



Advanced Physics of Semiconductors: Electronic Properties and Transport: 2016

By Massimo Fischetti, William G. Vandenberghe, Shela Aboud

Springer International Publishing AG. Hardback. Book Condition: new. BRAND NEW, Advanced Physics of Semiconductors: Electronic Properties and Transport: 2016, Massimo Fischetti, William G. Vandenberghe, Shela Aboud, This textbook is aimed at second-year graduate students in Physics, Electrical Engineering or Materials Science. It presents a rigorous introduction to electronic transport in solids, especially at the nanometer scale. Understanding electronic transport in solids requires some basic knowledge of Hamiltonian Classical Mechanics, Quantum Mechanics, Condensed Matter Theory, and Statistical Mechanics. Hence this book discusses those sub-topics of these four disciplines which are required to deal with electronic transport in a single, self-contained course. This will be useful for students who intend to work in academia or the nano/micro-electronics industry. Further topics covered include: the theory of energy bands in crystals, of second quantization and elementary excitations in solids, of the dielectric properties of semiconductors with an emphasis on dielectric screening and coupled interfacial modes, on electron scattering with phonons, plasmons, electrons and photons, on the derivation of transport equations in semiconductors and semiconductor nanostructures also at the quantum level, but mainly at the semi-classical level. The text presents examples relevant to current research, thus not only about Si, but also III-V compound semiconductors,...



[DOWNLOAD PDF](#)



[READ ONLINE](#)

[8.07 MB]

Reviews

Basically no terms to clarify. It can be written in basic terms instead of difficult to understand. I am easily could get a enjoyment of reading through a composed publication.

-- **Dr. Hazel Ziemann IV**

This book might be worthy of a go through, and a lot better than other. it had been written really properly and helpful. You may like just how the author write this publication.

-- **Prof. Mattie Beatty**

You May Also Like



Depression: Cognitive Behaviour Therapy with Children and Young People (Paperback)

Taylor Francis Ltd, United Kingdom, 2009. Paperback. Book Condition: New. 242 x 174 mm. Language: English . Brand New Book. In recent years there has been an increase in research into childhood depression, and it is now recognised that depression can severely...



Questioning the Author Comprehension Guide, Grade 4, Story Town

HARCOURT SCHOOL PUBLISHERS. PAPERBACK. Book Condition: New. 0153592419 Brand new soft cover book. Soft cover books may show light shelf wear. Item ships within 24 hours with Free Tracking.



That Recoil of Nature (Paperback)

Charivari Press, Canada, 2011. Paperback. Book Condition: New. 202 x 132 mm. Language: English . Brand New Book. In 1598 a young Italian noblewoman named Beatrice Cenci murdered her abusive, rapist father. Her actions found many defenders but not the Romantic poet...



Electronic Dreams: How 1980s Britain Learned to Love the Computer

Audible Studios on Brilliance, United States, 2016. CD-Audio. Book Condition: New. Unabridged. 170 x 135 mm. Language: English . Brand New. Remember the ZX Spectrum? Ever have a go at programming with its stretchy rubber keys? Did you marvel at the immense...



Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 3: The Backpack (Hardback)

Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 174 x 142 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK's best-selling home reading series. It is based on Oxford Reading Tree which...



Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 3: The Sing Song (Hardback)

Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 176 x 150 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK's best-selling home reading series. It is based on Oxford Reading Tree which...
