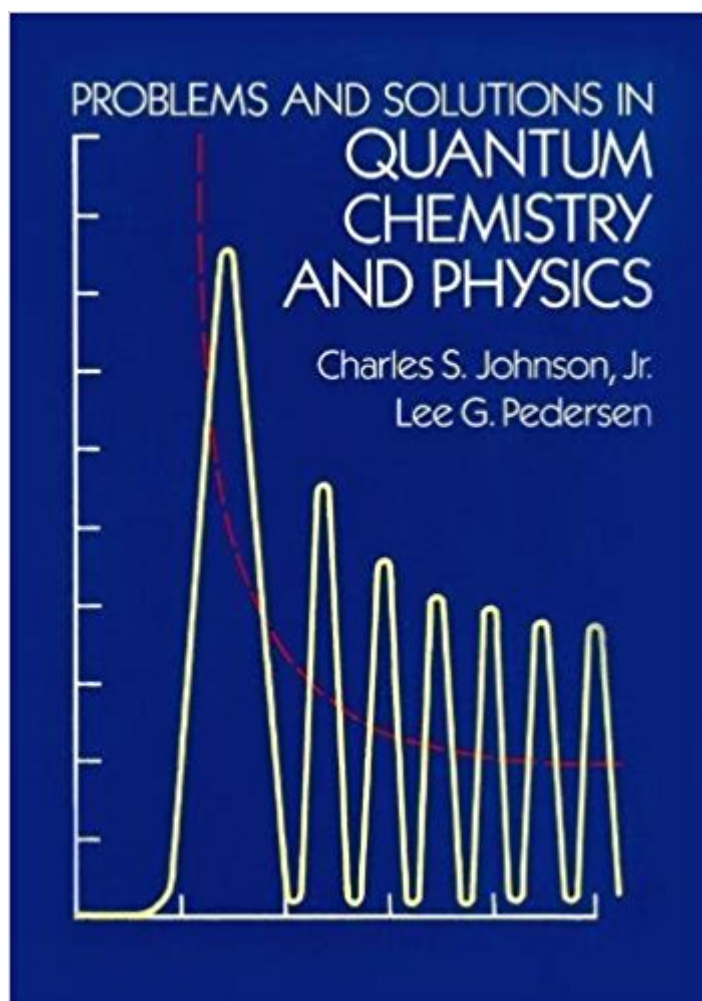


The book was found

Problems And Solutions In Quantum Chemistry And Physics (Dover Books On Chemistry)



Synopsis

"A very useful addition to the chemical literature." — Journal of the American Chemical Society. Designed to aid students and teachers in advanced physical chemistry, spectroscopy, or quantum chemistry courses, this carefully written book is unique in the variety of problems covered and the detail of the solutions provided. The book consists of 12 chapters, each of which includes a short introduction, followed by approximately 20 problems with detailed solutions. Also provided in each chapter are approximately 10 "supplementary" problems, with answers but no solutions. Chapter headings include: Atomic Physics and the Old Quantum Theory Waves and Superposition Postulates and Formalism of Quantum Mechanics Simple Exactly Soluble Problems in Wave Mechanics Angular Momentum Perturbation and Variation Theory Hydrogen-Like Atoms Electronic Structure of Atoms Electronic Structure of Molecules Radiation and Matter Molecular Spectroscopy Scattering Theory Assuming some facility with calculus, mechanics, and electricity and magnetism, the authors offer thorough and up-to-date coverage of both modern subject matter and standard topics. Interspersed among classic examples are lucid applications involving such topics as Fourier transforms, Poisson brackets, uncertainty, the virial theorem, van der Waals forces, lasers, tunneling, group theory, and the Born approximation. Students will also find 10 helpful appendixes covering a range of mathematical topics, a list of references cited in solutions to the problems, and a Subject Index. With its unique variety of problems, unusually detailed solutions, and wide range of applications, this book not only expounds the principles of quantum theory but also helps students develop the proper intuition for solving problems in a complex and subtle field of endeavor.

