



Essential Quantum Mechanics for Electrical Engineers (Paperback)

By Peter Deak

Wiley-VCH Verlag GmbH, Germany, 2017. Paperback. Condition: New. 1. Auflage. Language: English . Brand New Book. Quantum mechanics (QM) is latently present in the life of electrical engineers already, since the hardware of todays information technology - from electrical data processing, through interconversion of electronic and optical information, to data storage and visualization - works on QM principles. New developments in micro- and opto-electronics and the advent of quantum information processing will soon make the active understanding of QM unavoidable for engineers, too. Unfortunately, the principles of QM can only be formulated mathematically, so even introductory books on the subject are mostly rather abstract. This book, written mainly for BSc students, tries to help the reader by showing QM in action , demonstrating its surprising effects directly in applications, like lighting technology, lasers, photo- and solar cells, flash memories and quantum bits. While the axioms and basic concepts of quantum mechanics are introduced without compromises, the math is kept at a level which is required from electrical engineers anyhow. Computational work is spared by the use of Applets which also visualize the results. Among the host of other didactic features are learning objectives, chapter summaries, self-testing questions, and problems with...



Reviews

This book can be worthy of a read, and much better than other. It usually fails to charge a lot of. I realized this publication from my dad and i encouraged this pdf to understand.

-- Prof. Flo Cruickshank DDS

Thorough information! Its such a excellent read. It is really simplistic but unexpected situations within the fifty percent of your pdf. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- Johnathon Moore