1. Record Nr. UNISA996387109303316

Autore	Millington Edward <d. 1703.>
Titolo	A catalogue of books [[electronic resource]] : viz. [brace] divinity, history, philology [brace] poetry and plays, romances and novels, voyages and travels, &c. [brace] : together with volumes of bound tracts, and sermons, contained in the library of a learned and eminent citizen of London, sometime-since deceased : which will be sold by auction at the Black-Swan in St. Paul's Church-yard, over against the south-door of St. Paul's Church, amongst the wollen-drapers, on Monday the 12th day of this instant March, 1687/8
Pubbl/distr/stampa	[London, : s.n., 1688]
Descrizione fisica	[2], 45, [2] p
Soggetti	Catalogs, Booksellers' - England - London
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Imperfect: stained, cropped, worn, with slight loss of text. "Catalogues are distributed gratis, by Mr. Wilkinson at the Black-Boy in Fleetstreet. Mr. W. Miller at the Acorn, in St. Paul's Church- yard. At the Black-Boy Coffee-House in Ave-Mary-Lane. And at Bridges Coffee-House over against the Exchange in Cornhil." Reproduction of original in the Bodleian Library.
Sommario/riassunto	eebo-0014

2. Record Nr. UNINA9911006885403321

Autore	Leonard Francois <1972->
Titolo	The physics of carbon nanotube devices / / Francois Leonard
Pubbl/distr/stampa	Norwich, NY, : William Andrew, c2009
ISBN	9786612253294 9786612027628 9786612027857 9786612169304 9780815519683 0815519680 9780080947549 0080947549 9781282027855 1282027859
Edizione	[1st edition]
Descrizione fisica	1 online resource (xii, 296 pages)
Collana	Micro & nano technologies
Disciplina	620.5 620.193
Soggetti	Electronic apparatus and appliances - Materials Nanotubes - Electric properties Nanotubes - Analysis Microphysics Fullerenes - Structure
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	Front Cover; The Physics of Carbon Nanotube Devices; Copyright Page; Contents; Series Editor's Preface; Preface; Chapter 1. Introduction; 1.1 Structure of Carbon Nanotubes; 1.2 Electronic Properties of Carbon Nanotubes; 1.3 Phonon Spectra; References; Chapter 2. Metallic Carbon Nanotubes for Current Transport; 2.1 Introduction; 2.2 Low Bias Transport; 2.3 High Bias Transport; 2.4 Capacitance and Inductance; References; Chapter 3. Physics of Nanotube/Metal Contacts; 3.1 Introduction; 3.2 End-Bonded Contacts; 3.3 Side Contacts; 3.4 Contacts

to Metallic Carbon Nanotubes

3.5 Metal/Oxide/Nanotube ContactsReferences; Chapter 4. Electronic Devices; 4.1 Introduction; 4.2 Rectifiers; 4.3 Field-Effect Transistors; References; Chapter 5. Electromechanical Devices; 5.1 Bending; 5.2 Uniaxial and Torsional Strain; 5.3 Radial Deformation; 5.4 Devices; References; Chapter 6. Field Emission; 6.1 Introduction; 6.2 Adsorbates; 6.3 Nanotube Arrays; 6.4 Failure Mechanism; 6.5 Devices; References; Chapter 7. Optoelectronic Devices; 7.1 Introduction; 7.2 Optical Properties; 7.3 Photoconductivity; 7.4 Electroluminescence; 7.5 Optical Detection with Functionalized Nanotubes ReferencesChapter 8. Chemical and Biological Sensors; 8.1 Sensing Mechanisms; 8.2 Liquid Gating; 8.3 Functionalized Nanotubes; References; Index; Micro & Nano Technologies

Sommario/riassunto

Possibly the most impactful material in the nanotechnology arena, carbon nanotubes have spurred a tremendous amount of scientific research and development. Their superior mechanical and chemical robustness makes them easily manipulable and allows for the assembly of various types of devices, including electronic, electromechanical, opto-electronic and sensing devices. In the field of nanotube devices, however, concepts that describe the properties of conventional devices do not apply. Carbon nanotube devices behave much differently from those using traditional materials, and offer entirely new functionality. This book – designed for researchers, engineers and graduate students alike – bridges the experimental and theoretical aspects of carbon nanotube devices. It emphasizes and explains the underlying physics that govern their working principles, including applications in electronics, nanoelectromechanical systems, field emission, optoelectronics and sensing. Other topics include: electrical contacts, p-n junctions, transistors, ballistic transport, field emission, oscillators, rotational actuators, electron-phonon scattering, photoconductivity, and light emission. Many of the aspects discussed here differ significantly from those learned in books or traditional materials, and are essential for the future development of carbon nanotube technology. • Bridges experimental and theoretical aspects of carbon nanotube devices, focusing on the underlying physics that govern their working principles • Explains applications in electronics, nanoelectromechanical systems, field emission, optoelectronics and sensing. • Other topics include: electrical contacts, p-n junctions, transistors, ballistic transport, field emission, oscillators, rotational actuators, electron-phonon scattering, photoconductivity, and light emission. • Covers aspects that significantly differ from those learned in traditional materials, yet are essential for future advancement of carbon nanotube technology.