# Gestion documentaire de l'Institut d'Alembert

**Nouvelle recherche**

**Cote** PHO HEN

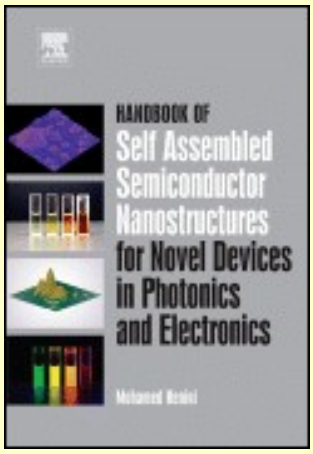
**Auteur** Henini Mohamed

**Titre** HANDBOOK OF SELF ASSEMBLED SEMICONDUCTOR NANOSTRUCTURES FOR NOVEL DEVICES IN PHOTONICS AND ELECTRONICS

**Editeur** Elsevier

**Année** 2008

**Section** IDA




**Résumé**

The self-assembled nanostructured materials described in this book offer a number of advantages over conventional material technologies in a wide range of sectors. World leaders in the field of self-organisation of nanostructures review the current status of research and development in the field, and give an account of the formation, properties, and self-organisation of semiconductor nanostructures. Chapters on structural, electronic and optical properties, and devices based on self-organised nanostructures are also included. Future research work on self-assembled nanostructures will connect diverse areas of material science, physics, chemistry, electronics and optoelectronics. This book will provide an excellent starting point for workers entering the field and a useful reference to the nanostructured materials research community. It will be useful to any scientist who is involved in nanotechnology and those wishing to gain a view of what is possible with modern fabrication technology. Mohamed Henini is a Professor of Applied Physics at the University of Nottingham. He has authored and co-authored over 750 papers in international journals and conference proceedings and is the founder of two international conferences. He is the Editor

**Commentaires**

Relié: 864 pages
Editeur : Elsevier Science (30 juin 2008)
Langue : Anglais
ISBN-10: 0080463258

Retour à l'accueil

# Gestion documentaire de l'Institut d'Alembert

**Nouvelle recherche**

**Cote** MONA ALB

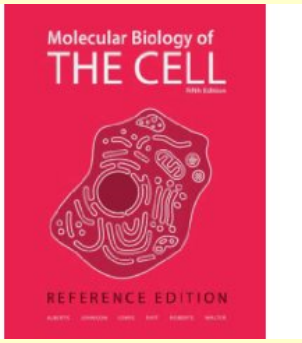
**Auteur** Alberts, Johnson, Lewis LLewis,

**Titre** Molecular Biology of the Cell

**Editeur** Garland Publishing

**Année** 2008

**Section** IDA




**Résumé**

Molecular Biology of the Cell is the classic in-depth text reference in cell biology. By extracting fundamental concepts and meaning from this enormous and ever-growing field, the authors tell the story of cell biology, and create a coherent framework through which non-expert readers may approach the subject. Written in clear and concise language, and illustrated with original drawings, the book is enjoyable to read, and provides a sense of the excitement of modern biology. Molecular Biology of the Cell not only sets forth the current understanding of cell biology (updated as of Fall 2001), but also explores the intriguing implications and possibilities of that which remains unknown.

The hallmark features of previous editions continue in the Fourth Edition. The book is designed with a clean and open, single-column layout. The art program maintains a completely consistent format and style, and includes over 1,600 photographs, electron micrographs, and original drawings by the authors. Clear and concise concept headings introduce each section. Every chapter contains extensive references. Most important, every chapter had been subjected to a

**Commentaires**

1728 pages - ISBN 0815332181 – Hardback Book



Retour à l'accueil

# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA LEH

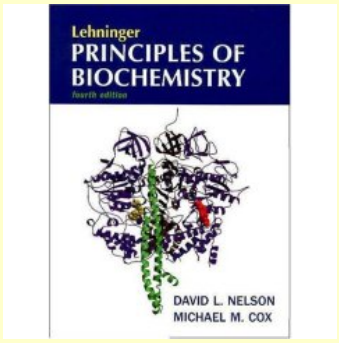
**Auteur** Lehninger

**Titre** Principles of Biochemistry, Fourth Edition

**Editeur** W. H. Freeman

**Année** 2005

**Section** IDA




**Résumé**

In the Fifth Edition, authors Dave Nelson and Mike Cox combine the best of the laboratory and best of the classroom, introducing exciting new developments while communicating basic principles through a variety of new learning tools—from new in-text worked examples and data analysis problems to the breakthrough eBook, which seamlessly integrates the complete text and its media components.

**Commentaires**

1120 pages
ISBN 0-7167-4339-6

Retour à l'accueil

# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA POZ

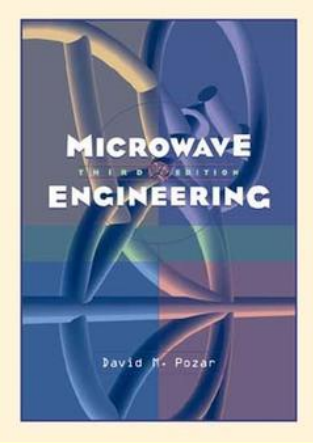
**Auteur** Pozar D. M.

**Titre** Microwave engineering, (3rd Ed)

**Editeur** Wiley

**Année** 2005

**Section** IDA




**Résumé**

Focusing on the design of microwave circuits and components, this valuable reference offers professionals and students an introduction to the fundamental concepts necessary for real world design. The author successfully introduces Maxwell's equations, wave propagation, network analysis, and design principles as applied to modern microwave engineering. A considerable amount of material in this book is related to the design of specific microwave circuits and components, for both practical and motivational value. It also presents the analysis and logic behind these designs so that the reader can see and understand the process of applying the fundamental concepts to arrive at useful results. The derivations are well laid out and the majority of each chapter's formulas are displayed in a nice tabular format every few pages. This Third Edition offers expanded coverage with new material on: Noise, Nonlinear effects, RF MEMs, transistor power amplifiers, FET mixers, oscillator phase noise, transistor oscillators and frequency multiplier.

