

|                         |   |
|-------------------------|---|
| 1. Record Nr.           | UNINA9910465661003321   |
| Titolo                  | Global tuberculosis control [[electronic resource] ] : WHO report 2010  |
| Pubbl/distr/stampa      | Geneva, : World Health Organization, 2010   |
| ISBN                    | 1-282-94461-4<br>9786612944611<br>92-4-068576-6   |
| Descrizione fisica      | 1 online resource (217 p.)  |
| Soggetti                | Tuberculosis - Prevention<br>Tuberculosis - Epidemiology<br>Electronic books.   |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | "WHO/HTM/TB/2010.7".  |
| Nota di bibliografia    | Includes bibliographical references.  |
| Nota di contenuto       | COVER; TITLE; COPYRIGHT; CONTENTS; ABBREVIATIONS;<br>Acknowledgements; Summary; Introduction; Conclusions; Annexes  |
| Sommario/riassunto      | The World Health Organization (WHO) has published an annual report on global control of tuberculosis (TB) every year since 1997. The main purpose of the report is to provide a comprehensive and up-to-date assessment of the TB epidemic and progress made in TB care and control at global, regional and country levels. This fifteenth annual report contains more up-to-date information than any previous report in the series, following earlier data collection and the completion of the production cycle within a calendar year. This report includes the same wealth of information as previous reports in the |

|                         |  |
|-------------------------|--|
| 2. Record Nr.           | UNINA9910132204703321  |
| Titolo                  | Advanced sensor and detection materials // edited by Ashutosh Tiwari and Mustafa M. Demir ; cover design by Russell Richardson   |
| Pubbl/distr/stampa      | Hoboken, New Jersey : , : Wiley, , 2014<br>©2014   |
| ISBN                    | 1-118-77409-4<br>1-118-77403-5<br>1-118-77370-5  |
| Descrizione fisica      | 1 online resource (535 p.)   |
| Collana                 | Advanced Material Series   |
| Disciplina              | 681.2  |
| Soggetti                | Detectors<br>Detectors - Materials   |
| 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 and index.   |
| Nota di contenuto       | Cover; Title Page; Copyright Page; Contents; Preface; Part 1: Principals and Prospective; 1 Advances in Sensors' Nanotechnology; 1.1 Introduction; 1.2 What is Nanotechnology?; 1.3 Significance of Nanotechnology; 1.4 Synthesis of Nanostructure; 1.5 Advancements in Sensors' Research Based on Nanotechnology; 1.6 Use of Nanoparticles; 1.7 Use of Nanowires and Nanotubes; 1.8 Use of Porous Silicon; 1.9 Use of Self-Assembled Nanostructures; 1.10 Receptor-Ligand Nanoarrays; 1.11 Characterization of Nanostructures and Nanomaterials; 1.12 Commercialization Efforts; 1.13 Future Perspectives; References<br>2 Construction of Nanostructures: A Basic Concept Synthesis and Their Applications<br>2.1 Introduction; 2.1.1 Importance of Nanomaterials; 2.1.2 Synthetic Methods; 2.2 Formation of Zinc Oxide Quantum Dots (ZnO-QDs) and Their Applications; 2.3 Needle-Shaped Zinc Oxide Nanostructures and Their Growth Mechanism; 2.4 Flower-Shaped Zinc Oxide Nanostructures and Their Growth Mechanism; 2.5 Construction of Mixed Shaped Zinc Oxide Nanostructures and Their Growth Mechanism; 2.6 Summary and Future Directions; References;<br>3 The Role of the Shape in the Design of New Nanoparticles; 3.1 Introduction |

3.1.1 The Importance of Shape and Size in the Design of New Nanoparticles  
3.2 The Importance of Shape as Nanocarriers; 3.2.1 Targeting and Shape; 3.3 Influence of Shape on Biological Process; 3.3.1 Biodistribution; 3.3.2 Phagocytosis; 3.3.3 Cytotoxicity; 3.4 Different Shapes of Polymeric Nanoparticles; 3.4.1 Synthesis; 3.4.2 Classification by Synthesis Method; 3.4.3 Classification by Initial Shape; 3.5 Different Shapes of Non-Polymeric Nanoparticles; 3.5.1 Gold Nanorods; 3.5.2 Carbon Nanotubes; 3.5.3 Fullerenes; 3.6 Different Shapes of Polymeric Nanoparticles: Examples; 3.6.1 Hexagonal Form 3.6.2 Toroidal 3.6.3 Conical; 3.6.4 Ellipsoids; 3.6.5 Disks; 3.7 Another Type of Nanoparticles; 3.7.1 Electrospun; 3.7.2 Vesicles; Acknowledgments; References; 4 Molecularly Imprinted Polymer as Advanced Material for Development of Enantioselective Sensing Devices; 4.1 Introduction; 4.2 Molecularly Imprinted Chiral Polymers; 4.3 MIP-Based Chiral Sensing Devices; 4.3.1 Electrochemical Chiral Sensor; 4.3.2 Optical Chiral Sensors; 4.3.3 Piezoelectric Chiral Sensing Devices; 4.4 Conclusion; References; 5 Role of Microwave Sintering in the Preparation of Ferrites for High Frequency Applications 5.1 Microwaves in General 5.2 Microwave-Material Interactions; 5.3 Microwave Sintering; 5.4 Microwave Equipment; 5.5 Kitchen Microwave Oven Basic Principle; 5.6 Microwave Sintering of Ferrites; 5.7 Microwave Sintering of Garnets; 5.8 Microwave Sintering of Nanocomposites; References; Part 2: New Materials and Methods; 6 Mesoporous Silica: Making "Sense" of Sensors; 6.1 Introduction to Sensors; 6.2 Fundamentals of Humidity Sensors; 6.3 Types of Humidity Sensors; 6.4 Humidity Sensing Materials; 6.5 Issues with Traditional Materials in Sensing Technology; 6.6 Introduction to Mesoporous Silica 6.7 M41S Materials

---

## Sommario/riassunto

The development of sensors at macroscopic or nanometric scales in solid, liquid, or gas phases, contact or noncontact configurations, has driven the research of sensor & detection materials and technology into high gear. The emphasis on detection techniques requires the use of spin crossover organic, inorganic and composite materials and methods that could be unique for sensors fabrication. The influence of length, composition and conformation structure of materials on their properties and the possibilities to adjust sensing properties by doping or addin

---