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Titolo	MOQDOC : bulletin d'ARLIS/MOQ = bulletin of ARLIS/MOQ
Pubbl/distr/stampa	Montréal, : Art Libraries Society/Montréal, Ottawa, Québec, 1990-
ISSN	2561-2735
Descrizione fisica	1 online resource
Classificazione	cci1icc
Disciplina	026.7/060/71
Soggetti	Art libraries - Canada Art libraries Art - Bibliothèques Art - Bibliothèques - Canada Periodicals. Canada
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Periodico
Note generali	Title from caption.

2. Record Nr.	UNINA9910131280603321
Autore	Bodine Sigrun
Titolo	Asymptotic Integration of Differential and Difference Equations // by Sigrun Bodine, Donald A. Lutz
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-18248-X
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (XI, 402 p.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 2129
Disciplina	515.35
Soggetti	Differential equations Difference equations Functional equations Ordinary Differential Equations Difference and Functional Equations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Introduction, Notation, and Background -- Asymptotic Integration for Differential Systems -- Asymptotics for Solutions of Difference Systems -- Conditioning Transformations for Differential Systems -- Conditioning Transformations for Difference Systems -- Perturbations of Jordan Differential Systems -- Perturbations of Jordan Difference Systems -- Applications to Classes of Scalar Linear Differential Equations -- Applications to Classes of Scalar Linear Difference Equations -- Asymptotics for Dynamic Equations on Time Scales.
Sommario/riassunto	This book presents the theory of asymptotic integration for both linear differential and difference equations. This type of asymptotic analysis is based on some fundamental principles by Norman Levinson. While he applied them to a special class of differential equations, subsequent work has shown that the same principles lead to asymptotic results for much wider classes of differential and also difference equations. After discussing asymptotic integration in a unified approach, this book studies how the application of these methods provides several new insights and frequent improvements to results found in earlier literature. It then continues with a brief introduction to the relatively

new field of asymptotic integration for dynamic equations on time scales. Asymptotic Integration of Differential and Difference Equations is a self-contained and clearly structured presentation of some of the most important results in asymptotic integration and the techniques used in this field. It will appeal to researchers in asymptotic integration as well to non-experts who are interested in the asymptotic analysis of linear differential and difference equations. It will additionally be of interest to students in mathematics, applied sciences, and engineering. Linear algebra and some basic concepts from advanced calculus are prerequisites. .

3. Record Nr.	UNINA9911004696503321
Autore	Martinez-Duart J. M
Titolo	Nanotechnology for microelectronics and optoelectronics / / J.M. Martinez-Duart, R.J. Martin-Palma, F. Agullo-Rueda
Pubbl/distr/stampa	Amsterdam, : Elsevier, c2006
ISBN	1-280-62168-0 9786610621682 0-08-045695-2
Edizione	[1st ed.]
Descrizione fisica	1 online resource (302 p.)
Collana	European Materials Research Society Series
Altri autori (Persone)	Martin-PalmaR. J Agullo-RuedaFernando
Disciplina	621.381
Soggetti	Optoelectronics Microelectronics 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 and index.
Nota di contenuto	NANOTECHNOLOGY FOR MICROELECTRONICS AND OPTOELECTRONICS; NANOTECHNOLOGY FOR MICROELECTRONICS AND OPTOELECTRONICS; Preface; About the Authors; Acknowledgements; Structure of the Book; CONTENTS; Chapter 1 Mesoscopic Physics and Nanotechnologies; 1.1. OUTLOOK OF THE BOOK; 1.2. TRENDS IN NANO ELECTRONICS AND OPTOELECTRONICS; 1.3. CHARACTERISTIC LENGTHS IN MESOSCOPIC

SYSTEMS; 1.4. QUANTUM MECHANICAL COHERENCE; 1.5. QUANTUM WELLS, WIRES, AND DOTS; 1.6. DENSITY OF STATES AND DIMENSIONALITY; 1.7. SEMICONDUCTOR HETEROSTRUCTURES; 1.8. QUANTUM TRANSPORT; REFERENCES; FURTHER READING; PROBLEMS