**Commentaires**

ELECTROMAGNETIC THEORY. Introduction to Microwave Engineering. Applications of Microwave Engineering. A Short History of Microwave Engineering. Maxwells Equations. Fields in Media and Boundary Conditions. Fields at a General Material Interface. Fields at a Dielectric Interface. Fields at the Interface with a Perfect Conductor (Electric Wall). The MagneticWall Boundary Condition. The Radiation Condition. The Wave Equation and Basic Plane Wave Solutions. The Helmholtz Equation. Plane Waves in a Lossless Medium. Plane Waves in a General Lossy Medium. Plane Waves in a Good Conductor. General Plane Wave Solutions. Circularly Polarized Plane Waves. Energy and Power. Power Absorbed by a Good Conductor. Plane Wave Reflection from a Media

Retour à l'accueil

# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA LOD

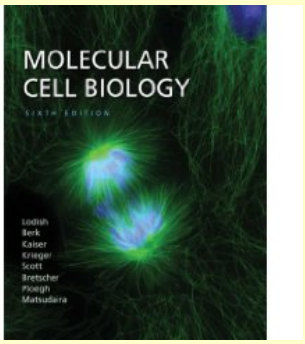
**Auteur** Lodish, Harvey F.

**Titre** Molecular Cell Biology

**Editeur** W.H.Freeman

**Année** 2008

**Section** IDA




**Résumé**

With its acclaimed author team, cutting-edge content, and coverage based on landmark experiments, Molecular Cell Biology has earned an impeccable reputation with instructors edition after edition. The new Sixth Edition is the Molecular Cell Biology for a new generation, a dramatic revision of the classic text featuring two new co-authors, expanded coverage of immunology and development, and new media tools for students and instructors.

**Commentaires**

Life Begins with Cells - Chemical Foundations - Protein Structure and Function - Basic Molecular Genetic Mechanisms - Molecular Genetic Techniques - Genes, Genomics, and Chromosomes - Transcriptional Control of Gene Expression - Post- transcriptional Gene Control - Visualizing, Fractionating, and Culturing Cells - Biomembrane Structure - Cellular Energetics - Moving Proteins into Membranes and Organelles - Vesicular Traffic, Secretion, and Endocytosis - Cell Signaling I: Signal Transduction and Short-term Cellular Responses - Cell Signaling II: Signaling Pathways that Control Gene Activity - Cell Organization and Movement I: Microfilaments - Cell Organization and Movement II: Microtubules and Intermediate Filaments - Integrating Cells into Tissues - Regulating the

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# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA ATK

**Auteur** ATKIN'S

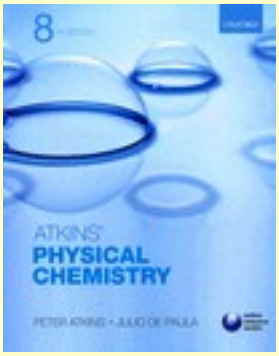
**Titre** Physical chemistry

ONLINE RESSOURCE CENTER (ordinateur 5 à l'espace documentaire)

**Editeur** Oxford University Press

**Année** 2006

**Section** IDA




**Résumé**

Atkins' Physical Chemistry remains the benchmark of achievement for a chemistry degree throughout the world. The judicious choice of topics, the clear writing style of both authors, and the careful exposition of maths, reaffirm the book's position as market leader. In the eighth edition the authors provide a more compact presentation through the careful restructuring and redistribution of material. The coverage of introductory topics has been streamlined, and later topics rationalized, bringing into sharper focus the scope of the text to mirror the needs of today's students and lecturers. Mathematics remains an intrinsic yet challenging part of physical chemistry; the new edition offers greater explanation and support, to ensure that students can master the important mathematical principles, without sacrificing the rigour and depth of its mathematical content. The pedagogical framework, which is a hallmark of Atkins' writing, has been strengthened further: new 'Notes on good practice' provide guidance on the use of terminology and help students to avoid common pitfalls; short 'Commentaries' remind students of the applications of mathematical and physical concepts, and provide useful cross-references to related resources in the book and on the

**Commentaires**

PART 1. EQUILIBRIUM; 1. The properties of gases; 2. The first law; 3. The second law; 4. Physical transformations of pure substances; 5. Simple mixtures; 6. Phase diagrams; 7. Chemical equilibrium; PART 2. STRUCTURE; 8. Quantum theory: introduction and principles; 9. Quantum theory: techniques and applications; 10. Atomic structure and atomic spectra; 11. Molecular orbitals for polyatomic systems; 12. Molecular symmetry; 13. Spectroscopy 1: rotational and vibrational spectra; 14. Spectroscopy 2: electronic transitions; 15. Spectroscopy 3: magnetic resonance; 16. Statistical thermodynamics: the concepts; 17. Statistical thermodynamics: the machinery; 18. Molecular interactions; 19. Materials 1: Macromolecules and aggregates; 20. Materials 2:

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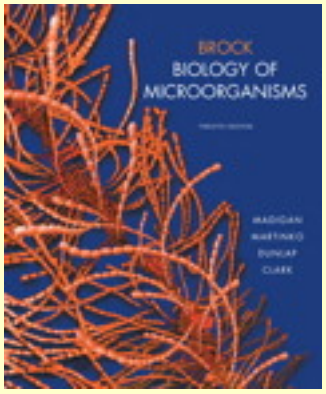
# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

| | |
|---|---|
| **Cote** | MONA MAD |
| **Auteur** | Madigan, Michael T. |
| **Titre** | Brock biology of microorganisms<br><br>ONLINE SUPPORT (Ordinateur 2 à l'espace documentaire) |
| **Editeur** | Pearson Benjamin Cummings |
| **Année** | 2009 |
| **Section** | IDA |




**Résumé**

The authoritative text for introductory microbiology, Brock Biology of Microorganisms continues its long tradition of impeccable scholarship, accuracy, and outstanding illustrations and photos. This book for biology, microbiology, and other science majors balances the most current science coverage with the concepts essential for understanding the field of microbiology. Now reorganized for greater flexibility and updated with findings from new research, the Twelfth Edition speaks to today's students while maintaining the depth and precision science majors need.

