Record Nr. UNINA9910787851303321 Autore Thomas Sabu Titolo Foundations of nanotechnology: nanoelements formation and interaction / / Sabu Thomas, PhD, Saeedeh Rafiei, Shima Maghsoodlou, and Arezo Afzali Pubbl/distr/stampa Waretown, N.J.:,: Apple Academic Press, Inc.,, 2015 ©2015 **ISBN** 1-77463-105-9 0-429-17063-7 1-77188-028-7 [First edition.] Edizione Descrizione fisica 1 online resource (411 p.) AAP Research Notes on Nanoscience & Nanotechnology Collana Disciplina 620.5 Soggetti Nanotechnology 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. Nota di contenuto Front Cover; ABOUT AAP RESEARCH NOTES ON NANOSCIENCE & NANOTECHNOLOGY: BOOKS IN THE AAP RESEARCH NOTES ON NANOSCIENCE & NANOTECHNOLOGY BOOK SERIES; ABOUT THE AUTHORS; CONTENTS; LIST OF ABBREVIATIONS; LIST OF SYMBOLS; PREFACE: CHAPTER 1: NANOSCALE SCIENCE AND TECHNOLOGY: AN OVERVIEW: CHAPTER 2: NANOELEMENT MANUFACTURING: SELF-ASSEMBLY: CHAPTER 3: NANOMATERIALS: PROPERTIES AND APPLICATION: CHAPTER 4: MODELING AND SIMULATION: CHAPTER 5: MOLECULAR SIMULATION FORNANOMATERIALS; CHAPTER 6: NUMERICAL SIMULATION OF NANOELEMENTS; CHAPTER 7: NUMERICAL STUDY OF AXIAL AND COAXIAL ELECTROSPINNING PROCESS The collection of topics in this book reflects the diversity of recent Sommario/riassunto advances in nanoelements formation and interactions in nanosystems with a broad perspective that is useful for scientists as well as for graduate students and engineers. One of the main tasks in making nanocomposites is building the dependence of the structure and shape of the nanoelements, forming the basis for the composite of their

sizes. This is because with an increase or a decrease in the specific size of nanoelements, their physical-mechanical properties such as the

coefficient of elasticity, strength, and deformatio