

1. Record Nr.	UNINA9910787245203321
Titolo	6th Forum of New Materials : proceedings of the 6th Forum on New Materials, part of CIMTEC 2014-13th International Ceramics Congress and 6th Forum on New Materials, June 15-19, 2014, Montecatini Terme, Italy. Part C / / edited by Pietro Vincenzini, World Academy of Ceramics and National Research Council, Italy ; co-edited by Yury Gogotsi, Drexel University, USA [and three others]
Pubbl/distr/stampa	Faenza, Italy : , : TTP, , [2014] ©2014
ISBN	3-03826-692-2
Descrizione fisica	1 online resource (218 p.)
Collana	Advances in science and technology, , 1662-8969 ; ; volume 95
Disciplina	620.14
Soggetti	Ceramics Ceramic materials Ceramic engineering
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	6th Forum on New Materials - Part C; Preface; Table of Contents; Chapter 1: Novel Functional Carbon Nanomaterials; Thermionic and Photon-Enhanced Emission from CVD Diamond: Influence of Nanostructure, Doping, and Substrate; Research of Diamond-Like Carbon Film Deposited by Double Pulsed Lasers; Evolution of Cu Surface Morphology and its Effect on Graphene Synthesized by Chemical Vapor Deposition; Liquid Crystal Assisted Selective Separation of Large Graphene Oxide and its Size Dependent Oxygen Reduction Catalytic Effect; The Possibilities of Graphenes Application in Textronic Devices Improvement of Performance of Paper Transistor Using Carbon-Nanotube-Composite Paper and its Application to Logic Circuit Development of Carbon-Nanotube Composite Thread and its Application to ""Thread Transistor""; Energy Gap Associated to Photocatalytic Activity of MWCNT/TiO ₂ /ZnO Nanocomposites; Carbon Coils-Polyurethane Composites for the Shielding Materials of Electromagnetic Interference; Chapter 2: Transport in Inorganic

Materials; The Influence of the Exterior Surface on Grain Boundary Mobility Measurements; Protonic SOFCs Using Perovskite-Type Conductors

Vacancy Diffusion under a Stress and Kinetic of Nanovoid Growth in Cubic MetalsChapter 3: Non-Volatile Inorganic Memory Devices; Two-Terminal Non-Volatile Memory Devices Using Silicon Nanowires as the Storage Medium; Extraction of Filament Properties in Resistive Random Access Memory (ReRAM) Consisting of Binary-Transition-Metal-Oxides; Elucidation of Metal Diffusion Mechanism in Conducting-Bridge Random Access Memory (CB-RAM) Using First-Principle Calculation; Resistive Switching Behavior in Undoped -Fe₂O₃ Film with a Low Resistivity

Two Terminal Non-Volatile Memory Devices Using Diamond-Like Carbon and Silicon NanostructuresSwitching in Polymer Memory Devices Based on Polymer and Nanoparticles Admixture; Thermal Properties of In-Sb-Te Thin Films for Phase Change Memory Application; Thermal Conductivity Measurement of a Sb₂Te₃ Phase Change Nanowire; MRAM Concepts for Sub-Nanosecond Switching and Ultimate Scalability; Doped Hafnium Oxide - An Enabler for Ferroelectric Field Effect Transistors; Integration of STT-MRAMs for Embedded Cache Memories; Chapter 4: Novel Superconducting Materials

Superconductivity at T_c = 36.5 K in Na-Substituted SrFe₂As₂ Single CrystalsRole of Mg-B-O Nanostructural Inhomogenities on the Performance of Superconducting MgB₂; Microwave Measurements of Surface Resistance and Complex Conductivity of Nd₂Ba₂Cu₃O₇ Films; Critical Current Density and Pinning Energy of Partial Melted Sm-Based Superconductor; Critical Current of Bi-2212 Single Crystal by Doping Oxides as a Pinning Center; High Critical Currents in Single Grain YBa₂Cu₃O_y Bulk Superconductors Produced by Infiltration-Growth Development of Density Functional Theory for Plasmon-Assisted Superconductivity

Sommario/riassunto

Collection of selected, peer reviewed papers from the 6 th Forum on New Materials, part of CIMTEC 2014-13th International Ceramics Congress and 6 th Forum on New Materials, June 15-19, 2014, Montecatini Terme, Italy. The 32 papers are grouped as follows: Chapter 1: Novel Functional Carbon Nanomaterials, Chapter 2: Transport in Inorganic Materials, Chapter 3: Non-Volatile Inorganic Memory Devices, Chapter 4: Novel Superconducting Materials.