**Commentaires**

ISBN 9780321536150
Unit 1: Principles of Microbiology 1) Microorganisms and Microbiology 2) A Brief Journey to the Microbial World 3) Chemistry of Cellular Components 4) Cell Structure and Function in Bacteria and Archaea 5) Nutrition, Culture, and Metabolism of Microorganisms 6) Microbial Growth Unit 2: Molecular Biology of Microorganisms 7) Essentials of Molecular Biology 8) Archaeal and Eukaryotic Molecular Biology 9) Regulation of Gene Expression 10) Overview of Viruses and Virology 11) Principles of Bacterial Genetics 12) Genetic Engineering 13) Microbial Genomics Unit 3: Microbial Diversity 14) Microbial Evolution and Systematics 15) Bacteria: The Proteobacteria 16) Bacteria: Gram-Positive and

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# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA LAK

**Auteur** Lakowicz, Joseph R.

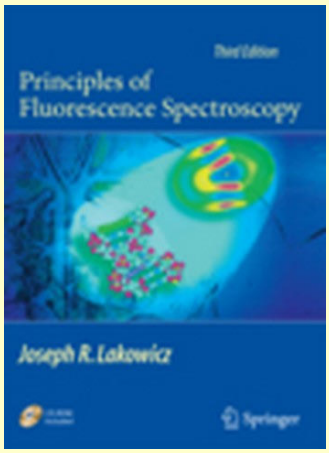
**Titre** Principles of Fluorescence Spectroscopy

CD ROM (à demander à l'espace documentaire)

**Editeur** Springer

**Année** 2006

**Section** IDA




**Résumé**

The third edition of this established classic text reference builds upon the strengths of its very popular predecessors. Organized as a broadly useful textbook Principles of Fluorescence Spectroscopy, 3rd edition maintains its emphasis on basics, while updating the examples to include recent results from the scientific literature. The third edition includes new chapters on single molecule detection, fluorescence correlation spectroscopy, novel probes and radiative decay engineering. Includes a CD-ROM reproducing all book artwork, for easy use in lecture slides. This is an essential volume for students, researchers, and industry professionals in biophysics, biochemistry, biotechnology, bioengineering, biology and medicine.

**Commentaires**

Retour à l'accueil

# Gestion documentaire de l'Institut d'Alembert

**Nouvelle recherche**

**Cote** MONA REI

**Auteur** Reif Federick

**Titre** Fundamentals of Statistical and Thermal Physics

**Editeur** McGraw-Hill Education - Europe

**Année** 1965 (re edited 1985)

**Section** IDA

**Résumé**

**Commentaires**

Retour à l'accueil

# Gestion documentaire de l'Institut d'Alembert

 **Nouvelle recherche**

**Cote** MONA FOR

**Auteur** de Fornel

**Titre** Evanescent waves from Newtonian optics to atomic optics

**Editeur** Springer Series in Optical Sciences

**Année** 2001

**Section** IDA

**Résumé**

Evanescent waves play a growing role in many different areas such as guided optics, optical-fiber couplers, integrated optical elements, internal reflection spectroscopy, atom optics, dark-field microscopy, scanning tunneling optical microscopy, microaperture microscopy, and apertureless microscopies. This book describes the near field of an object through the role of the evanescent field in these areas of research. It is intended as a reference for scientists and as an introduction at the graduate level.

**Commentaires**

Part I. The evanescent field: Introduction to Part I. Total internal reflection. Diffraction from an aperture and dipolar radiation.The evanescent field in guided optics. Conclusion of Part I.- Part II. Delocalized interaction with the evanescent field: Introduction to Part II. Evanescent field optical-fiber couplers. Integrated-optical evanescent field couplers. Evanescent field waveguide sensors. Internal-reflection spectroscopy. Evanescent wave atom optics. Dark-field microscopy and photon tunneling microscopy. Conclusion of Part II.- Part III. Localized interaction with the evanescent field: Introduction to Part III. Scanning tunneling optical microscopy. Micro-aperture microscopy. Apertureless microscopies. Conclusion of Part III.- References.- Index.

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# Gestion documentaire de l'Institut d'Alembert

 **Nouvelle recherche**

**Cote** MONA VAH

**Auteur** Vahala, Kerry.

**Titre** Optical microcavities

**Editeur** World Scientific, Advanced series in applied

**Année** 2004

**Section** IDA

**Résumé**

Optical microcavities are structures that enable confinement of light to microscale volumes. The universal importance of these structures has made them indispensable to a wide range of fields. This important book describes the many applications and the related physics, providing both a review and a tutorial of key subjects by leading researchers from each field. The topics include cavity QED and quantum information, nanophotonics and nanostructure interactions, wavelength switching and modulation in optical communications, optical chaos and biosensors.

