Record Nr. UNINA9910824535603321 Low-dimensional solids [[electronic resource] /] / edited by Duncan W. **Titolo** Bruce, Dermot O'Hare, Richard I. Walton Pubbl/distr/stampa Hoboken, N.J., : Wiley, 2010 **ISBN** 1-282-77308-9 9786612773082 0-470-66140-2 0-470-66139-9 Descrizione fisica 1 online resource (310 p.) Collana Inorganic materials series Altri autori (Persone) BruceDuncan W O'HareDermot WaltonRichard I Disciplina 620/.5 Soggetti **Nanotubes Nanowires** Metallic oxides Inorganic compounds Superconducting composites Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Low-Dimensional Solids; Contents; Inorganic Materials Series Preface; Preface; List of Contributors; 1 Metal Oxide Nanoparticles; 2 Inorganic Nanotubes and Nanowires; 3 Biomedical Applications of Layered Double Hydroxides: 4 Carbon Nanotubes and Related Structures: 5 Magnesium Diboride MgB2: A Simple Compound with Important Physical Properties; Index With physical properties that often may not be described by the Sommario/riassunto transposition of physical laws from 3D space across to 2D or even 1D space, low-dimensional solids exhibit a high degree of anisotropy in the spatial distribution of their chemical bonds. This means that they can demonstrate new phenomena such as charge-density waves and can display nanoparticulate (0D), fibrous (1D) and lamellar (2D)

morphologies. This text presents some of the most recent research into

the synthesis and properties of these solids and covers:Metal Oxide NanoparticlesInorganic Nanotubes and Nanowires