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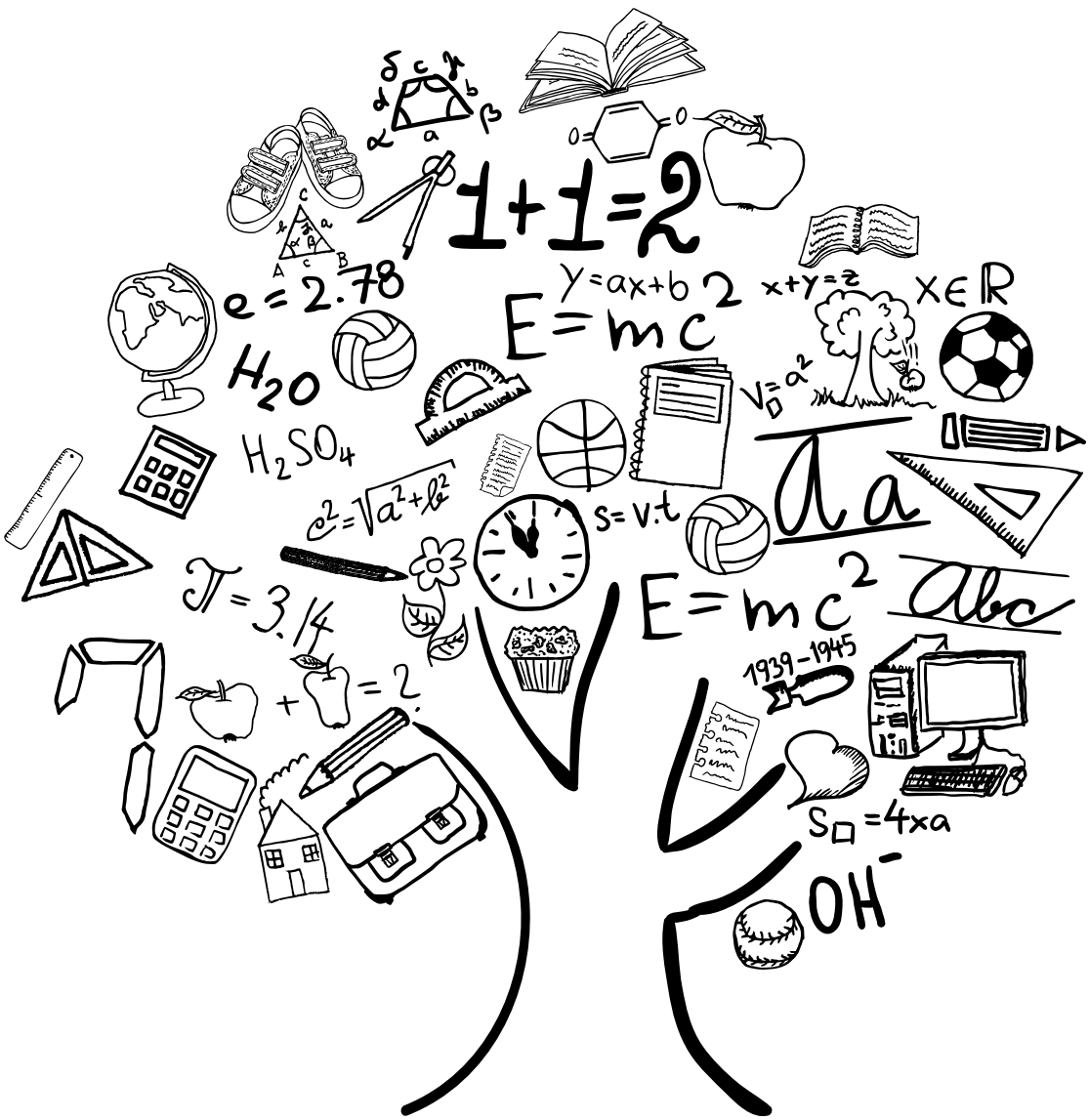

Physics

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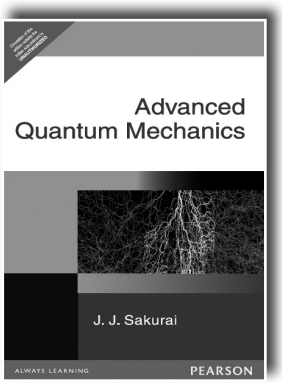
Advanced Quantum Mechanics



ISBN: 9788177589160

J. J. Sakurai

336 | © **2006**

Web Supplements

ABOUT THE BOOK

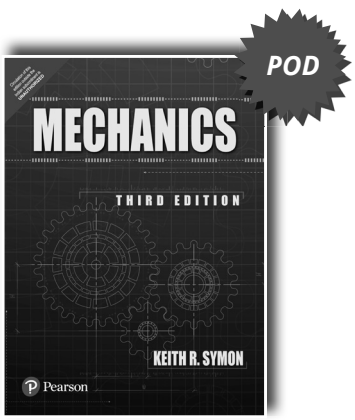
This widely-regarded classic presents the major advances in the fundamentals of quantum physics. No familiarity with relativistic quantum mechanics or quantum field theory is presupposed, but the reader is assumed to be familiar with non-relativistic quantum mechanics, classical thermodynamics and classical mechanics.