**Commentaires**

ISBN 981-238775-7
Optical Resonators and Filters (H A Haus et al.); Microfabricated Optical Cavities and Photonic Crystals (M Lonear & A Scherer); Semiconductor Lasers for Telecommunications (T L Koch); Cavity-Enhanced Single Photons from a Quantum Dot (J Vuekoviae et al.); Fabrication, Coupling and Nonlinear Optics of Ultra-High-Q Micro-Sphere and Chip-Based Toroid Microcavities (T J Kippenberg et al.); Nonlinear Optical Properties of Semiconductor Quantum Wells inside Microcavities (T Meier et al.); Polymer Microring Resonators (P Rabiei & W H Steier); Atoms in Microcavities: Quantum Electrodynamics, Quantum Statistical Mechanics, and Quantum Information Science (A C Doherty & H Mabuchi);

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# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA SMI

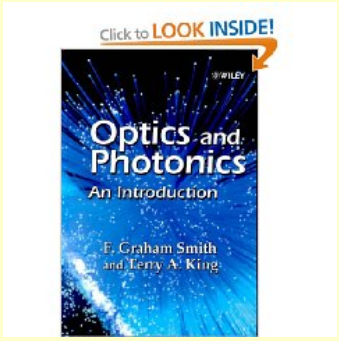
**Auteur** Graham-Smith, Francis

**Titre** Optics and photonics

**Editeur** John Wiley , The Manchester physics series

**Année** 2007

**Section** IDA




**Résumé**

The Second Edition of this successful textbook provides a clear, well-written introduction to both the fundamental principles of optics and the key aspects of photonics to show how the subject has developed in the last few decades, leading to many modern applications. Optics and Photonics: An Introduction, Second Edition thus provides a complete undergraduate course on optics in a single integrated text, and is an essential resource for all undergraduate physics, science and engineering students taking a variety of optics based courses. Specific changes for this edition include: new material on modern optics and photonics; rearrangement of chapters to give a logical progression comprising groups of chapters on geometric optics, wave optics and photonics; many more worked examples and problems; and substantial revisions to chapters on Holography, Lasers and the interaction of light with matter.

**Commentaires**

ISBN 9780470017845
PREFACE.1. LIGHT AS WAVES, RAYS AND PHOTONS.The nature of light.Waves and rays.Total internal reflection.The light wave.Electromagnetic waves.The electromagnetic spectrum.Stimulated emission: the laser. Photons and material particles.2. GEOMETRIC OPTICS.The thin prism: the ray approach and the wavefront approach.The lens as an assembly of prisms.Refraction at a spherical surface.Two surfaces; the simple lens.Imaging in spherical mirrors.General properties of imaging systems.Separated thin lenses in air.Ray tracing by matrices.Locating the cardinal points: position of a nodal point, focal point, principal point, focal length, the other cardinal points.Perfect imaging.Perfect

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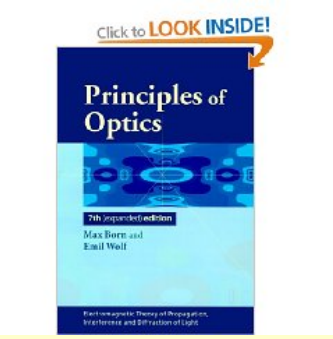
# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

| | |
|---|---|
| **Cote** | MONA BOR |
| **Auteur** | Born, Max. |
| **Titre** | Principles of optics |
| **Editeur** | Cambridge University Press |
| **Année** | 2006 (7th edition) |
| **Section** | IDA |




**Résumé**

A revised and expanded edition of this standard text. Among the new material is a section on the CAT scan (computerized axial tomography), a chapter on scattering from inhomogeneous media and an account of the principles of diffraction tomography.

**Commentaires**

Historical introduction; 1. Basic properties of the electromagnetic field; 2. Electromagnetic potentials and polarization; 3. Foundations of geometrical optics; 4. Geometrical theory of optical imaging; 5. Geometrical theory of aberrations; 6. Image-forming instruments; 7. Elements of the theory of interference and interferometers; 8. Elements of the theory of diffraction; 9. The diffraction theory of aberrations; 10. Interference and diffraction with partially coherent light; 11. Rigorous diffraction theory; 12. Diffraction of light by ultrasonic waves; 13. Scattering from inhomogeneous media; 14. Optics of metals; 15. Optics of crystals; 16. Appendices; Author index; Subject index.

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# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA MUL

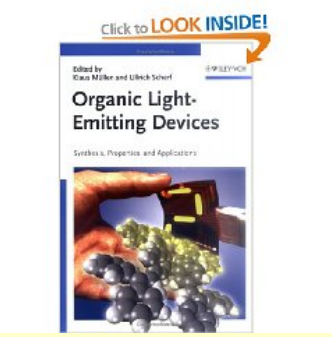
**Auteur** Müllen, K.

**Titre** Organic light-emitting devices

**Editeur** Wiley-VCH

**Année** 2006

**Section** IDA




**Résumé**

This high-class book reflects a decade of intense research, culminating in excellent successes over the last few years. The contributions from both academia as well as the industry leaders combine the fundamentals and latest research results with application know-how and examples of functioning displays. As a result, all the four important aspects of OLEDs are covered: syntheses of the organic materials; physical theory of electroluminescence and device efficiency; device conception and construction; and, characterization of both materials and devices. The whole is naturally rounded off with a look at what the future holds in store. The editor, Klaus Muellen, is director of the highly prestigious MPI for polymer research in Mainz, Germany, while the authors include Nobel Laureate Alan Heeger, one of the most notable founders of the field, Richard Friend, as well as Ching Tang, Eastman Kodak's number-one OLED researcher, known throughout the entire community for his key publications.

**Commentaires**

ISBN 3-527-31218-8
1 Inorganic Semiconductors for Light-emitting Diodes (E. Fred Schubert, Thomas Gessmann, and Jong Kyu Kim).1.1 Introduction.1.2 Optical Emission Spectra.1.3 Resonant-cavity-enhanced Structures.1.4 Current Transport in LED Structures.1.5 Extraction Efficiency.1.6 Omnidirectional Reflectors.1.7 Packaging.1.8 Conclusion.References.2 Electronic Processes at Semiconductor Polymer Heterojunctions (Arne C. Morteani, Richard H. Friend, and Carlos Silva).2.1 Introduction.2.2 Charge Capture at Polymer Heterojunctions.2.3 Exciton Dissociation at Polymer Heterojunctions.2.4 Morphology-dependent Exciton Retrapping at Polymer Heterojunctions.2.5 Summary.Acknowledgments.