Chapter 2 Survey of Solid State Physics 2.1. INTRODUCTION; 2.2. SHORT REVIEW OF QUANTUM MECHANICS; 2.3. FREE ELECTRON MODEL OF A SOLID. DENSITY OF STATES FUNCTION; 2.4. BLOCH THEOREM; 2.5. ELECTRONS IN CRYSTALLINE SOLIDS; 2.6. DYNAMICS OF ELECTRONS IN BANDS; 2.7. LATTICE VIBRATIONS; 2.8. PHONONS; REFERENCES; FURTHER READING; PROBLEMS; Chapter 3 Review of Semiconductor Physics; 3.1. INTRODUCTION; 3.2. ENERGY BANDS IN TYPICAL SEMICONDUCTORS; 3.3. INTRINSIC AND EXTRINSIC SEMICONDUCTORS; 3.4. ELECTRON AND HOLE CONCENTRATIONS IN SEMICONDUCTORS; 3.5. ELEMENTARY TRANSPORT IN SEMICONDUCTORS 3.6. DEGENERATE SEMICONDUCTORS 3.7. OPTICAL PROPERTIES OF SEMICONDUCTORS; REFERENCES; FURTHER READING; PROBLEMS;

Chapter 4 The Physics of Low-Dimensional Semiconductors; 4.1. INTRODUCTION; 4.2. BASIC PROPERTIES OF TWO-DIMENSIONAL SEMICONDUCTOR NANOSTRUCTURES; 4.3. SQUARE QUANTUM WELL OF FINITE DEPTH; 4.4. PARABOLIC AND TRIANGULAR QUANTUM WELLS; 4.5. QUANTUM WIRES; 4.6. QUANTUM DOTS; 4.7. STRAINED LAYERS; 4.8. EFFECT OF STRAIN ON VALENCE BANDS; 4.9. BAND STRUCTURE IN QUANTUM WELLS; 4.10. EXCITONIC EFFECTS IN QUANTUM WELLS; REFERENCES; FURTHER READING; PROBLEMS

Chapter 5 Semiconductor Quantum Nanostructures and Superlattices 5.1. INTRODUCTION; 5.2. MOSFET STRUCTURES; 5.3. HETEROJUNCTIONS; 5.4. QUANTUM WELLS; 5.5. SUPERLATTICES; REFERENCES; FURTHER READING; PROBLEMS; Chapter 6 Electric Field Transport in Nanostructures; 6.1. INTRODUCTION; 6.2. PARALLEL TRANSPORT; 6.3. PERPENDICULAR TRANSPORT; 6.4. QUANTUM TRANSPORT IN NANOSTRUCTURES; REFERENCES; FURTHER READING; PROBLEMS;

Chapter 7 Transport in Magnetic Fields and the Quantum Hall Effect; 7.1. INTRODUCTION; 7.2. EFFECT OF A MAGNETIC FIELD ON A CRYSTAL; 7.3. LOW-DIMENSIONAL SYSTEMS IN MAGNETIC FIELDS 7.4. DENSITY OF STATES OF A 2D SYSTEM IN A MAGNETIC FIELD 7.5. THE AHARONOV-BOHM EFFECT; 7.6. THE SHUBNIKOV-DE HAAS EFFECT; 7.7. THE QUANTUM HALL EFFECT; REFERENCES; FURTHER READING; PROBLEMS; Chapter 8 Optical and Electro-optical Processes in Quantum Heterostructures; 8.1. INTRODUCTION; 8.2. OPTICAL PROPERTIES OF QUANTUM WELLS AND SUPERLATTICES; 8.3. OPTICAL PROPERTIES OF QUANTUM DOTS AND NANOCRYSTALS; 8.4. ELECTRO-OPTICAL EFFECTS IN QUANTUM WELLS. QUANTUM CONFINED STARK EFFECT; 8.5. ELECTRO-OPTICAL EFFECTS IN SUPERLATTICES. STARK LADDERS AND BLOCH OSCILLATIONS; REFERENCES; FURTHER READING PROBLEMS

Sommario/riassunto

When solids are reduced to the nanometer scale, they exhibit new and exciting behaviours which constitute the basis for a new generation of electronic devices. Nanotechnology for Microelectronics and Optoelectronics outlines in detail the fundamental solid-state physics concepts that explain the new properties of matter caused by this reduction of solids to the nanometer scale. Applications of these electronic properties is also explored, helping students and researchers to appreciate the current status and future potential of nanotechnology as applied to the electronics industry