



## The Oxford Solid State Basics

By Steven H. Simon

Oxford University Press. Paperback. Book Condition: New. Paperback. 312 pages. Dimensions: 9.6in. x 7.4in. x 0.6in.The study of solids is one of the richest, most exciting, and most successful branches of physics. While the subject of solid state physics is often viewed as dry and tedious this new book presents the topic instead as an exciting exposition of fundamental principles and great intellectual breakthroughs. Beginning with a discussion of how the study of heat capacity of solids ushered in the quantum revolution, the author presents the key ideas of the field while emphasizing the deep underlying concepts. The book begins with a discussion of the EinsteinDebye model of specific heat, and the DrudeSommerfeld theories of electrons in solids, which can all be understood without reference to any underlying crystal structure. The failures of these theories force a more serious investigation of microscopics. Many of the key ideas about waves in solids are then introduced using one dimensional models in order to convey concepts without getting bogged down with details. Only then does the book turn to consider real materials. Chemical bonding is introduced and then atoms can be bonded together to crystal structures and reciprocal space results. Diffraction experiments, as...



## Reviews

An exceptional ebook along with the font applied was interesting to read through. it was actually writtern really completely and beneficial. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- Mr. Hector Cole Jr.

This written pdf is wonderful. It can be writter in easy phrases and not difficult to understand. Your lifestyle span will likely be enhance once you full looking over this ebook.

-- Juanita Reynolds

## You May Also Like



## I Want to Thank My Brain for Remembering Me: A Memoir

Back Bay Books. PAPERBACK. Book Condition: New. 0316118796 Never Read-12+ year old Paperback book with dust jacket-may have light shelf or handling wear-has a price sticker or price written inside front or back cover-publishers mark-Good Copy- I ship FAST with FREE tracking!!...



Crochet: Learn How to Make Money with Crochet and Create 10 Most Popular Crochet Patterns for Sale: (Learn to Read Crochet Patterns, Charts, and Graphs, Beginner's Crochet Guide with Pictures)

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Getting Your FREE Bonus Download this book, read it to the end and see BONUS: Your FREE Gift chapter after...



Daddyteller: How to Be a Hero to Your Kids and Teach Them What's Really by Telling Them One Simple Story at a Time

Createspace, United States, 2013. Paperback. Book Condition: New. 214 x 149 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.You have the power, Dad, to influence and educate your child. You can teach your child about a virtue or...



Plants vs. Zombies game book - to play the stickers 2 (puzzle game swept the world. most played together(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date: Unknown Pages: 28 in Publisher: China Children Press List Price: 13.00 yuan Author: Lin mosquito compiled Press: China...



10 Most Interesting Stories for Children: New Collection of Moral Stories with Pictures

Paperback. Book Condition: New. This item is printed on demand. Item doesn't include CD/DVD.



Children's Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]

Createspace, United States, 2013. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to expand and inspire young minds; this is...