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# Gestion documentaire de l'Institut d'Alembert

**Nouvelle recherche**

**Cote** MONA HEC

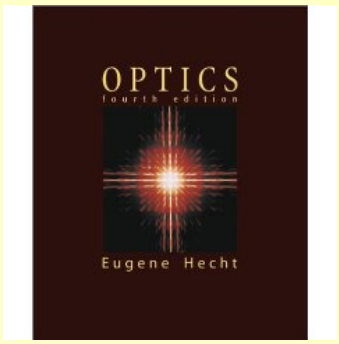
**Auteur** Hecht Eugene

**Titre** Optics (fourth edition)

**Editeur** Addison Wesley

**Année** 2002

**Section** IDA




**Résumé**

Accurate, authoritative and comprehensive, Optics, Fourth Edition has been revised to provide readers with the most up-to-date coverage of optics. The market leader for over a decade, this book provides a balance of theory and instrumentation, while also including the necessary classical background. The writing style is lively and accessible.

**Commentaires**

ISBN 9780321188786
1. A Brief History. 2. Wave Motion. UPDATED! 3. Electromagnetic Theory, Photons, and Light. 4. The Propagation of Light. 5. Geometrical Optics. 6. More on Geometrical Optics. 7. The Superposition of Waves. 8. Polarization. 9. Interference. 10. Diffraction. 11. Fourier Optics. 12. Basics of Coherence Theory. 13. Modern Optics: Lasers and Other Topics.

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# Gestion documentaire de l'Institut d'Alembert

**Nouvelle recherche**

**Cote** MONA DUP

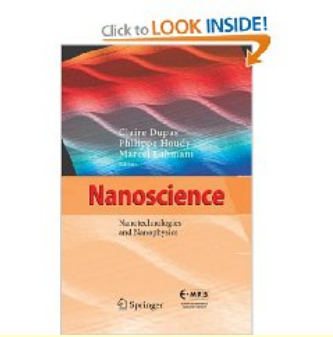
**Auteur** Dupas Claire, Houdy Philippe, Lahmani Marcel

**Titre** Nanoscience
Sub-Title: nanotechnologies and nanophysics

**Editeur** Springer

**Année** 2004

**Section** IDA




**Résumé**

Nanotechnologies and nanosciences are a fast-developing field of research, which sit at the point of convergence of several disciplines (physics, chemistry, biology, mechanics, etc.). This practically-oriented overview is designed to provide students and researchers with essential information on both the tools of manufacture and specific features of the nanometric scale, as well as applications within the most active fields (electronics, magnetism, information storage, biology). Specific applications and techniques covered include nanolithography, STM and AFM, nanowires and supramolecules, molecular electronics, optronics, and simulation. Each section of the book devotes considerable space to industrial applications and prospective developments.

**Commentaires**

ISBN 9783540286165
Lithography and Etching Processes.- Growth of Organised Nano-Objects on Prepatterned Surfaces.- Scanning Tunneling Microscopy.- Atomic Force Microscopy.- Near-Field Optics: From Experiment to Theory.- Emerging Nanolithographic Methods.- Clusters and Colloids.- Fullerenes and Carbon Nanotubes.- Nanowires.- Nano-Objects.- Ultimate Electronics.- Alternative Electronics.- Molecular Electronics.- Nanomagnetism and Spin Electronics.- Information Storage.- Optronics.- Nanophotonics for Biology.- Numerical Simulation.- Computer Architectures for Nanotechnology: Towards Nanocomputing

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# Gestion documentaire de l'Institut d'Alembert

**Nouvelle recherche**

**Cote** MONA OKA

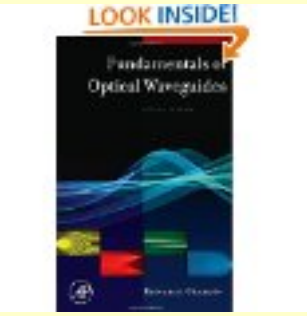
**Auteur** Okamoto, Katsunari,

**Titre** Fundamentals of optical waveguides

**Editeur** Elsevier

**Année** 2006

**Section** IDA




**Résumé**

Fundamentals of Optical Waveguides is an essential resource for any researcher, professional or student involved in optics and communications engineering. Any reader interested in designing or actively working with optical devices must have a firm grasp of the principles of lightwave propagation. Katsunari Okamoto has presented this difficult technology clearly and concisely with several illustrations and equations. Optical theory encompassed in this reference includes coupled mode theory, nonlinear optical effects, finite element method, beam propagation method, staircase concatenation method, along with several central theorems and formulas. Since the publication of the well-received first edition of this book, planar lightwave circuits and photonic crystal fibers have fully matured. With this second edition the advances of these fibers along with other improvements on existing optical technologies are completely detailed. This comprehensive volume enables readers to fully analyze, design and simulate optical atmospheres. This title includes an exceptional new chapter on Arrayed-Waveguide Grating (AWG). It provides in-depth discussion of Photonic Crystal Fibers (PCFs), thorough explanation of Multimode Interference Devices (MMI), and full coverage of

**Commentaires**

ISBN 978-0-12-525096-2

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# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA BOY

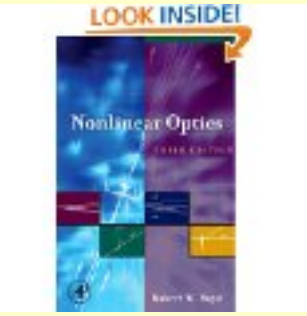
**Auteur** Boyd Robert W.