CONTENTS

ABOUT THE AUTHOR

The late **J. J. Sakurai**, noted theorist in particle physics, was born in Tokyo, Japan, in 1933. He received his B.A. from Harvard University in 19565, and his Ph. D. from Cornell University in 1958. Appointed assistant professor at the University of Chicago, he worked there until he became a professor at the University of California, Los Angeles in 1970. Sakurai died in 1982 while he was a visiting professor at CERN in Geneva, Switzerland.

Mechanics, 3/e



Keith R. Symon

656 | © **2016**

ISBN: 9789332573918

ABOUT THE BOOK

This text is intended as the basis for an intermediate course in mechanics at the undergraduate level. Such a course, as essential preparation for advanced work in physics, has several major objectives. It must develop in the student a thorough understanding of the fundamental principles of mechanics. It should treat in detail certain specific problems of primary importance in physics, for example, the harmonic oscillator and the motion of a particle under a central force

FEATURES

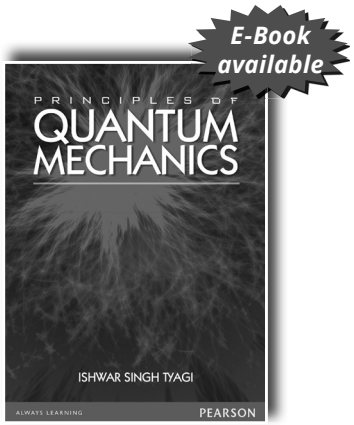
- The treatment throughout the book is intended to emphasize the modern point of view with mathematical rigor
- The examples treated in the text have been worked out so as to integrate as far as possible, the mathematical treatment with physical interpretation
- Two chapters on the theory of relativity has been added in this edition.
- The problems at end of each chapter requires more or less physical ingenuity in addition to an understanding of the text.

CONTENTS

ABOUT THE AUTHOR

Keith R. Symon, University of Wisoconsin

Principles of Quantum Mechanics



Ishwar Singh Tyagi

584 | © **2013**

ISBN: 9788131773352

ABOUT THE BOOK

Any course in physics cannot be completed without learning quantum mechanics. This subject helps in understanding the individual behaviour of the subatomic particles that constitute all forms of matter. Principles of Quantum Mechanics comprehensively covers all relevant topics to meet the requirements of both undergraduate and postgraduate students of physics. The initial chapters of the book introduce the basic fundamentals of the subject to help the first-time learners and the later chapters cover aspects that will prepare them to apply quantum mechanics to understand the various physical phenomena, for example, the working of micro- and nano-devices. The book includes a detailed discussion on why classical mechanics, which is applicable at macroscopic level, cannot be applicable at microscopic level.

CONTENTS

ABOUT THE AUTHOR

Ishwar Singh Tyagi is Emeritus Fellow at the Physics Dept. of IIT Roorkee. After completing his Ph.D. in 1976 from the University of Roorkee (now IIT Roorkee) he joined the Department of Physics as a faculty member in 1977 and became professor in 1996. His assignments as post-doctoral as well as visiting scientist took him to the New University of Ulster (NUU), Coleraine, in North Ireland and the Freie Universitat Berlin.

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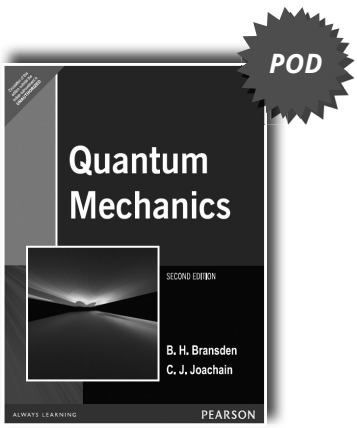


ISBN: 9788131708392

Quantum Mechanics, 2/e

B. H. Bransden | C. J. Joachain

808 | © 2006

Web Supplements

ABOUT THE BOOK

This book gives a modern, comprehensive introduction to the principles of quantum mechanics, to the main approximation methods and to the application of quantum theory to a wide variety of systems. The needs of students having an average mathematical ability are kept very much in mind, with the avoidance of complex mathematical arguments and any undue compression of material.

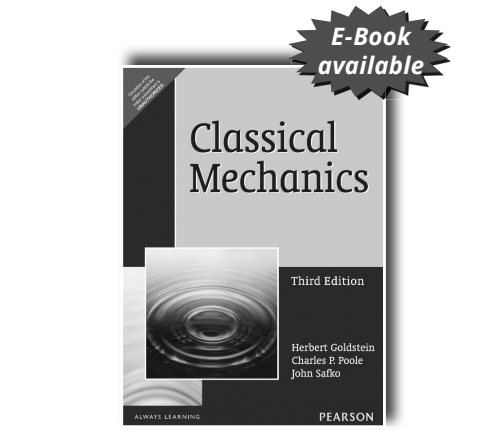
FEATURES

- Comprehensive coverage of core material in quantum mechanics.
- Full and detailed explanations to help students of average mathematical ability.
- Additional topics covered in this edition include: Feynman's path integrals; the Berry phase; quantum dots; quantum jumps; and Bose-Einstein condensation.
- New chapter on relativistic quantum mechanics.
- Problems set to help students monitor their progress and increase understanding.

