1. Record Nr. UNINA9910483875803321

Titolo	Nanotechnology : Trends and Future Applications / / edited by Muhammad Bilal Tahir, Muhammad Rafique, Muhammad Sagir
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
ISBN	981-15-9437-6
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (143 pages)
Collana	Physics and Astronomy Series
Disciplina	620.5
Soggetti	Nanoscience Nanotechnology Nanochemistry Materials Catalysis Force and energy Nanophysics Nanoscale Design, Synthesis and Processing Nanoengineering Materials for Energy and Catalysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Historical Background, Development and Preparation of Nanomaterials -- Chapter 2. Types and Classifications of Nanomaterials -- Chapter 3. An Insight into the chemistry of nanostructures and their defects -- Chapter 4. Nanostructures: A Solution to quantum computation and energy problems -- Chapter 5. Production of Bioplastics by Different Methods-A Step towards Green Economy -- Chapter 6. Challenges and Future Prospects .
Sommario/riassunto	This book presents the basic and fundamental aspects of nanomaterials, its types, and classifications with respect to different factors. It contains methods of preparation and characterization of unique nanostructured materials. Consisting of six chapters, this book appeals to a wide readership from academia and industry professionals and is also useful to undergraduate and graduate students focusing on

nanotechnology and nanomaterials, sustainable chemistry, energy conversion and storage, environmental protection, opto-electronics, sensors, and surface and interface science. It also appeals to readers who wish to know about the design of new types of materials with controlled nanostructures.