**Titre** Nonlinear optics

**Editeur** Academic Press

**Année** 2008

**Section** IDA




**Résumé**

Nonlinear optics is the study of the interaction of intense laser light with matter. The third edition of this textbook has been rewritten to conform to the standard SI system of units and includes comprehensively updated material on the latest developments in the field. The book introduces the entire field of optical physics and specifically the area of nonlinear optics. It focuses on the fundamental issues including the electromagnetic origin of optical phenomena, the quantum mechanical description of the optical properties of matter, the role of spatial symmetries in determining the optical response, causality and Kramers Kronig relations, and ultrafast and high intensity optical effects. The book also covers applied aspects of nonlinear optics such as harmonic generation, the operation of parametric oscillators, optical switching, photonics, materials issues in nonlinear optics, and processes such as laser damage that can restrict the use of nonlinear optics.This edition contains new material on: applications of harmonic generation including applications within the fields of microscopy and biophotonics; electromagnetically induced transparency; and, spectroscopy based on coherent anti-Stokes Raman scattering (CARS). Nonlinear Optics appeals to a wide

**Commentaires**

ISBN 9780123694706

Retour à l'accueil

# Gestion documentaire de l'Institut d'Alembert

**Nouvelle recherche**

**Cote** MONA JAN

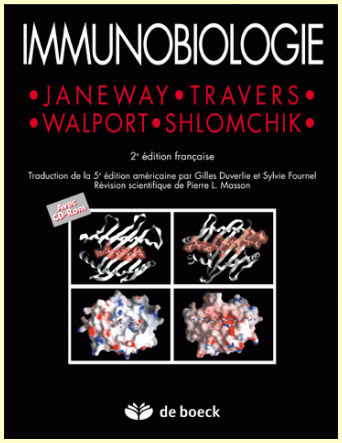
**Auteur** Charles A. Janeway, Paul Travers, Mark Walport,

**Titre** Immunobiologie
with CD ROM in english

**Editeur** de boeck

**Année** 2003

**Section** IDA




**Résumé**

Intégrant les derniers progrès scientifiques sous une forme originale et particulièrement bien illustrée, cette nouvelle édition permet une compréhension aisée des mécanismes les plus subtils du fonctionnement normal du système immunitaire et de ses déficiences pathologiques.

Partant du rôle concret du système immunitaire dans la défense de l'hôte contre des agents pathogènes, les auteurs y intègrent les avancées les plus récentes de la génétique moléculaire et conduisent jusqu'aux perspectives les plus audacieuses dans la manipulation de ce système tout en rencontrant les tests cliniques et les techniques immunologiques largement utilisées. Un appendice reprenant les grandes techniques de l'immunologie et un glossaire détaillé complètent l'ouvrage.

Enfin, un cédérom propose une présentation animée des mécanismes complexes de reconnaissance et de réponse aux antigènes rencontrés.

**Commentaires**

ISBN 2744501506
2ème édition, 2003
792 pages

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# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA FEY

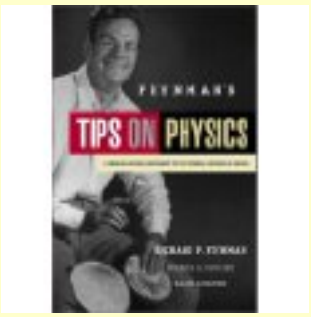
**Auteur** Feynman, Richard Phillips

**Titre** Feynman's Tips on Physics: A Problem-Solving Supplement to the Feynman Lectures on Physics

**Editeur** Pearson Addison-Wesley

**Année** 2006

**Section** IDA




**Résumé**

This new volume contains four previously unpublished lectures that Feynman gave to students preparing for exams. With characteristic flair, insight and humor, Feynman discusses topics students struggle with and offers valuable tips on solving physics problems. An illuminating memoir by Matthew Sands -- who originally conceived The Feynman Lectures on Physics -- gives a fascinating insight into the history of Feynman's lecture series and the books that followed. This book is rounded off by relevant exercises and answers by R. B. Leighton and R. E. Vogt, originally developed to accompany the Lectures on Physics.

**Commentaires**

ISBN 0805390634

Retour à l'accueil

# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA FEY I II ET III

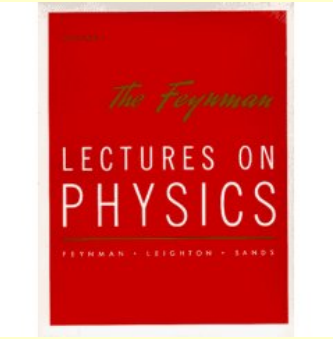
**Auteur** Feynman, Richard Phillips

**Titre** Feynman lectures on physics, the definitive and extended edition - Part I : Mainly mechanics, radiation, and heat - Part II : Mainly electromagnetism and matter - Part III : Quantum mechanics

**Editeur** Pearson Addison-Wesley

**Année** 2006

**Section** IDA




**Résumé**

The revised edition of Feynman's legendary lectures includes extensive corrections and updates collated by Feynman and his colleagues. A new foreword by Kip Thorne, the current Richard Feynman Professor of Theoretical Physics at Caltech, discusses the relevance of the new edition to today's readers. This boxed set also includes Feynman's new Tips on Physics -- the four previously unpublished lectures that Feynman gave to students preparing for exams at the end of his course. Thus, this 4 -- volume set is the complete and definitive edition of The Feynman Lectures on Physics. Packaged in a specially designed slipcase, this 4 -- volume set provides the ultimate legacy of Feynman's extraordinary contribution to students, teachers, researches, and lay readers around the world.

