

1. Record Nr.	UNINA9910140644703321
Titolo	Advanced functional materials // edited by Ashutosh Tiwari and Lokman Uzun
Pubbl/distr/stampa	Hoboken, New Jersey : , : Scrivener Publishing : , : Wiley, , 2015 ©2015
ISBN	1-118-99898-7 1-118-99897-9
Descrizione fisica	1 online resource (1000 p.)
Collana	Advanced Materials Series
Disciplina	620.11
Soggetti	Molecular electronics - Materials Nanostructured materials Metallic oxides
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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.

