

1.	Record Nr.	UNINA990006470480403321
	Autore	Bouvier, Paule
	Titolo	L'accession du Congo belge a l'indépendance : essays d'analyse sociologique / Paule Bouvier
	Pubbl/distr/stampa	Bruxelles : Institut de Sociologie, 1965
	Descrizione fisica	390 p. ; 22 cm
	Disciplina	967.5
	Locazione	FSPBC
	Collocazione	XIV E 1397
	Lingua di pubblicazione	Italiano
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNISA996551141903316
	Autore	Hardwick
	Titolo	Classics in Post-Colonial Worlds
	Pubbl/distr/stampa	Oxford University Press, 2007
	ISBN	1-4356-1014-8 0-19-153784-5 1-281-15500-4 9786611155001 0-19-959132-6 0-19-171213-2
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

3. Record Nr.	UNINA9910957881203321
Autore	Petty Michael C
Titolo	Molecular electronics : from principles to practice / / Michael C. Petty
Pubbl/distr/stampa	Chichester, England ; ; Hoboken, NJ, : John Wiley & Sons, c2007
ISBN	1-282-12308-4 9786612123085 0-470-72388-2
Edizione	[1st ed.]
Descrizione fisica	1 online resource (548 p.)
Collana	Wiley series in materials for electronic and optoelectronic applications
Disciplina	621.381
Soggetti	Molecular electronics
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	Molecular Electronics From Principles to Practice; Contents; Series Preface; Preface; Acknowledgements; Symbols and Abbreviations; 1 Scope of Molecular Electronics; 1.1 INTRODUCTION; 1.2 MOLECULAR MATERIALS FOR ELECTRONICS; 1.3 MOLECULAR-SCALE ELECTRONICS; 1.3.1 Evolution of Microelectronics; 1.3.2 Moore's Laws; 1.3.3 Beyond Moore; 1.4 THE BIOLOGICAL WORLD; 1.5 FUTURE OPPORTUNITIES; 1.6 CONCLUSIONS; BIBLIOGRAPHY; REFERENCES; 2 Materials' Foundations; 2.1 INTRODUCTION; 2.2 ELECTRONIC STRUCTURE; 2.2.1 Atomic Structure; 2.2.2 Electrons in Atoms; 2.2.3 Filling of Orbitals 2.2.4 The Periodic Table2.3 CHEMICAL BONDING; 2.3.1 Bonding Principles; 2.3.2 Ionic Bond; 2.3.3 Covalent Bond; 2.3.4 Metallic Bonding; 2.3.5 Van der Waals Bonding; 2.3.6 Hydrogen Bonding; 2.4 BONDING IN ORGANIC COMPOUNDS; 2.4.1 Hybridized Orbitals; 2.4.2 Isomers; 2.4.3 Double and Triple Bonds; 2.5 CRYSTALLINE AND NONCRYSTALLINE MATERIALS; 2.5.1 States of Matter; 2.5.2 Phase Changes and Thermodynamic Equilibrium; 2.5.3 The Crystal Lattice; 2.5.4 Crystal Systems; 2.5.5 Miller Indices; 2.5.6 Distance Between Crystal Planes; 2.5.7 Defects; 2.5.8 Amorphous Solids; 2.6 POLYMERS 2.6.1 Molecular Weight2.6.2 Polymer Structure; 2.6.3 Polymer Crystallinity; 2.7 SOFT MATTER: EMULSIONS, FOAMS AND GELS; 2.8 DIFFUSION; BIBLIOGRAPHY; REFERENCE; 3 Electrical Conductivity; 3.1 INTRODUCTION; 3.2 CLASSICAL THEORY; 3.2.1 Electrical Conductivity; 3.2.2 Ohm's Law; 3.2.3 Charge Carrier Mobility; 3.2.4 Fermi Energy; 3.3

ENERGY BANDS IN SOLIDS; 3.3.1 Quantum Mechanical Foundations; 3.3.2 Kronig-Penney Model; 3.3.3 Conductors, Semiconductors and Insulators; 3.3.4 Electrons and Holes; 3.3.5 Intrinsic and Extrinsic Conduction; 3.3.6 Quantum Wells; 3.3.7 Disordered Semiconductors 3.3.8 Conductivity in Low-dimensional Solids 3.4 ORGANIC COMPOUNDS; 3.4.1 Band Structure; 3.4.2 Doping; 3.4.3 Solitons, Polarons and Bipolarons; 3.4.4 Superconductivity; 3.5 LOW-FREQUENCY CONDUCTIVITY; 3.5.1 Electronic Versus Ionic Conductivity; 3.5.2 Quantum Mechanical Tunnelling; 3.5.3 Variable Range Hopping; 3.5.4 Space-Charge Injection; 3.5.5 Schottky and Poole-Frenkel Effects; 3.6 CONDUCTIVITY AT HIGH FREQUENCIES; 3.6.1 Complex Permittivity; 3.6.2 Impedance Spectroscopy; BIBLIOGRAPHY; REFERENCES; 4 Optical Phenomena; 4.1 INTRODUCTION; 4.2 ELECTROMAGNETIC RADIATION; 4.3 REFRACTIVE INDEX 4.3.1 Permittivity Tensor 4.3.2 Linear and Nonlinear Optics; 4.4 INTERACTION OF EM RADIATION WITH ORGANIC MOLECULES; 4.4.1 Absorption Processes; 4.4.2 Aggregate Formation; 4.4.3 Excitons; 4.4.4 Effect of Electric Fields on Absorption; 4.4.5 Emission Processes; 4.4.6 Energy Transfer; 4.5 TRANSMISSION AND REFLECTION FROM INTERFACES; 4.5.1 Laws of Reflection and Refraction; 4.5.2 Fresnel Equations; 4.5.3 Ellipsometry; 4.5.4 Thin Films; 4.6 WAVEGUIDING; 4.7 SURFACE PLASMONS; 4.7.1 The Evanescent Field; 4.7.2 Surface Plasmon Resonance; 4.8 PHOTONIC CRYSTALS; 4.8.1 Subwavelength Optics; BIBLIOGRAPHY REFERENCES

Sommario/riassunto

This consistent and comprehensive text is unique in providing an informed insight into molecular electronics by contrasting the prospects for molecular scale electronics with the continuing development of the inorganic semiconductor industry. Providing a wealth of information on the subject from background material to possible applications, Molecular Electronics contains all the need to know information in one easily accessible place. Speculation about future developments has also been included to give the whole picture of this increasingly popular and important topic.