**Commentaires**

ISBN 0805390456
Coffret de 4 livres

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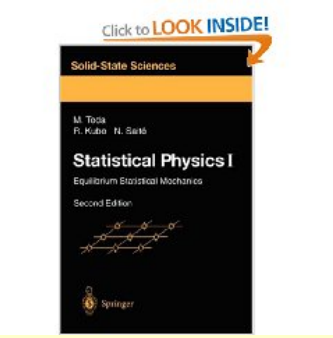
# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

| | |
|---|---|
| **Cote** | MONA TOD |
| **Auteur** | Toda, Morikazu |
| **Titre** | Statistical physics I<br>Equilibrium statistical mechanics |
| **Editeur** | Springer series in solid-state sciences |
| **Année** | 1998 |
| **Section** | IDA |




**Résumé**

Statistical Physics I discusses the fundamentals of equilibrium statistical mechanics, focussing on basic physical aspects. No previous knowledge of thermodynamics or the molecular theory of gases is assumed. Illustrative examples based on simple materials and photon systems elucidate the central ideas and methods.

**Commentaires**

ISBN 3-540-53662-0

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# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA COH1 et MONA COH2

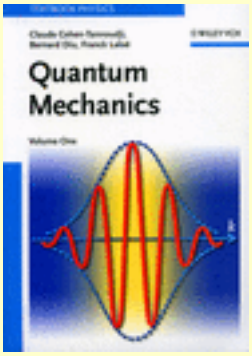
**Auteur** Cohen-Tannoudji, Claude

**Titre** Quantum mechanics. Volume 1 et 2

**Editeur** A Wiley-Interscience publication

**Année** 2005

**Section** IDA




**Résumé**

Beginning students of quantum mechanics frequently experience difficulties separating essential underlying principles from the specific examples to which these principles have been historically applied. Nobel-Prize-winner Claude Cohen-Tannoudji and his colleagues have written this book to eliminate precisely these difficulties. Fourteen chapters provide a clarity of organization, careful attention to pedagogical details, and a wealth of topics and examples which make this work a textbook as well as a timeless reference, allowing to tailor courses to meet students' specific needs. Each chapter starts with a clear exposition of the problem which is then treated, and logically develops the physical and mathematical concept. These chapters emphasize the underlying principles of the material, undiluted by extensive references to applications and practical examples which are put into complementary sections. The book begins with a qualitative introduction to quantum mechanical ideas using simple optical analogies and continues with a systematic and thorough presentation of the mathematical tools and postulates of quantum mechanics as well as a discussion of their physical content. Applications follow, starting with the simplest ones like

**Commentaires**

ISBN 9780471164353
ISBN 9780471164357

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# Gestion documentaire de l'Institut d'Alembert

**Nouvelle recherche**

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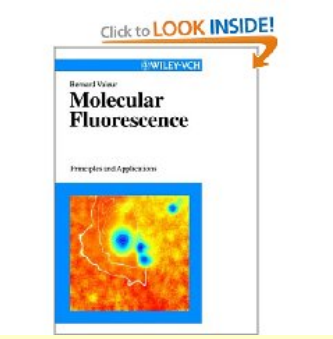
|---|---|
| **Cote** | MONA VAL |
| **Auteur** | Valeur, Bernard |
| **Titre** | Molecular fluorescence<br>Sub-Title: principles and applications |
| **Editeur** | Wiley-VCH |
| **Année** | 2002 reprint 2007 |
| **Section** | IDA |




**Résumé**

Today, fluorescence spectroscopy is an important tool of investigation in many areas. In analytical sciences, its advantage is extremely high sensitivity and selectivity - even single molecules can be detected - and it achieves a high spatial resolution and time resolution in combination with microscopic techniques or laser techniques, respectively. In material sciences, this is used to study structure and dynamics of surfaces. Particularly in the areas of biochemistry and molecular genetics, fluorescence spectroscopy has become a dominating technique. Together with the latest imaging techniques, fluorescence spectroscopy allows a real-time observation of the dynamics of intact biological systems with an unprecedented resolution. This book offers a comprehensive introduction to and survey of fluorescence spectroscopy. It is written for newcomers and active researchers alike who are learning to apply fluorescence methods in the areas of chemistry, physical chemistry, polymers, materials, colloids, biochemistry, biology, medical and pharmaceutical research.

**Commentaires**

ISBN 9783527299195
Preface. Prologue. Introduction. Absorption of UV--visible light. Characteristics of Fluorescence Emission. Effects of Intermolecular Photophysical Processes on Fluorescence Emission. Fluorescence polarization: Emission Ansotropy. Principles of steady--state and time--resolved fluorometric techniques. Effect of polarity of fluorescence emission. Polarity probes. Microviscosity, fluidity, molecular mobility. Estimation by means of fluorescent probes. Resonance energy transfer and its applications. Fluorescent molecular sensors of ions and molecules. Advanced techniques in fluorescence spectroscopy. Epilogue. Index.

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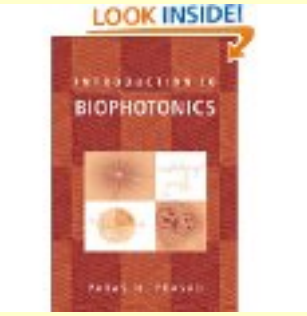
# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

| | |
|---|---|
| **Cote** | MONA PRA |
| **Auteur** | Prasad, Paras N |
| **Titre** | Introduction to biophotonics |
| **Editeur** | Wiley-Interscience |
| **Année** | 2003 |
| **Section** | IDA |




**Résumé**

Paras Prasad's text provides a basic knowledge of a broad range of topics so that individuals in all disciplines can rapidly acquire the minimal necessary background for research and development in biophotonics. Introduction to Biophotonics serves as both a textbook for education and training as well as a reference book that aids research and development of those areas integrating light, photonics, and biological systems. Each chapter contains a topic introduction, a review of key data, and description of future directions for technical innovation. Introduction to Biophotonics covers the basic principles of * Optics * Optical spectroscopy * Microscopy Each section also includes illustrated examples and review questions to test and advance the reader's knowledge. Sections on biosensors and chemosensors, important tools for combating biological and chemical terrorism, will be of particular interest to professionals in toxicology and other environmental disciplines. Introduction to Biophotonics proves a valuable reference for graduate students and researchers in engineering, chemistry, and the life sciences.

