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Descrizione fisica	1 online resource (1000 p.)
Collana	Advanced Materials Series
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Soggetti	Molecular electronics - Materials Nanostructured materials Metallic oxides
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Part 1. Functional metal oxides : architecture, design, and applications -- Development of toxic chemicals sensitive chemiresistors based on metal oxides, conducting polymers and nanocomposites thin films -- The synthetic strategy for developing mesoporous materials through nanocasting route -- Spray pyrolysis of nano-structured optical and electronic materials -- Multifunctional spinel ferrite nanoparticles for biomedical application -- Heterostructures based on TiO <sub>2</sub> and silicon for solar hydrogen generation -- Studies on electrochemical properties of MnO <sub>2</sub> and CuO decorated multi-walled carbon nanotubes as high-performance electrode materials -- Part 2. Multifunctional hybrid materials : fundamentals and frontiers -- Discotic liquid crystalline dimers : chemistry and applications -- Supramolecular nanoassembly and its potential -- Carbon-based hybrid composites as advanced electrodes for supercapacitors -- Synthesis, characterization, and uses of novel-architecture copolymers through gamma radiation technique -- Advanced composite adsorbents : chitosan versus graphene -- Antimicrobial biopolymers -- Organometal halide perovskites for photovoltaic applications.

Part 1. Functional metal oxides : architecture, design, and applications  
-- Part 2. Multifunctional hybrid materials : fundamentals and frontiers.

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