CONTENTS

ABOUT THE AUTHOR(S)

B.H. Bransden, Department of Physics, University of Durham
C.J. Joachain, Physique Theorique, Universite Libre de Bruxelles University of Wisoconsin



ISBN: 9788131758915

Classical Mechanics, 3/e

Herbert Goldstein | Charles P. Poole | John Safko

664 | © 2011

ABOUT THE BOOK

For 30 years, this classic text has been the acknowledged standard in classical mechanics courses. *Classical Mechanics* enables students to make connections between classical and modern physics " an indispensable part of a physicist's education. The authors have updated the topics, applications, and notations to reflect today's physics curriculum. They introduce students to the increasingly important role that nonlinearities play in contemporary applications of classical mechanics. New numerical exercises help students develop skills in the use of computer techniques to solve problems in physics. Mathematical techniques are presented in detail so that the text remains fully accessible to students who have not had an intermediate course in classical mechanics.

FEATURES

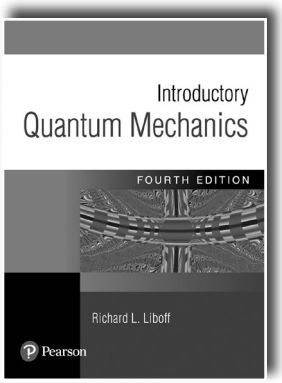
- The classical approach of this leading text book has been revised and updated
- A section on the Euler and Lagrange exact solutions to the three-body problem
- A section on the damped driven oscillator as an example of the workings of the Josephson junction
- Chapter on canonical perturbation theory has been streamlined and the mathematics has been simplified
- Approximately 45 new problems, mostly in Chapters 1–8 and 11.
- Problems sets are now divided into "Derivations" and "Exercises"
- Solutions for 19 select problems have been provided in Appendix C

CONTENTS

ABOUT THE AUTHOR(S)

Herbert Goldstein, Columbia University
Charles P. Poole Jr., University of South Carolina
John L. Safko, University of South Carolina

Introductory Quantum Mechanics, 4/e



Richard L. Liboff

896 | © **2006**

ISBN: 9788131704417

Web Supplements

ABOUT THE BOOK

Careful and detailed explanations of challenging concepts, and comprehensive and up-to-date coverage in this best-selling quantum mechanics text, continue to set the standard in physics education. In this new edition, a new chapter on the revolutionary topic of quantum computing (not currently covered in any other text at this level) and thorough updates to the rest of the text bring it up to date.

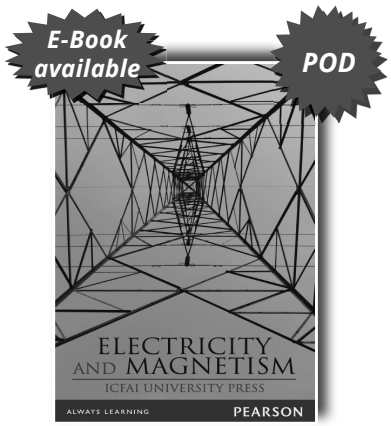
FEATURES

- Introductory Quantum Mechanics, Fourth Edition is well known for its wealth of great problems (869 in total).
- Comprehensive coverage makes the book adaptable to any course.
- The book uses precise presentation and careful use of appropriate math.
- A new chapter on the revolutionary topic of quantum computing and numerous revisions throughout the rest of the book bring it up to date.
- More than 30 new problems have been added.

CONTENTS

ABOUT THE AUTHOR

Richard L. Liboff is presently a Professor of Applied Physics, Applied Math, and Electrical Engineering at Cornell University. He has served as visiting professor at numerous universities and was awarded a Fulbright Scholarship in 1984 in support of a Visiting Professorship of Physics at Tel Aviv University. He has written over 100 scientific articles and has authored four textbooks. His research specialties include condensed-matter theory, kinetic theory, applied math, and elements of astrophysics.



ISBN: 9788131773727

Electricity and Magnetism

ICFAI University Press

440 | © **2012**

ABOUT THE BOOK

Electricity and Magnetism is designed for undergraduate courses in Physics. It comprehensively covers the topics of electricity and magnetism and brings out the relationship between the two forces with adequate emphasis on principles, theory and pedagogy. Illustrations are specially made to suit classroom presentation. Written in a simple and lucid language, the book progresses from the basic laws, which help the students to stay focused on the key tenets, without getting lost in the maze of intricate details

FEATURES

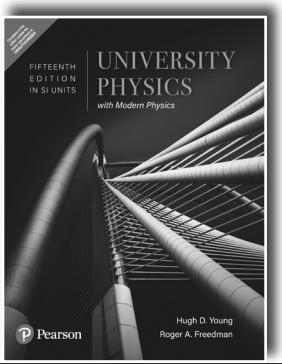
- It traces the origin of electromagnetic radiations, starting from the first principles.
- In-depth coverage of Current, Resistance and Electric Circuits, Gauss's Law and Magnetism
- Electric Charge and Electric Field and Electric Potential discussed in detail
- Student centric pedagogy with 90 solved examples and over 120 exercises.