**Commentaires**

ISBN 9780471287704
Preface.Acknowledgments.1. Introduction.2. Fundamentals of Light and Matter.3. Basics of Biology.4. Fundamentals of Light-Matter Interactions.5. Principles of Lasers, Current Laser Technology, and Nonlinear Optics.6. Photobiology.7. Bioimaging: Principles and Techniques.8. Bioimaging: Applications.9. Optical Biosensors.10. Microarray Technology for Genomics and Proteomics.11. Flow Cytometry.12. Light-Activated Therapy: Photodynamic Therapy.13. Tissue Engineering with Light.14. Laser Tweezers and Laser Scissors.15. Nanotechnology for Biophotonics: Bionanophotonics.16. Biomaterials for Photonics.Index.

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# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA BRA

**Auteur** Brabec, C. J.

**Titre** Organic photovoltaics
Sub-Title: concepts and realization

**Editeur** Springer series in materials science 60

**Année** 2003

**Section** IDA


**Résumé**

Achieving efficient solar energy conversion at both large scale and low cost is among the most important technological challenges for the near future. The present volume describes and explains the fundamentals of organic/plastic solar cells in a manner accessible to both researchers and students. It provides a comprehensive analysis of the operational principles underlying several types of solar cells that have absorber layers based on polymer materials and small molecules. It addresses competing approaches, such as polymer solar cells and dye-sensitized cells, while considering the thermodynamic principles within the context of these schemes. Organic Photovoltaics also analyzes in detail the charge-transfer processes in the bulk-heterojunction devices corresponding to the relevant mechanism of carrier generation. Emphasized throughout is the concept of interpenetrating polymer-fullerene networks, due to their high potential for improving power efficiency.

**Commentaires**

ISBN 3-540-00405-X
Photoinduced Charge Transfer in Bulk Heterojunction Composites.- Optical and Spectroscopic Properties of Conjugated Polymers.- Transport Properties of Conjugated Polymers.- Quantum Solar Energy Conversion and Application to Organic Solar Cells.- Semiconductor Aspects of Organic Bulk Heterojunction Solar Cells.- Organic Photodiodes: From Diodes to Blends.- Dye-Sensitized Solar Cells.

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# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA PRI

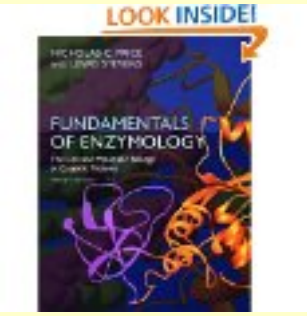
**Auteur** Price, Nicholas C.

**Titre** Fundamentals of enzymology
Sub-Title: the cell and molecular biology of catalytic proteins

**Editeur** Oxford University Press

**Année** 1999 third edition (reprint in 2006)

**Section** IDA




**Résumé**

Since the publication of the successful and popular second edition of Fundamentals of Enzymology in 1989 there has been a large increase in the knowledge of several aspects of enzymology, not least the rapid acceleration of structural characterization of enzymes and the development of the field of bioinformatics. This new edition places appropriate emphasis on the new knowledge and consolidates the strengths of the previous editions. As before, Fundamentals of Enzymology 3rd ed gives an all-round view of the field including enzyme purification and characterization, enzyme structure (including information on the web), enzyme kinetics, the mechanisms and control of enzyme action, enzyme folding, how enzymes act in vivo, enzyme synthesis and degradation, and also clinical and industrial applications of enzymology. Throughout the book, the integration of these themes is stressed.

**Commentaires**

ISBN 0-19-850229-X

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# Gestion documentaire de l'Institut d'Alembert

Nouvelle recherche

**Cote** MONA BER

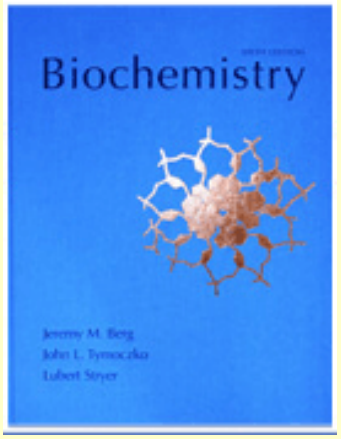
**Auteur** Berg, Jeremy Mark.

**Titre** Biochemistry
Edition: 6th ed.

**Editeur** W. H. Freeman

**Année** 2007

**Section** IDA




**Résumé**

In 1975, Lubert Stryer's Biochemistry emerged as the text that would shape the way Biochemistry is taught. Dr. Stryer conveyed the beauty and excitement of the field with unmatched clarity and elegance. In the forthcoming sixth edition, authors Jeremy M. Berg and John L. Tymoczko responded to feedback from over a hundred instructors. The authors continue to introduce exciting new developments while refocusing on the hallmark strengths of Biochemistry that have helped hundreds of thousands of students worldwide.

**Commentaires**

ISBN 9780716767664
PART I: THE MOLECULAR DESIGN OF LIFE - Prelude: Biochemistry and the Genomic Revolution - Protein Structure and Composition - Exploring Proteins and Proteomes - DNA, RNA and the Flow of Genetic Information - Exploring Genes and Genomes - Exploring Evolution and Bioinformatics - Hemoglobin - Enzymes: Basic Concepts and Kinetics - Catalytic Strategies - Regulatory Strategies - Carbohydrates - Lipids and Cell Membranes - Membrane Channels and Pumps - Signal Transduction Pathways - PART II: TRANSDUCING AND STORING ENERGY - Metabolism: Basic Concepts and Design - Glycolysis and Gluconeogenesis - The Citric Acid Cycle - Oxidative Phosphorylation - The Light Reactions of

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