Record Nr. UNINA9910782886103321 Autore Wan Meixiang <1940-> Titolo Conducting polymers with micro or nanometer structure [[electronic resource] /] / Meixiang Wan Pubbl/distr/stampa Beijing,: Tsinghua University Press Berlin, : Springer, c2008 **ISBN** 9786612048159 1-282-04815-5 3-540-69323-8 Edizione [1st ed. 2008.] Descrizione fisica 1 online resource (306 p.) Classificazione 540 UV 9560 Disciplina 547.70457 620.19204297 Soggetti Conducting polymers Polymers - Structure 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. of Conducting Polymers -- Polyaniline as A Promising Conducting Nota di contenuto Polymer -- Physical Properties and Associated Applications of Conducting Polymers -- Conducting Polymer Nanostructures --Template-Free Method to Conducting Polymer Micro/Nanostructures. Conducting Polymers with Micro or Nanometer Structure describes a Sommario/riassunto topic discovered by three winners of the Nobel Prize in Chemistry in 2000: Alan J. Heeger, University of California at Santa Barbara, Alan G. MacDiarmid at the University of Pennsylvania, and Hideki Shirakawa at the University of Tsukuba. Since then, the unique properties of conducting polymers have led to promising applications in functional materials and technologies. The book first briefly summarizes the main concepts of conducting polymers before introducing micro/nanostructured conducting polymers dealing with their synthesis, structural characterizations, formation mechanisms, physical and chemical properties, and potential applications in nanomaterials

and nanotechnology. The book is intended for researchers in the related fields of chemistry, physics, materials, nanomaterials and

nanodevices. Meixiang Wan is a professor at the Institute of Chemistry, Chinese Academy of Sciences, Beijing.