CONTENTS

ABOUT THE AUTHOR

ICFAI University Press, Hyderabad

University Physics with Modern Physics, 15/e



ISBN: 9789353949297

Roger A. Freedman | Hugh D. Young

1608 | © **2021**

ABOUT THE BOOK

University Physics has been revered for its emphasis on fundamental principles and its applications since its first edition. The new 15th Edition of University Physics with Modern Physics, now in SI Units, draws on insights from several users to help students see patterns and make connections between problem types. Students learn to recognize when to use similar steps in solving the same problem type and develop an understanding for problem solving approaches, rather than simply plugging values into an equation. This edition addresses students' tendency to focus on the objects and situations posed in a problem, rather than recognizing the underlying principle or the problem type.

FEATURES

- New—Key Example Variation Problems in the new Guided Practice section based on worked examples, build in difficulty by changing scenarios, swapping knowns and unknowns, and adding complexity to provide a wide range of related problems that use the same basic approach to solve.
- New—Key Concept statements appear at the end of every example, providing a summary of the key idea used in the solution to consolidate what was most important and what can be broadly applied to other problems.
- A research-based Problem-Solving Approach—Identify, Set Up, Execute, Evaluate—used in every example to teach students to tackle problems thoughtfully rather than cutting straight to the math.
- Expanded—Challenge Problems significantly stretch students by requiring sophisticated reasoning, often involving multiple steps or concepts.
- Expanded—Cumulative Problems promote advanced problem-solving techniques by covering knowledge and skills from previous chapters to be integrated with understanding from the current chapter.

Hallmark Pedagogy:

- Annotated Key Equations
- Caution Paragraphs
- Visual Summaries
- Problem-Solving Strategies
- Bridging Problems
- Conceptual Examples
- Biosciences-Related Problems
- Data Problems
- Passage Problems
- Test your understanding

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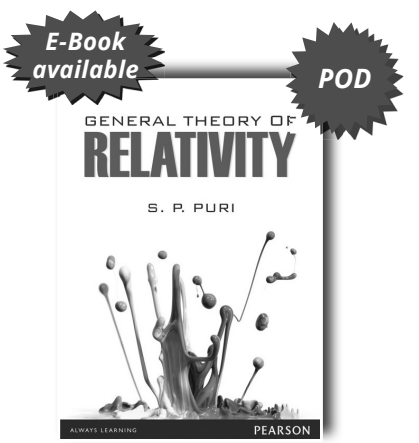
ABOUT THE AUTHOR(S)

Roger A. Freedman is a Lecturer in Physics at the University of California, Santa Barbara. He was an undergraduate at the University of California campuses in San Diego and Los Angeles and did his doctoral research in nuclear theory at Stanford University under the direction of Professor J. Dirk Walecka. Dr. Freedman came to UCSB in 1981 after three years of teaching and doing research at the University of Washington

Hugh D. Young was Emeritus Professor of Physics at Carnegie Mellon University. He earned both his undergraduate and graduate degrees from that university. He earned his Ph.D. in fundamental particle theory under the direction of the late Richard Cutkosky. Dr. Young joined the faculty of Carnegie Mellon in 1956 and retired in 2004. He also had two visiting professorships at the University of California, Berkeley.

A. Lewis Ford is Professor of Physics at Texas A&M University. He received a B.A. from Rice University in 1968 and a Ph.D. in chemical physics from the University of Texas at Austin in 1972. After a one-year postdoc at Harvard University, he joined the Texas A&M physics faculty in 1973 and has been there ever since. Professor Ford has specialized in theoretical atomic physics—in particular, atomic collisions. At Texas A&M he has taught a variety of undergraduate and graduate courses, but primarily introductory physics.



ISBN: 9788131795682

General Theory of Relativity

S P Puri

368 | © **2013**

Web Supplements

ABOUT THE BOOK

General Theory of Relativity is the generalization of special relativity to include gravitation. It emphasizes that the law of Physics must be same for all observers and thereby extended it to non-inertial frames.This text is intended as a textbook for the students of Physics at the undergraduate and postgraduate level. It gives equal importance to the mathematical and physical aspects of general theory of relativity and hence strengthening the foregrounds.

FEATURES

- Detailed study of Tensor analysis
- In-depth coverage on cosmology
- An introductory chapter on Special Theory of Relativity
- 36 figures, 18 solved problems and 82 unsolved problems with answers

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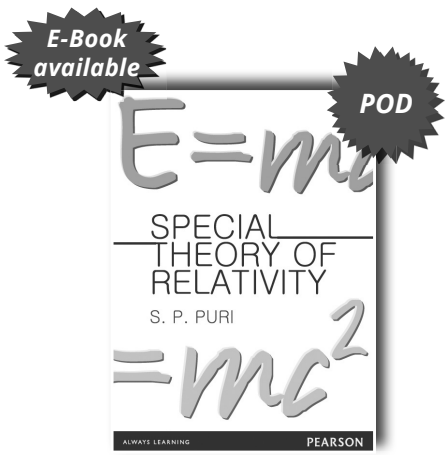
CONTENTS

ABOUT THE AUTHOR

SP Puri is a former U.G.C Emeritus Fellow. He was also a Professor and Chairman at Department of Physics in Panjab University, Chandigarh.



