; Electro Ceramic Properties of Porous Silicon Thin Films on P-Type Crystalline Silicon; Tape Cast Dielectric Composites Produced with Camphene as a Freezing Medium; Electronic Transfer between Low-Dimensional Nanosystems Combined Dilatometer-Mass Spectrometer Analysis of the Sintering of Barium TitanateEffect of DC Poling Field on Ferroelectric Properties in Alkali Bismuth Titanate Lead-Free Ceramics; Multifunctional Nature of Modified Iron Titanates and Their Potential Applications; Long-Term Convergence of Bulk- and Nano-Crystal Properties; Influence of Magnetic Flux Density and Sintering Process on the Oriented Structure of C-Axis-Oriented Sr2NaNb5O15 Piezoelectric Ceramics; Sintering of

Defect-Free BaTi0.975Sn0.025O3/BaTi0.85Sn0.15O3 Functionally Graded Materials
Applications of High-Throughput Screening Tools for Thermoelectric MaterialsDEVELOPMENTS IN HIGH TEMPERATURE SUPERCONDUCTORS; Altering Self-Assembly of Second Phase Additions in YBa2Cu3O7-x for Pinning Enhancement; Electrical Properties of Hg0.8Tl0.2Ba2Can-1CunO2n+2 for (n=1-5) HTSC System; Electrodeposited Ag-Stabilization Layer for High Temperature Superconducting Coated Conductors; The Combined Influence of SiC and Rare-Earth Oxides Doping on Superconducting Properties of MgB2 Wires; Fabrication of GdBCO Coated Conductors on Clad-Type Textured Metal Substrates for HTS Cables
Characteristics of Superconducting YBCO Phase Formation through Auto Combustion Citrate-Nitrate Sol-GelChemical Interactions of the Ba2YCu306+x Superconductor with Coated Conductor Buffer Layers; Chemical Tailoring of Electronic Doping in Y1-xGdxBa1.9Sr0.1Cu3O7- High Tc Superconductors; Processing-Property Relations for Y1-xGdxBa2Cu3O7- High Tc Superconductors; MAGNETOELECTRIC MULTIFERROICS; Finite-Size Effects in Nanoscaled Multiferroics
Functionally Graded Piezomagnetic and Piezoelectric Bilayers for Magnetic Field Sensors: Magnetoelectric Interactions at Low-Frequencies and at Bending ModesMagnetic and Electrical Properties of 0.7Bi0.95Dy0.05FeO3-0.3Pb(Fe0.5Nb0.5)O3 Multiferroic; Multiferroic Nanofilm with Bilayer of Pb(Zr0.52Ti0.48)O3 and CoFe2O4 Prepared by Electrophoretic Deposition; MULTIFUNCTIONAL OXIDES; Synthesis and Characterization of Ternary Cobalt Spinel Oxides for Photoelectrochemical Water Splitting to Produce Hydrogen; Author Index

Sommario/riassunto

This book contains 26 papers from the Magnetoelectric Multiferroic Thin Films and Multilayers; Dielectric Ceramic Materials and Electronic Devices; Recent Developments in High-Temperature Superconductivity; and Multifunctional Oxides symposia held during the 2010 Materials Science and Technology (MS&T'10) meeting, October 17-21, 2010, Houston, Texas. Topics include: Properties; Structures; Synthesis; Characterization; Device Applications; Multiferroics and Magnetoelectrics; YBCO Pinning Methods and Properties; YBCO Processing and Reliability Related Issues; New Superconductors and MgB2.