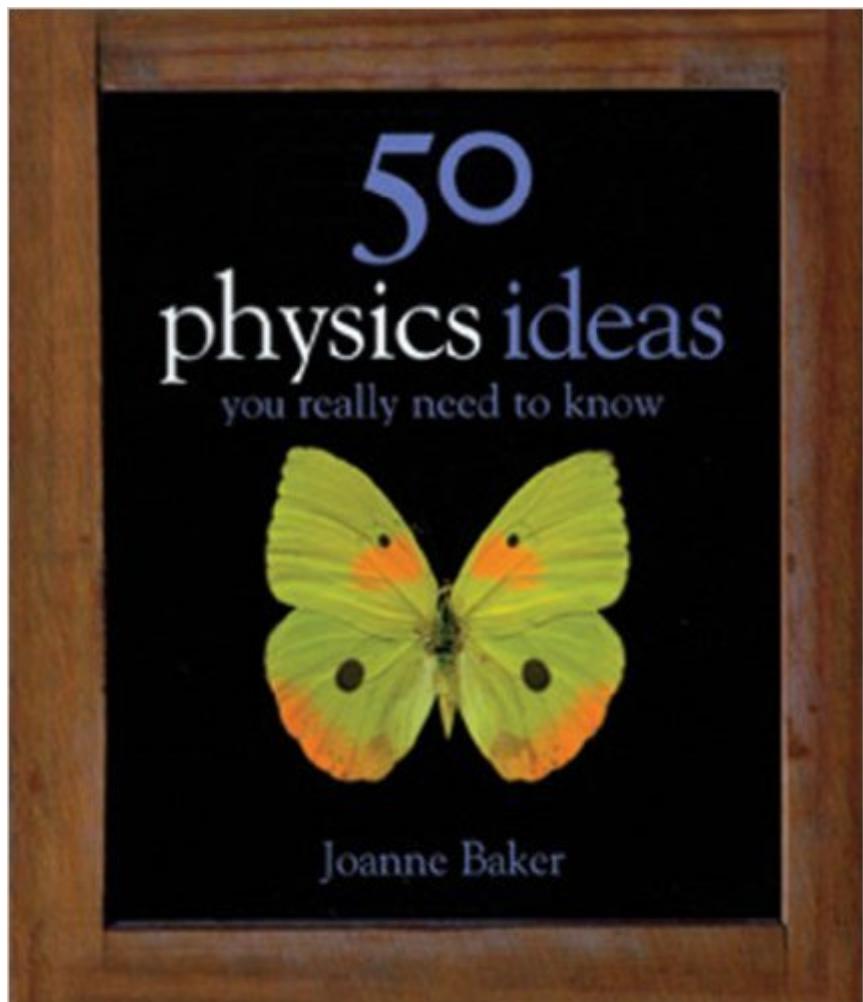


The book was found

50 Physics Ideas You Really Need To Know (50 Ideas)



Synopsis

As well as outlining and explaining such historic breakthroughs in human understanding of the physical world as Kepler's law of planetary motion and Newton's law of gravitation, Joanne Baker unravels the sometimes baffling complexities of modern scientific theory; from Planck's law to Pauli's exclusion principle and from Schrodinger's cat to string theory. The essays are accompanied by a range of useful editorial features, including biographies of iconic physicists, timelines of related ideas, explanatory diagrams and display quotations.

Book Information

Series: 50 ideas

Hardcover: 208 pages

Publisher: Book Sales, Inc. (September 17, 2009)

Language: English

ISBN-10: 1847241484

ISBN-13: 978-1847241481

Product Dimensions: 8 x 6.8 x 0.9 inches

Shipping Weight: 13.6 ounces

Average Customer Review: 4.0 out of 5 stars [See all reviews](#) (28 customer reviews)

Best Sellers Rank: #219,537 in Books (See Top 100 in Books) #72 in Books > Science & Math > Astronomy & Space Science > Star-Gazing #198 in Books > Science & Math > Physics > Quantum Theory #275 in Books > Science & Math > Astronomy & Space Science > Cosmology

