1. Record Nr. UNINA9910791913603321

Titolo	Materials and applications for sensors and transducers [[electronic resource]] : selected, peer reviewed papers from the 1st International Conference on Materials and Applications for Sensors and Transducers (IC-MAST), May 13-17 2011, Kos Island, Greece / / edited by E. Hristoforou and D.S. Vlachos
Pubbl/distr/stampa	Durnten-Zurich, : Trans Tech, 2012
ISBN	3-03813-683-2
Descrizione fisica	1 online resource (372 p.)
Collana	Key engineering materials, , 1013-9826 ; ; v. 495
Altri autori (Persone)	HristoforouE VlachosD. S
Disciplina	681.2
Soggetti	Detectors - Materials Detectors - Industrial applications Transducers - Materials Transducers - Industrial applications
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	Materials and Applications for Sensors and Transducers; Preface, Organizers and Committees; Table of Contents; Study of the early Stage of Deposition Process for Electrodeposited Ni100-XFeX Thin Films; Electrical Permittivity of Polyvinylidene Fluoride Nanocomposites Filled with Organoclay and Graphite Nanoplatelets: Compared and Contrasted; Sensing Element Made of Multi-Wall Carbon Nanotube Network for Organic Vapor Detection; Effect of Substrate Temperature on Microstructural Characteristics of Thermal Sprayed Superalloys Silver-Rutile UV Sensor Fabricated on Thermally Oxidized Titanium Foil Marketing Dynamic Simulation Modelling in High Tech Laboratories; Metamaterial Sensor Based on WGM; Fabrication of Carbon Nanotube/Low Density Polyethylene Composites for Strain Sensing; Nanostructures of Water Molecules in Iteratively Filtered Water; Metrological Performances of Smart Structures Based on Bragg Grating Sensors; Cyclodextrin-Based Supramolecular Multilayer Assemblies for the Design of Biological Optical Sensors Using Tilted Fiber Bragg

Gratings

Cyclodextrin-Based Supramolecular Multilayer Assemblies for the Design of Chemical Optical Sensors Using Tilted Fiber Bragg GratingsMetrological Performances of Fiber Bragg Grating Sensors and Comparison with Electrical Strain Gauges; New Ti-Alloy with Negative and Zero Thermal Expansion Coefficients; Performance Optimization in Switched Reluctance Motor Drives; Magnetoelastic Viscosity Sensor for Lubricant Oil Condition Monitoring; Optical Electronic Nose Based on Fe (III) Complex of Porphyrins Films for Detection of Volatile Compounds Detection of Formaldehyde Using Plasmonic Properties of Gold Nanoparticles Improved Selectivity of Oxidized Multiwall Carbon Nanotube Network for Detection of Ethanol Vapor; Polymer Coated Microfabricated Interdigitated Electrodes Arrays for Gas Sensing Applications; Using the Own Flexibility of a Climbing Robot as a Double Force Sensor; Study and Application of Micrometric Alignment on the Prototype Girders of the CLIC Two-Beam Module; Oxhydroelectric Effect: Electricity from Water by Twin Electrodes; Experimental Evidence of a Neutron Flux Generation in a Plasma Discharge Electrolytic Cell Growth, Structural and Mechanical Characterization and Reliability of Chemical Vapor Deposited Co and Co3O4 Thin Films as Candidate Materials for Sensing ApplicationsThreshold Voltage and Sub-Threshold Slope Variation with Gate-Length in Al2O3/InAlAs/InGaAs Quantum Well (QW) FET's; Development of an Electrochemical Maltose Biosensor; Radiation Dosimeter Based on Metal-Oxide-Semiconductor Structures Containing Silicon Nanocrystals; Water Plasma Modes and Nuclear Transmutations on the Metallic Cathode of a Plasma Discharge Electrolytic Cell; SHM System Based on ANN for Aeronautical Applications

Qualitative and Quantitative Architecture Characterisation of Porous Materials

Sommario/riassunto

ICMAST-2011 is an international interdisciplinary conference which covers research and development in the field of materials science; especially those materials which are used for sensors, actuators, and all kinds of transducers. ICMAST-2011 aims to bring together scientists, engineers and product designers in order to fill the gap between research and development. The topics covered by ICMAST-2011 include: new materials development, fabrication technology, sensing principles and mechanisms, actuators, optical devices, electrochemical devices, mass-sensitive devices, gas sensors, biosensors, a