1. Record Nr. UNINA9910962016803321

Titolo	Quantum nanosystems : structure, properties, and interactions / / edited by Mihai V. Putz, PhD
Pubbl/distr/stampa	Waretown, NJ : , : Apple Academic Press, Inc. Boca Raton, FL : , : CRC Press, , [2015] ©2015
ISBN	0-429-15656-1 1-926895-90-8
Edizione	[First edition.]
Descrizione fisica	1 online resource (512 p.)
Disciplina	620.5
Soggetti	Nanotechnology Quantum systems
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 at the end of each chapters.
Nota di contenuto	Front Cover; About the Editor; Contents; List of Contributors; List of Abbreviations; List of Symbols; Preface; Foreword; Chapter 1: Nanouniverse Expanding Macrouniverse: From Elementary Particles to Dark Matter and Energy; Chapter 2: Inerton Field Effects in Nanosystems; Chapter 3: Non-Classical Properties of Classical Nanostructures; Chapter 4: Exotic Multi-Shell Nanostructures; Chapter 5: The Self-Assembly of Porphyrin Derivatives into 2D and 3D Architectures; Chapter 6: Recent Trends in Nano-Optomechanical Systems; Chapter 7: Magnetic Anisotropy in Case Studies Chapter 8: Functional Supramolecular Systems Controlled by LightChapter 9: Novel Parallel Stacking Interactions of Aromatic Molecules; Chapter 10: Nanochips for Mass Spectrometry and Applications in Biomedical Research; Chapter 11: The "How-To" Guide to Computational Crystallography
Sommario/riassunto	The need for economically feasible and multifunctional materials becomes more acute as the natural physical and chemical resources reveal either their limits or reveal the difficulties and increasing costs in storage, transport, and conversion. This reference presents the work from contributors from various fields, of various ages and from

different countries, creating a valuable collection of research that will advance the fundamental and innovative techniques of nanosystems and their interactions. The authors cover self-assembly, self-regenerating, storage, and directional properties of inte