ISBN: 9788131785010

Special Theory of Relativity

S P Puri

232 | © **2013**

Web Supplements

ABOUT THE BOOK

Special Theory of Relativity is primarily intended as a textbook for the students of physics at the undergraduate level. Examining developments in the field as well as the predictions of special relativity that have taken place since 1959, its comprehensive coverage includes engaging explanations of the mathematical treatment as well as the applications of the special theory of relativity.

FEATURES

- Includes applications of special theory of relativity in a chapter
- 45 solved problems and 100 unsolved problems for practice
- Answers to unsolved problems included

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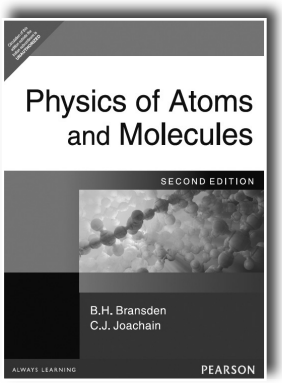
ABOUT THE AUTHOR

S. P. Puri, is a former U.G.C. Emeritus Fellow, was Professor and Chairman, Department of Physics, Punjab University, Chandigarh.

Physics of Atoms and Molecules, 2/e



ISBN: 9788177582796

B.H. Bransden | **C. J. Joachain**

1128 | © **2005**

ABOUT THE BOOK

The study of atomic and molecular physics is a key component of undergraduate courses in physics, because of its fundamental importance to the understanding of many aspects of modern physics. The aim of this new edition is to provide a unified account of the subject within an undergraduate framework, taking the opportunity to make improvements based on the teaching experience of users of the first edition, and cover important new developments in the subject.

FEATURES

- Revised material on molecular structure and spectra.
- Extended material on electronic and atomic collisions.
- A new chapter describing applications based on the use of the maser and the laser, including laser spectroscopy, laser cooling and trapping of atoms, Bose Einstein condensation, atom lasers and atomic systems in intense laser fields.
- A new chapter describing other applications, including magnetic resonance, atom optics, atoms in cavities, ions in traps, atomic clocks and astrophysics.
- Revised appendices include new material on molecules and updated tables of physical constants.
- Solutions of selected problems.

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ABOUT THE AUTHOR(S)

B.H. Bransden, Department of Physics, University of Durham

C.J. Joachain, Physique Theorique, Universite Libre de Bruxelles

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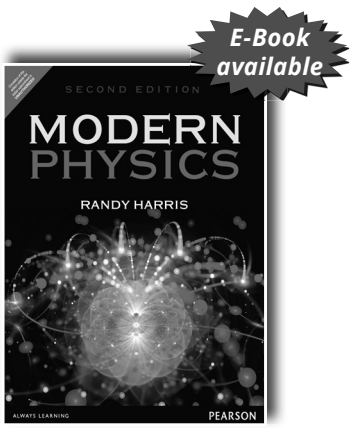

ISBN: 9789332570962

Modern Physics, 2/e

Randy Harris

640 | © **2016**

ABOUT THE BOOK

Modern Physics, Second Edition provides a clear, precise, and contemporary introduction to the theory, experiment, and applications of modern physics. Ideal for both physics majors and engineers, this eagerly awaited second edition puts the modern back into modern physics courses. Pedagogical features throughout the text focus the reader on the core concepts and theories while offering optional, more advanced sections, examples, and cutting-edge applications to suit a variety of students and courses. Critically acclaimed for his lucid style, in the second edition, Randy Harris applies the same insights into recent developments in physics, engineering, and technology.

FEATURES

- A contemporary approach that incorporates recent developments in physics and up-to-date applications in engineering and technology make the physics relevant and engaging.
- Critically acclaimed for a lucid and precise style, the book carefully balances concepts, theory, experimental data, and theory. It strives for complete exposition of fundamental ideas while addressing common misconceptions.
- Progress and Applications sections survey current applications of the theories described in the chapter. Students see how what they learn applies to their chosen career and the opportunities available for professional physicists and engineers.
- Worked Examples in the text carefully walk students step-by-step through solving problems to better prepare them to tackle the end-of-chapter problems.
- Optional/Advanced sections are clearly labeled so that professors can pick and choose sections to optimally match the level, scope, and emphasis of their course.
- Chapter Outlines and brief introductions give students a learning roadmap to the chapter ahead.
- Chapter Summaries now incorporate a Basic Equations section to show how each equation relates to the key topics in the chapter, and to one another.
- Challenge Problems are highlighted so professors can easily build assignments of ideal level, and know where they can push their best students.

