Record Nr. UNINA9910146055103321 Metal-polymer nanocomposites [[electronic resource] /] / edited by **Titolo** Luigi Nicolais, Gianfranco Carotenuto Pubbl/distr/stampa Hoboken, N.J., : Wiley-Interscience, c2005 **ISBN** 1-280-26540-X 9786610265404 0-470-24535-2 0-471-69542-4 0-471-69543-2 Edizione [1st ed.] Descrizione fisica 1 online resource (320 p.) Altri autori (Persone) NicolaisLuigi CarotenutoGianfranco Disciplina 620.1/6 Soggetti Nanostructured materials Metallic composites Polymeric composites 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 METAL-POLYMER NANOCOMPOSITES; CONTENTS; Preface; Contributors; 1 PHYSICAL AND CHEMICAL PROPERTIES OF NANO-SIZED METAL PARTICLES; 2 METAL-CONTAINING POLYMERS: CRYOCHEMICAL SYNTHESIS, STRUCTURE, AND PHYSICOCHEMICAL PROPERTIES; 3 CONTROLLED PYROLYSIS OF METAL-CONTAINING PRECURSORS AS A WAY FOR SYNTHESIS OF METALLOPOLYMER NANOCOMPOSITES: 4 NANOSTRUCTURED POLYMERIC NANOREACTORS FOR METAL NANOPARTICLE FORMATION: 5 METAL-POLYMER NANOCOMPOSITE SYNTHESIS: NOVEL EX SITU AND IN SITU APPROACHES; 6 PLAMON ABSORPTION OF EMBEDDED NANOPARTICLES 7 MAGNETOOPTICS OF GRANULAR MATERIALS AND NEW OPTICAL METHODS OF MAGNETIC NANOPARTICLES AND NANOSTRUCTURES **IMAGING8 OPTICAL EXTINCTION OF METAL NANOPARTICLES** SYNTHESIZED IN POLYMER BY ION IMPLANTATION; 9 OPTICALLY ANISOTROPIC METAL-POLYMER NANOCOMPOSITES: Index

A unique guide to an essential area of nanoscience Interest in nano-

Sommario/riassunto

sized metals has increased greatly due to their special characteristics and suitability for a number of advanced applications. As technology becomes more refined-including the ability to effectively manipulate and stabilize metals at the nanoscale-these materials present evermore workable solutions to a growing range of problems. Metal-Polymer Nanocomposites provides the first guide solely devoted to the unique properties and applications of this essential area of nanoscience. It offers a truly multidiscipli