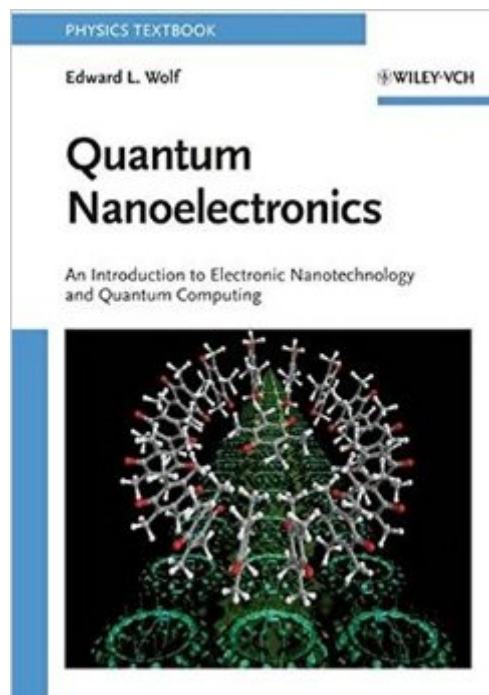# Quantum Nanoelectronics: An Introduction To Electronic Nanotechnology And Quantum Computing

Synopsis

A tutorial coverage of electronic technology, starting from the basics of condensed matter and quantum physics. Experienced author Ed Wolf presents established and novel devices like Field Effect and Single Electron Transistors, and leads the reader up to applications in data storage, quantum computing, and energy harvesting. Intended to be self-contained for students with two years of calculus-based college physics, with corresponding fundamental knowledge in mathematics, computing and chemistry.

Book Information

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Average Customer Review: 3.5 out of 5 starsÂ Â See all reviewsÂ (2 customer reviews)

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Customer Reviews

Although the author of this book (also the professor of the class I took this for) claim that all you need to understand this material is Mechanics and E&M as a prerequisite, that is not the case at all. The book discusses advanced topics right off the bat in theoretical physics and would really only benefit someone that has taken courses in Quantum Physics and Solid State Physics, which I did not. It's not at all engaging and put me to sleep throughout the semester. The equations are just thrown at the reader with no examples on how to properly use them (like most physics and calculus books normally have). It dives right into cutting edge technology without starting with the basic physics that led up to the breakthrough. It is a book for physics majors, not engineering majors. I was really disappointed with it and if I could do it over, I would never have taken the course either.

I bought it for my class. If you just interested in the field, you can buy it if you have some physical

background.

Quantum Nanoelectronics: An introduction to electronic nanotechnology and quantum computing CMOS Nanoelectronics: Analog and RF VLSI Circuits Quantum Transport in Mesoscopic Systems: Complexity and Statistical Fluctuations (Mesoscopic Physics and Nanotechnology) Quantum Transport in Mesoscopic Systems: Complexity and Statistical Fluctuations. A Maximum Entropy Viewpoint (Mesoscopic Physics and Nanotechnology) Semiconductor Quantum Dots: Organometallic and Inorganic Synthesis (Nanoscience & Nanotechnology Series) Student Solutions Manual for Differential Equations: Computing and Modeling and Differential Equations and Boundary Value Problems: Computing and Modeling Quantum Computing: A Gentle Introduction (Scientific and Engineering Computation) GPU Computing Gems Emerald Edition (Applications of GPU Computing Series) Cloud Computing and Electronic Discovery (Wiley CIO) Modern Quantum Chemistry: Introduction to Advanced Electronic Structure Theory (Dover Books on Chemistry) Waste Electrical and Electronic Equipment (WEEE) Handbook (Woodhead Publishing Series in Electronic and Optical Materials) Nanostructures and Nanomaterials: Synthesis, Properties, and Applications (2nd Edition) (World Scientific Series in Nanoscience and Nanotechnology) "The Handbook of Nanotechnology. Nanometer Structures: Theory, Modeling, and Simulation (SPIE Press Monograph Vol. PM129)" How Nanotechnology Will Transform Medicine and Dentistry Nanotechnology (AIP-Press S) Radical Abundance: How a Revolution in Nanotechnology Will Change Civilization Engines of Creation: The Coming Era of Nanotechnology (Anchor Library of Science) Modern Perspectives in Lattice QCD: Quantum Field Theory and High Performance Computing: Lecture Notes of the Les Houches Summer School: Volume 93, August 2009 Quantum Computing for Computer Scientists Introduction to Computing Systems: From Bits and Gates to C and Beyond