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ABOUT THE AUTHOR

Randy Harris, University of California, Davis

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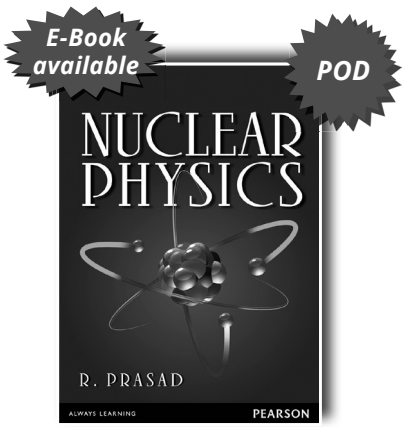

ISBN: 9789332522657

Nuclear Physics

R Prasad

504 | © 2014

ABOUT THE BOOK

Nuclear Physics provides a clear and concise introduction to the subject. Fundamentals aside, the book reviews the evolution of the subject from its emergence to its present-day advancements and critically examines the future directions of nuclear and particle physics. The book brings together the essence of nuclear, particle and cosmic ray physics, serving as an ideal text for undergraduate students.

FEATURES

- Exclusive chapters on elementary particles and cosmic rays
- Focus on contemporary developments like heavy ion reactions, in-complete fusion, neutrino oscillations, big accelerators, colliding beam experiments & Higg's particle
- Over 220 illustrations
- Rich pedagogy comprising over 300 multiple choice questions and problems for practice

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1. The Birth of the Nucleus
2. Basic Properties of the Nucleus and their Determination
3. Force between Nucleons
4. Quantum Mechanical analysis of some Nuclear systems
5. Characteristics of stable Nuclei and Nuclear Models
6. Radioactive Decay
7. Nuclear radiations and Detectors
8. Nuclear reactions
9. Particle accelerators
10. Nuclear energy
11. Fundamentals of elementary Particles
12. Cosmic rays

ABOUT THE AUTHOR

R. Prasad has more than 40 years experience of teaching physics and nuclear physics to graduate and postgraduate students. He is an ex-professor of nuclear physics at the Aligarh Muslim University, Aligarh, India.

Throughout his career, Prof. Prasad supervised half a dozen Ph.D, about two dozen M.Phil, large number of M.Sc projects, eleven research projects funded by various agencies in India and carried out post doctoral research at many international and national institutes/universities including the First Institute of Experimental Physics, University of Hamburg, Germany and Atom Institute, Technical Universities of Austria, Vienna, Austria among many. He has also attended and chaired sessions of a large number of international and national conferences, seminars and symposia and delivered invited talks. He has published more than 80 research papers in various reputed international and national journals and presented six science-based television films under the UGC higher education programme. He is a recipient of prestigious DAAD (German) Fellowship, Post-doc fellowship of the Government of Austria, and Emeritus fellowship of UGC, India. He is a life member of many academic societies of the country.

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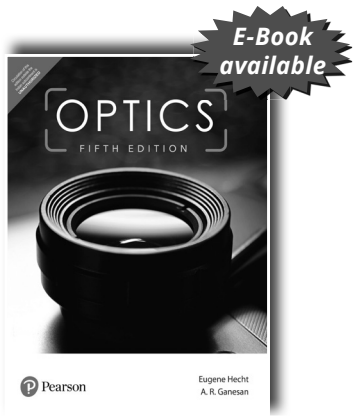

ISBN: 9789353439590

Optics, 5/e

Eugene Hecht | A. R. Ganesan

752 | © 2020

Web Supplements

ABOUT THE BOOK

Optics, Fifth Edition is distinguished by three core imperatives: up-to-date content in line with the ever-evolving technological advances in the Optics field a modern approach to discourse including studies on photons, phasors, and theory and improvements and revisions to the previous edition's pedagogy including over one hundred new worked examples. Sustaining market leadership for over twenty years, this edition continues to demonstrate range and balance in subject matter. The text is grounded in traditional methodology, while providing an early introduction to the powerful perspective of the Fourier theory, which is crucial to present-day analysis. Electron and neutron diffraction patterns are pictured alongside the customary photon images, and every piece of art has been scrutinized for accuracy and altered where appropriate to improve clarity.

FEATURES

New to this edition

- UPDATED! New illustrations, photos, and revised art are included throughout the text, enhancing the already outstanding visual pedagogy of the book.
- UPDATED! Promoting the balance of theory and instrumentation, this comprehensive text provides students with a classical background to ensure success in their field.
- Anon-mathematical introduction sets the stage for traditional presentation in Optics.
- Traditional discussion of interference is extended, using phasors to graphically represent electric-field amplitudes, giving students an alternative way to visualize and understand core elements.
- Graphical analysis is used in addition to the standard, mathematical treatment of Fourier series to conceptually show what the integrals are actually doing to promote student comprehension.
- A complete Wave Motion section includes helical waves and an added section on Twisted Light.
- Divergence and Curl Comprehension ensures students' understanding of the physical correspondence of divergence and curl in simple terms.
- Understanding Negative Refraction is an active area of contemporary research, which is explained in refined yet simple terms along with a brief introduction to the basic physics involved.
- Constructing Refracted Rays highlights the method devised by Huygens Optics and allows a convenient way to appreciate refraction in anisotropic crystals.
- The Geometrical Optics is a collection of new art which clearly illustrates the behavior of lenses and mirrors, along with additional remarks on fiberoptics; including the subsections Virtual Objects, Focal-Plane Ray Tracing, and Holey/Microstructured Fibers.
- Fourier Optics includes a new subsection, Two-Dimensional Images, and contains a remarkable series of illustrations depicting how spatial frequency components combine to create images.
- The Modern Optics contains an enriched and updated treatment of lasers accompanied by tables and illustrations and includes a subsection on Optoelectronic Image Reconstruction.

