1. Record Nr. UNINA9910149487703321

Titolo	Conducting Polymer Hybrids / / edited by Vijay Kumar, Susheel Kalia, Hendrik C. Swart
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (V, 336 p. 195 illus., 135 illus. in color.)
Collana	Springer Series on Polymer and Composite Materials, , 2364-1878
Disciplina	541.2254
Soggetti	Polymers Optical materials Electronics - Materials Ceramics Glass Composite materials Electrochemistry Nanochemistry Polymer Sciences Optical and Electronic Materials Ceramics, Glass, Composites, Natural Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	From the Contents: Conducting polymer nanocomposites: recent developments and future prospects -- Polymer composites based on conducting metallic nanofillers -- Conducting polymer composites with magnetic nanoparticles.
Sommario/riassunto	This book presents a comprehensive survey about conducting polymers and their hybrids with different materials. It highlights the topics pertinent to research and development in academia and in the industry. The book thus discusses the preparation and characterization of these materials, as well as materials properties and their processing. The current challenges in the field are addressed, and an outline on new and even futuristic approaches is given. “Conducting Polymer Hybrids”

is concerned with a fascinating class of materials with the promise for wide-ranging applications, including energy generation and storage, supercapacitors, electronics, display technologies, sensing, environmental and biomedical applications. The book covers a large variety of systems: one-, two-, and three-dimensional composites and hybrids, mixed at micro- and nanolevel.