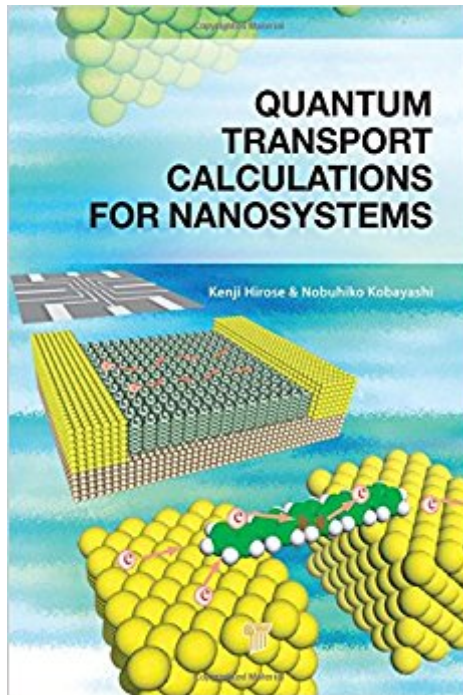


The book was found

# Quantum Transport Calculations For Nanosystems



## Synopsis

As electric devices become smaller and smaller, transport simulations based on the quantum mechanics become more and more important. There are currently numerous textbooks on the basic concepts of quantum transport, but few present calculation methods in detail. This book provides various quantum transport simulation methods and shows applications for transport properties of nanometer-scale systems. It starts with a short review of quantum transport, followed by various calculation methods based on scattering approaches, non-equilibrium Green's function (NEGF), master equation, and time-dependent wave-packet diffusion (TD-WPD). With these tools, transport properties of various nanosystems are then explored.

## Book Information

Hardcover: 523 pages

Publisher: Pan Stanford; 1 edition (April 11, 2014)

Language: English

ISBN-10: 9814267325

ISBN-13: 978-9814267328

Product Dimensions: 1 x 6.2 x 8.8 inches

Shipping Weight: 1.9 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #1,971,241 in Books (See Top 100 in Books) #262 in Books > Science & Math > Physics > Nanostructures #1677 in Books > Science & Math > Physics > Quantum Theory #3003 in Books > Engineering & Transportation > Engineering > Materials & Material Science

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

Quantum Transport Calculations for Nanosystems Modeling Groundwater Flow and Contaminant Transport (Theory and Applications of Transport in Porous Media) Freight Forwarding and Multi Modal Transport Contracts (Maritime and Transport Law Library) ASTNA Patient Transport: Principles and Practice (Air & Surface Patient Transport: Principles and Practice) Transport Nursing (CTRN) Review (Certification in Transport Nursing Book 1) Quantum Transport: Atom to Transistor 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) Towards Solid-State Quantum Repeaters: Ultrafast, Coherent Optical Control and Spin-Photon

Entanglement in Charged InAs Quantum Dots (Springer Theses) Quantum Nanoelectronics: An introduction to electronic nanotechnology and quantum computing QUANTUM SELF HYPNOSIS STOP SMOKING NOW: Hypnosis Script & Inductions Included! (Quantum Self Hypnosis Singles Book 2) 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) Quantum Thermodynamics: Emergence of Thermodynamic Behavior Within Composite Quantum Systems (Lecture Notes in Physics) Quantum Mechanics and Quantum Field Theory: A Mathematical Primer Quantum Computation and Quantum Information: 10th Anniversary Edition Culinary Calculations: Simplified Math for Culinary Professionals Mat Cutting and Calculations (How to Frame Book 1) Construction Calculations Manual Working Guide to Vapor-Liquid Phase Equilibria Calculations Applied Drilling Circulation Systems: Hydraulics, Calculations and Models

[Dmca](#)