Book Information

Series: Dover Books on Chemistry

Paperback: 448 pages

Publisher: Dover Publications (January 1, 1987)

Language: English

ISBN-10: 048665236X

ISBN-13: 978-0486652368

Product Dimensions: 6.5 x 0.9 x 9.2 inches

Shipping Weight: 1.3 pounds (View shipping rates and policies)

Average Customer Review: 4.4 out of 5 stars 5 customer reviews

Best Sellers Rank: #608,317 in Books (See Top 100 in Books) #33 in Books > Science & Math >

Chemistry > Physical & Theoretical > Quantum Chemistry #1929 in Books > Science & Math > Chemistry > General & Reference #7220 in Books > Science & Math > Physics

Customer Reviews

This is one of the most complete problem and solution book for the undergraduate quantum physics I have seen. Don't be disappointed by the look of this book, although it is printed somewhat unusual i.e cheap paper small fonts but, its complete. The problems are much like the problems you can find in quantum chemistry or quantum mechanics books(undergraduate) and the solutions are clear and concise. Of course prior knowledge in quantum mechanics and physical chemistry is required but that you already have if you are looking for a solution book parallel with your text book. At the beginning of every chapter some explanation and key points are given that help to recall from text book without opening the text book. I would say, its cheap and its almost complete for undergraduate in physics and more than complete for undergraduate in chemistry. 5 stars because of the price and quality.

A valuable collections of solved problems of quantum chemistry and physics at a different levels of difficulty, excellent to learn this field by solving problem by your own, it is worthwhile to have it

Its been covered that its a good Quantum problems book, but I really can't read it. I knew it was old, but it looks like it was done on a type-writer. Can't fault them though, Caveat Emptor.

Very good for the 5\$. This book i bought for 5\$ is worth its money. Packed very well and is in very good condition. Got it in 2-3 days

This collection of numerous problems in both old atomic theory as well as (slightly) more modern theory is a great review to students who may have taken introductory QM classes and need a refresher, or as a supplement to those students currently learning QM. The topics covered are varied and problems include complete solutions. Overall a good volume to include in any early theorist's collection.

[Download to continue reading...](#)

Problems and Solutions in Quantum Chemistry and Physics (Dover Books on Chemistry) Advanced Molecular Quantum Mechanics: An Introduction to Relativistic Quantum Mechanics and the Quantum Theory of Radiation (Studies in Chemical Physics) Recent Advances in the Theory of

Chemical and Physical Systems: Proceedings of the 9th European Workshop on Quantum Systems in Chemistry and Physics ... in Theoretical Chemistry and Physics) Mathematics of Classical and Quantum Physics (Dover Books on Physics) Methods of Quantum Field Theory in Statistical Physics (Dover Books on Physics) Problems and Solutions for McQuarrie's Quantum Chemistry Quantum Electrodynamics: Gribov Lectures on Theoretical Physics (Cambridge Monographs on Particle Physics, Nuclear Physics and Cosmology) Prostate Problems Home Remedies, How To Fight Prostate Problems At Home, Get Rid Of Prostate Problems Fast!: Back On Track - Fighting Prostate Problems At Home Boundary and Eigenvalue Problems in Mathematical Physics (Dover Books on Physics) 100 Instructive Calculus-based Physics Examples: Electricity and Magnetism (Calculus-based Physics Problems with Solutions Book 2) 100 Instructive Calculus-based Physics Examples: The Laws of Motion (Calculus-based Physics Problems with Solutions) Glencoe Physics: Principles and Problems, Student Edition (PHYSICS:PRINC AND PROBLEMS) Modern Quantum Chemistry: Introduction to Advanced Electronic Structure Theory (Dover Books on Chemistry) Quantum Mechanics in Chemistry (Dover Books on Chemistry) Quantum Runes: How to Create Your Perfect Reality Using Quantum Physics and Teutonic Rune Magic (Creating Magick with The Universal Laws of Attraction Book 1) Covariant Loop Quantum Gravity: An Elementary Introduction to Quantum Gravity and Spinfoam Theory (Cambridge Monographs on Mathematical Physics) Quantum Thermodynamics: Emergence of Thermodynamic Behavior Within Composite Quantum Systems (Lecture Notes in Physics) The Quantum Mechanics Solver: How to Apply Quantum Theory to Modern Physics Quantum Theory of Many-Particle Systems (Dover Books on Physics) The Physics and Philosophy of the Bible: How Relativity, Quantum Physics, Plato, and History Meld with Biblical Theology to Show That God Exists and That ... Live Forever (The Inevitable Truth Book 1)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)