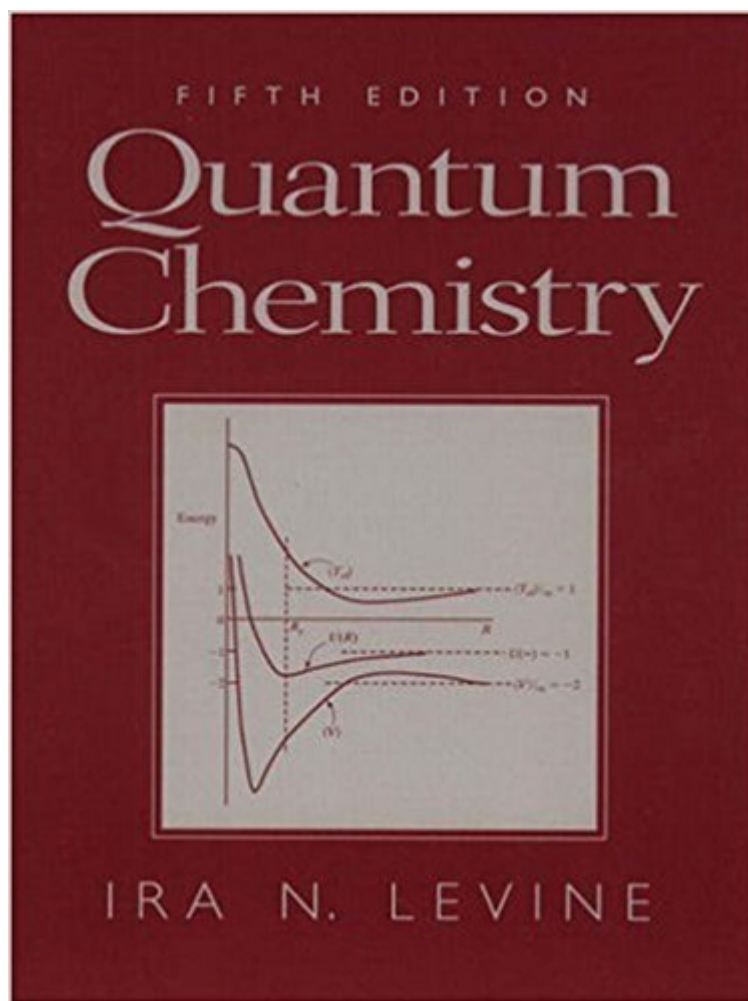


The book was found

Quantum Chemistry (5th Edition)



Synopsis

Integrating many new computer-oriented examples and problems throughout, this modern introduction to quantum chemistry covers quantum mechanics, atomic structure, and molecular electronics, and clearly demonstrates the usefulness and limitations of current quantum-mechanical methods for the calculation of molecular properties. Covers such areas as the Schrödinger Equation, harmonic oscillator, angular momentum, hydrogen atom, theorems of quantum mechanics, electron spin and the Pauli Principle, the Virial Theorem and the Hellmann-Feynman Theorem, and more. Contains solid presentations of the mathematics needed for quantum chemistry, clearly explaining difficult or subtle points in detail. Offers full, step-by-step examinations of derivations that are easy to follow and understand. Offers comprehensive coverage of recent, revolutionary advances in modern quantum-chemistry methods for calculating molecular electronic structure, including the ab initio and semiempirical methods for molecular calculations. Now integrates over 500 problems throughout, with a substantial increase in the amount of computer applications, and fully updated discussions of molecular electronic structure calculations. For professionals in all branches of chemistry.

Book Information

Series: Quantum Chemistry

Paperback: 739 pages

Publisher: Prentice Hall; 5 edition (August 5, 1999)

Language: English

ISBN-10: 0136855121

ISBN-13: 978-8120330641

Product Dimensions: 6.9 x 1.4 x 9.2 inches

Shipping Weight: 2.4 pounds (View shipping rates and policies)

Average Customer Review: 4.5 out of 5 stars 34 customer reviews

Best Sellers Rank: #546,932 in Books (See Top 100 in Books) #29 in [Books > Science & Math > Chemistry > Physical & Theoretical > Quantum Chemistry](#) #180 in [Books > Science & Math > Chemistry > Physical & Theoretical > Physical Chemistry](#) #489 in [Books > Science & Math > Physics > Quantum Theory](#)

Customer Reviews

This comprehensive, modern introduction to quantum chemistry covers quantum mechanics, atomic structure and molecular electronic structure. --This text refers to an out of print or unavailable edition

of this title.