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13. Modern Optics: Lasers and Other Topics
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Table 1 Solutions to Selected Problems
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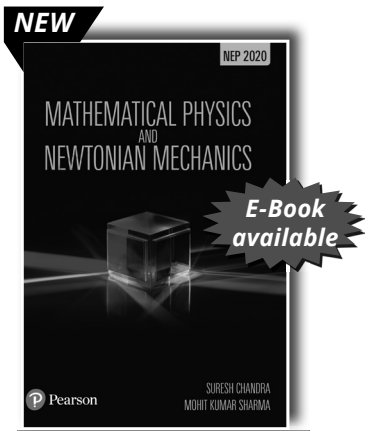
ABOUT THE AUTHOR(S)

Eugene Hecht Adelphi University

A. R. Ganesan Professor, Department of Physics Indian Institute of Technology Madras Chennai

PHYSICS FUNDAMENTALS



ISBN: 9789357053242

Mathematical Physics and Newtonian Mechanics, 1e

Suresh Chandra | Mohit Kumar Sharma

516 | © 2023

Web Supplements

ABOUT THE BOOK

This textbook is designed to meet the syllabus requirements of the undergraduate students of physics as per the Common Minimum Syllabus prescribed for all Uttar Pradesh State Universities and Colleges under the recommended National Education Policy 2020, for the paper on Mathematical Physics and Newtonian Mechanics and the lab course on Mechanical Properties of Matter. The topics are discussed in a methodical way and a number of topics such as Pseudo-Vector, Pseudo-Scalar, Wedge Product of Vectors, etc, have been discussed in a very systematic and simple manner to suit the beginner learners.

FEATURES

- The concepts are explained in a student-friendly language
- Topics are supported by exercises and review questions for better understanding
- Includes a lab manual on Mechanical properties of Matter

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1. Vector Algebra
2. Vector Calculus
3. Coordinate Systems
4. Introduction to Tensors
5. Dynamics of a System of Particles
6. Dynamics of a Rigid Body
7. Motion of Planets and Satellites
8. Wave Motion
9. Before going to Laboratory
10. In Laboratory

ABOUT THE AUTHOR

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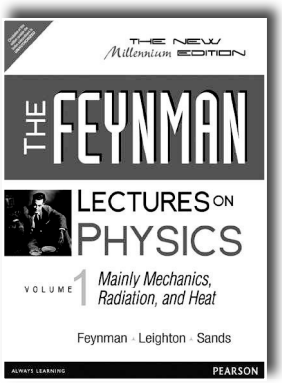

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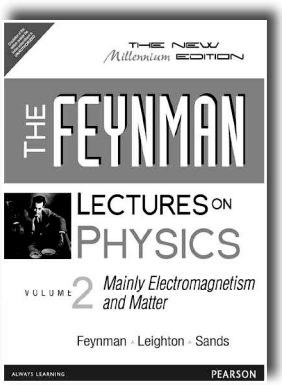

ISBN: 9788131792124

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When I look at The Feynman Lectures on Physics, "I feel a very personal sense of closeness to them," said Feynman, looking back at the origins of these books. Ranging from Gauss's law and Maxwell's electrodynamics to waveguides, dielectrics, magnetic materials, and elasticity, the lectures collected in Volume II of ***The Feynman Lectures on Physics*** stand as a monument to clear exposition and deep insightand to Feynman's deep connection with the field.

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ABOUT THE AUTHOR(S)

Richard P. Feynman was a professor of physics at Caltech from 1959 to 1988. In 1965 he shared a Nobel Prize in Physics for his work on the development of quantum electrodynamics.

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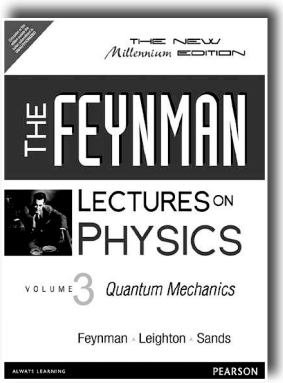

ISBN: 9788131792131

The Feynman Lectures on Physics: Volume III: The New Millennium Edition: Quantum Mechanics

Richard P. Feynman | Robert B. Leighton | Matthew Sands

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ABOUT THE BOOK

Timeless and collectible, ***The Feynman Lectures on Physics*** are essential reading, not just for students of Physics, but for anyone seeking an insightful introduction to the field from the inimitable Richard P. Feynman.

When I look at The Feynman Lectures on Physics, I feel a very personal sense of closeness to them," said Feynman, looking back at the origins of these books. Ranging from probability amplitudes to spin, two-state systems, propagation in a crystal lattice, semiconductors, symmetry, and conservation laws, the lectures collected in Volume Ill of ***The Feynman Lectures on Physics*** stand as a monument to clear exposition and deep insightand to Feynman's deep connection with the field.

