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Nota di contenuto	Advances and Applications in Electroceramics II; Contents; Preface; DIELECTRIC MATERIALS AND ELECTRONIC DEVICES; Dielectric II-VI and IV-VI Metal Chalcogenide Thin Films in Silver Coated Hollow Glass Waveguides (HGWS) for Infrared Spectroscopy and Laser Delivery; Dielectric Properties of Chemically Bonded Phosphate Ceramics Fabricated with Wollastonite Powders; Equivalent Circuit Modeling of Core-Shell Structured Ceramic Materials; Bi2Te3 and Bi2Te3-xSx for Thermoelectric Applications; Optimized Sputtering Parameters for ITO Thin Films of High Conductivity and Transparency Simulation of Enhanced Optical Transmission in Piezoelctric MaterialsEvolution of Microstructure Due to Additives and Processing; Comparison of the Electrical Behavior of AIN-on-Diamond and AIN-on-Si MIS Rectifying Structures; Effect of Nanocrystalline Diamond Deposition Conditions on Si MOSFET Device Characteristics; Study of the Diffusion from Melted Erbium Salt as the Surface-Modifying Technique for Localized Erbium Doping into Various Cuts of Lithium Niobate

Acoustic Wave Velocities Measurement on Piezoelecrtic Ceramics to Evaluate Young's Modulus and Poisson's Ratio for Realization of High PiezoelectricityLong-Term and Light Stimulated Evolution of Semiconductor Properties; Porosification of CaO-B2O3-SiO2 Glass-Ceramics by Selective Etching for Super-Low k LTCC; Mechanochemical Behavior of BaNd2Ti4O12 Powder in Ball Milling for High k Microwave Applications; Evaluation of Electroactive Polymer (EAP) Concept to Enhance Respirator Facial Seal; Effect of Spark Plasma Sintering on the Dielectric Behavior of Barium Titanate Nanoparticles
Relationship between Ordering Ratio and Microwave Q Factor on Indialite/Cordierite Glass CeramicsDielectric Properties of Nb-Rich Potassium Lithium Tantalate Niobate Single Crystals; Electrical Properties of Calcium Titanate:Hydroxyapatite Composites; The Influence of Consolidation Parameters on Grain Contact Surfaces BaTiO3-Ceramics; MAGNETOELECTRIC MULTIFERROIC THIN FILMS AND MULTILAYERS; Ferroic and Structural Investigations in Rare Earth Modified TbMnO3 Ceramics; HR-TEM Investigations in BiFeO3-PbTiO3 Multifunctional Ceramics; MULTIFUNTIONAL OXIDES
Modified Pechini Synthesis of La Doped Hexaferrite Co2Z with High PermeabilityZinc Oxide (ZnO) and Bandgap Engineering for Photoelectrochemical Splitting of Water to Produce Hydrogen; Investigation of ZnO:N and ZnO:(AI,N) Films for Solar Driven Hydrogen Production; Author Index

Sommario/riassunto

With contributed papers from the 2011 Materials Science & Technology symposia, this is a useful one-stop resource for understanding the most important issues in the advances and applications of electroceramics. Logically organized and carefully selected, the articles cover the themes of the symposia: Magnetoelectric Multiferroic Thin Films and Multilayers; Dielectric Ceramic Materials and Electronic Devices; and Multifunctional Oxide. An essential reference for government labs and academics in mechanical and chemical engineering, materials and or ceramics, and chemistry.