Integrating many new computer-oriented examples and problems throughout, this modern introduction to quantum chemistry covers quantum mechanics, atomic structure, and molecular electronics, and clearly demonstrates the usefulness and limitations of current quantum-mechanical methods for the calculation of molecular properties. Covers such areas as the Schrödinger Equation, harmonic oscillator, angular momentum, hydrogen atom, theorems of quantum mechanics, electron spin and the Pauli Principle, the Virial Theorem and the Hellmann-Feynman Theorem, and more. Contains solid presentations of the mathematics needed for quantum chemistry, clearly explaining difficult or subtle points in detail. Offers full, step-by-step examinations of derivations that are easy to follow and understand. Offers comprehensive coverage of recent, revolutionary advances in modern quantum-chemistry methods for calculating molecular electronic structure, including the ab initio and semiempirical methods for molecular calculations. Now integrates over 500 problems throughout, with a substantial increase in the amount of computer applications, and fully updated discussions of molecular electronic structure calculations. For professionals in all branches of chemistry.

Levine's Quantum Chemistry is one of the best books to understand quantum chemistry. It provides a rigorous foundation for students pursuing a career in theoretical chemistry. Once a student finishes reading this book, he or she can quickly go to the more specialized books like Szabo and Ostlund's Modern Quantum Chemistry.

"Quantum Chemistry" takes on a complex and esoteric subject and does the best introduction that I have read yet. There are numerous mathematical examples that follow the theory. I know that readers will always want more of actual usage and linking to give this area real relevance, as I did. But, this is the best that is available for the present, and for the last two decades. You will have to use your imagination and intuition to complete the story. But, if you are a practicing scientist, as I am, that won't be hard to do, just time consuming. There is a whole new field of materials integration that is emerging using the idea of convergent materials that have the properties of all the invested contents. Look into flexible glass plates, the ancients did it so we must be able to surpass their efforts, ceramic magnetic shields, guess who again and others.

I have gone through many books on quantum and this one is by far my favorite. The explanations

are clear, derivations are concise, easy to follow and straightforward.

Just what I expected. A very fine conceptual and mathematical development of the subject. If the student is unfamiliar with quantum chemistry and requires a reliable tutor to shape his skills meticulously, he/she should acquire the book.

Terrific book for sophomore students in chemistry who are interested in theoretical work. Easy to catch up with and tons of fundamental knowledge to dig up.

Product arrived as described.

It uses quantum mechanics to explain the basis of chemistry. The math is typical of a book on this topic but it is explained one step at a time.

:)

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

Advanced Molecular Quantum Mechanics: An Introduction to Relativistic Quantum Mechanics and the Quantum Theory of Radiation (Studies in Chemical Physics) Quantum Chemistry (5th Edition) Study Guide: Ace Organic Chemistry I - The EASY Guide to Ace Organic Chemistry I: (Organic Chemistry Study Guide, Organic Chemistry Review, Concepts, Reaction Mechanisms and Summaries) Ace General Chemistry I and II (The EASY Guide to Ace General Chemistry I and II): General Chemistry Study Guide, General Chemistry Review Quantum Chemistry & Spectroscopy Plus MasteringChemistry with eText -- Access Card Package (3rd Edition) (Engel Physical Chemistry Series) Modern Quantum Chemistry: Introduction to Advanced Electronic Structure Theory (Dover Books on Chemistry) Quantum Mechanics in Chemistry (Dover Books on Chemistry) 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) Problems and Solutions in Quantum Chemistry and Physics (Dover Books on Chemistry) Physical Chemistry: Quantum Chemistry and Molecular Interactions, Books a la Carte Plus MasteringChemistry with eText -- Access Card Package Quantum Ontology: A Guide to the Metaphysics of Quantum Mechanics Quantum Nanoelectronics: An introduction to electronic nanotechnology and quantum computing Introduction to Topological Quantum Matter & Quantum Computation Quantum Mechanics: Re-engineering Your Life With Quantum Mechanics &

Affirmations 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) Delirious, A Quantum Novel (Quantum Series Book 6) Quantum Thermodynamics: Emergence of Thermodynamic Behavior Within Composite Quantum Systems (Lecture Notes in Physics) Covariant Loop Quantum Gravity: An Elementary Introduction to Quantum Gravity and Spinfoam Theory (Cambridge Monographs on Mathematical Physics) The Quantum Mechanics Solver: How to Apply Quantum Theory to Modern Physics Quantum Space (Quantum Series Book 1)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)