Customer Reviews

This book contains 50 concise overviews of important ideas that form the basis of classical and modern physics. They are grouped into five sections, namely: Matter in Motion (mostly classical physics, such as Newton's laws of motions and Kepler's laws, but with some more modern ideas such as Chaos theory). Beneath the Waves (wave behavior of light, electromagnetic waves and Maxwell's equations). Quantum Conundrums (quantum mechanics, including Planck's law of black body radiation, photoelectric effect, Schrodinger's wave equation, Heisenberg's uncertainty principle and superconductivity). Splitting Atoms (structure of the atom, atomic fission and fusion, the standard model of particle physics and string theory). Space and Time (special and general relativity, the big bang theory, black holes, dark matter and dark energy). The specific topics listed above represent only 20 of the 50 ideas covered in the book, each of which is presented in exactly four pages. Each idea is supplemented with boxes containing some extended discussion of

a particular point, some quotations concerning the idea and biographical information about some scientists. Given that only four pages are allotted to each idea, the presentation is necessarily only superficial, but the author did a very good job of compressing the most salient points into a very limited space. This is a good book for those who only want a general overview of some very important ideas, presented without any math, for a general audience. It is also a useful review book for those who know are better versed in physics.

A Series on Fifty Basic Ideas: I was not sure exactly what readership this book is intended for, until I browsed through its penta-sections and read some of its entries. Since the fifty ideas cannot be quite included in a coffee table book nor is it a physics reference book, indeed it could be labeled a refresher review of modern physics. If you approach this book as a physics vocabulary, with elaborate definitions you could get more out of it. This second volume of an innovative series representing the core of critical areas of modern human knowledge, on Management, Mathematics, Philosophy, and Physics, the Cantab author Joanne Baker wraps up the top complex ideas of twentieth century physical sciences theory for a scientific enquiry reader. She explores the state of science on physical concepts at the end of the last century, for third millennia lay persons helping them upgrading their outdated space related science. **Advancing Fifty Physics Ideas:** The book title which caught my attention is a good description of the book's 50 concise essays Dr. Baker describes within two to three pages each. Some of those 50 basic concepts in physics which appealed to me, as an outdated applied scientist counted more than thirty from Kepler's laws, Maxwell demon, Fractals, Chaos theory, the butterfly effect, Fermat principle (proved recently), DNA double helix, extrasolar planets, Schrodinger's cat, teleportation etc. Dr. Baker makes a good job of describing the relevant physics theorems behind each concept, advocating a compelling plea for appreciation of modern physics that is happening daily around us.

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

50 Physics Ideas You Really Need to Know (50 Ideas You Really Need to Know Series) by Baker, Joanne (2007) 50 Physics Ideas You Really Need To Know (50 ideas) Everything You Need to Know About Snakes (Everything You Need Know) Everything You Need To Know About Geography Homework (Everything You Need To Know..) NCLEX-RN Drug Guide: 300 Medications You Need to Know for the Exam (Kaplan Nclex Rn Medications You Need to Know for the Exam) The Chicken Whisperer's Guide to Keeping Chickens: Everything You Need to Know . . . and Didn't Know You Needed to Know About Backyard and Urban Chickens Everything You Need to Know about Std's (Need to Know Library) Everything You Need to Know about Down Syndrome (Need to Know

Library) Pilgrim Tips & Packing List Camino de Santiago: What you need to know beforehand, what you need to take, and what you can leave at home. Physics for Scientists and Engineers with Modern Physics: Volume II (3rd Edition) (Physics for Scientists & Engineers) Head First Physics: A learner's companion to mechanics and practical physics (AP Physics B - Advanced Placement) Don't Know Much About History, Anniversary Edition: Everything You Need to Know About American History but Never Learned (Don't Know Much About Series) Expecting Better: Why the Conventional Pregnancy Wisdom Is Wrong--and What You Really Need to Know All You REALLY Need to Know About Economics-Why Government Bailouts, "Job Creation" and Other Socialist Schemes Don't Work Financial Intelligence for Entrepreneurs: What You Really Need to Know About the Numbers The Theoretical Minimum: What You Need to Know to Start Doing Physics The Reel Truth: Everything You Didn't Know You Need to Know About Making an Independent Film 2009 International Building Code Need to Know: The 20% of the Code You Need 80% of the Time Moody Bitches: The Truth About The Drugs You're Taking, The Sex You're Not Having, The Sleep You're Missing and What's Really Making You Feel Crazy Don't Know Much About the Universe: Everything You Need to Know About the Cosmos

[Dmca](#)