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| Titolo                  | Disclosing materials at the nanoscale : proceedings of the International Symposium "Disclosing Materials at the Nanoscale" of CIMTEC 2006 - 11th International Ceramics Congress and 4th Forum on New Materials, held in Acireale, Sicily, Italy on June 4-9, 2006 // edited by P. Vincenzini, World Academy of Ceramics and National Research Council, Italy, G. Marletta, University of Catania, Italy  |
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| Altri autori (Persone)  | VincenziniP<br>MarlettaG  |
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| Nota di contenuto       | Disclosing Materials at the Nanoscale; Committee; Preface; Table of Contents; Session 1 - Synthesis, Functionalization and Properties of Nanomaterials; Direct Synthesis of Tungsten Oxide Nanowires on Microscope Cover Glass; Electrochemical Control of the Magnetic Properties of Co and CoCu/Co Nanowires; In Situ Observation of Quantized Growth of Titanium Silicide in Ultra High Vacuum Transmission Electron Microscope (UHV-TEM); Nanocrystalline TiO <sub>2</sub> for Solar Cells and Lithium Batteries<br>Synthesis and Characterization of Mesostructured Silicas and Gold Frameworks as Active Matrices for Biomolecule Encapsulation<br>Synthesis and Cathodoluminescence Study of Well-Aligned Planar-Tip and Tapered-Tip ZnO Nanorods; Self-Assembled Low-Resistivity NiSi Nanowire Arrays on Epitaxial Si <sub>0.7</sub> Ge <sub>0.3</sub> on (001)Si; Preparation and Cathodoluminescence Properties of Ga-Doped ZnS Nanowalls; Nanoparticles of La(1-x)SrxMnO <sub>3</sub> (x = 0.33, 0.20) Assembled into Hollow Nanostructures for Solid Oxide Fuel Cells; Preparation of SiC |

Nanofibers by Using the Polymer Blend Technique

Investigation on the Reinforcement of Multi-Walled Carbon Nanotubes on Alumina Matrix Template Synthesis of Nanostructured Carbons; Characterization of Fullerene / TriA-PI Composites; Session 2 - Nanoscale Characterization and Techniques; Carbon-Based and Other Nanostructures Obtained via Cluster-Assembling: A View Combining Electron Spectroscopies and Nanospectroscopies; Probing the Role of Nanoroughness in Contact Mechanics by Atomic Force Microscopy; Structural Modification of Doped and Undoped Nanocrystalline TiO<sub>2</sub> by Temperature-Resolved XRPD ; Session 3 - Nanomanufacturing and Tools

Patterned 2D and 3D Assemblies of Nanoparticles on Molecular Printboards Sub-Wavelength Texturing for Solar Cells Using Interferometric Lithography ; Some Investigations on Gallium Arsenide MEMS. Simulation of Microstructure Shapes ; Session 4 - Theory, Modelling and Simulation; Dependence of Adhesion and Reflection on Orientation in Nanocluster Deposition; Many-Scale Simulation of ABS/PC Blends for the Automotive Industry ; Molecular Dynamics Simulation of Organic Molecules Distorted Conformation in Zeolites ; Session 5 - R&D Advances in Devices and Applications  
Nanotubes Based Composites for Energy Storage in Supercapacitors  
Nanocrystals in High-k Dielectric Stacks for Non-Volatile Memory Applications; Simulation of the Growth of Copper Films for Micro and Nano-Electronics; Industrial Ink-Jet Application of Nano-Sized Ceramic Inks ; Evolution of Pt Nanoclusters Morphology on PEMFC Electrode due to Methanol Oxidation Reaction Studied by Electron Microscopy and Synchrotron Grazing Incidence X-Ray Diffraction; Nanostructured Films of Polyphthalocyanines for Sensor Applications ; LGS and LGN Microresonators: Applications to High Temperature Nanobalances  
Humidity Sensors Based on Nanostructured Materials

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**Sommario/riassunto**

This collection presents 31 papers. Altogether, the collection offers a wealth of up-to-date information on Disclosing Materials at the Nanoscale.

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