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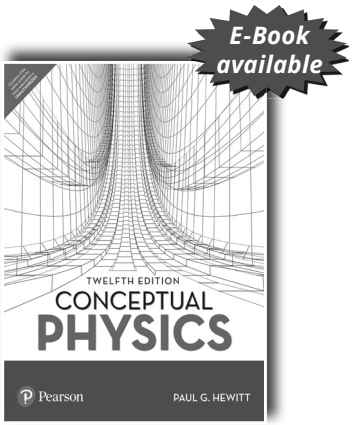

ISBN: 9789352861774

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Paul G. Hewitt

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ABOUT THE BOOK

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- Insight boxes provide short snippets of information about how topics in the text relate to real-life situations, experiments, and other parts of the book.
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ABOUT THE AUTHOR

Paul G. Hewitt, former silver-medal boxing champion, sign painter, uranium prospector, and soldier, Paul began college at the age of 27, with the help of the GI Bill. He pioneered the conceptual approach to teaching physics at the City College of San Francisco. He has taught as a guest teacher at various middle schools and high schools, the University of California at both the Berkeley and Santa Cruz campuses, and the University of Hawaii at both the Manoa and Hilo campuses. He also taught for 20 years at the Exploratorium in San Francisco, which honored him with its Outstanding Educator Award in 2000. He is the author of Conceptual Physics and a co-author of Conceptual Physical Science and Conceptual Physical Science Explorations (with John Suchocki and Leslie Hewitt).

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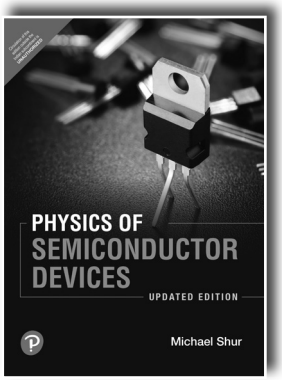
Physics of Semiconductor Devices, Updated edition, 1/e



ISBN: 9789353430061

Michael Shur

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ABOUT THE BOOK

This book provides a practical introduction to the basics of semiconductor physics as well as insights into important developments, such as amorphous silicon, compound semiconductor technologies, and novel heterostructure transistors.

FEATURES

- Implements all theories and models discussed in microcomputer programs
  - Providing readers with a useful "toolbox" for the modeling and simulation of semiconductor devices.
- Includes detailed appendices with useful information on semiconductor parameters which help readers to solve practical problems related to the analysis, design, and characterization of different semiconductor devices.
- Includes over 35 microcomputer programs and nearly 150 problems.

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4. Field Effect Transistors
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7. Novel Devices

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Michael Shur, University of Virginia.

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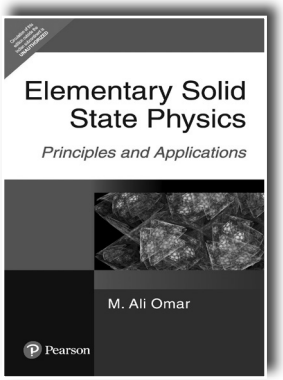

ISBN: 9788177583779

Elementary Solid State Physics: *Principles and Applications*

M. Ali Omar

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ABOUT THE BOOK

The volume is intended to serve as a general text in solid state physics for undergraduates in physics, applied physics, engineering, and other related scientific disciplines. It covers a wide range of topics with as many practical applications as possible.

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M. Ali Omar, Lowell Technological Institute

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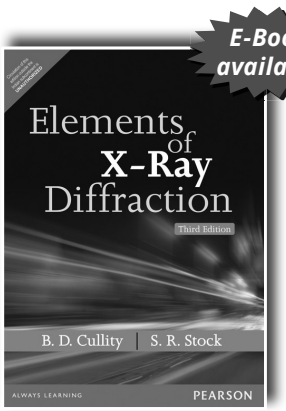

ISBN: 9789332535169

Elements of X-Ray Diffraction, 3/e

B. D. Cullity | S.R. Stock

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ABOUT THE BOOK

This revision of a classical text is intended to acquaint the reader, who has no prior knowledge of the subject, with the theory of x-ray diffraction, the experimental methods involved, and the main applications. The text is a collection of principles and methods designed directly for the student and not a reference tool for the advanced reader

FEATURES

- No metallurgical data are given beyond that necessary to illustrate the diffraction methods involved.
- X-ray diffraction is stressed rather than metallurgy.
- The book is divided into three main parts—Fundamentals; experimental methods; and applications.
- The subject of crystal structure is approached through, and, based on, the concept of the point lattice (Bravais lattice), because the point lattice of a substance is so closely related to its diffraction pattern.
- The book is written entirely in terms of the Bragg law and can be read without any knowledge of the reciprocal lattice.

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ABOUT THE AUTHOR(S)

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S.R. Stock, Georgia Institute of Technology

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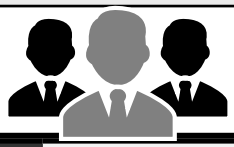

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