Record Nr.	UNINA9910824535603321
Titolo	Low-dimensional solids / / edited by Duncan W. 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
Edizione	[1st ed.]
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
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
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
Sommario/riassunto	With physical properties that often may not be described by the 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