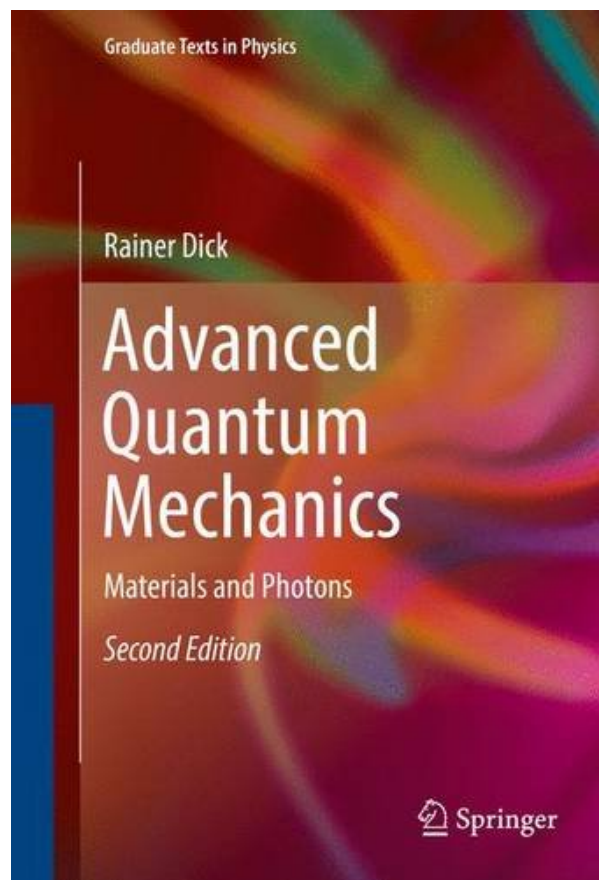


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Materials and Photons

Second Edition

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Review

From the reviews:

“Book goes through quantum mechanics starting from its foundations, that are introduced along the historical development. It also includes recent topics ... that is necessary to understand quantum effects inside chemistry, material science, microelectronics and photonics. The style is always very didactic, mathematical tools are introduced in a very gradual way Some chapters may constitute an initial course in quantum mechanics, the others cover a graduate course in advanced quantum mechanics and can also provide a very useful introduction to quantum field theory.” (Bassano Vacchini, Zentralblatt MATH, Vol. 1247, 2012)

From the Back Cover

In this updated and expanded second edition of a well-received and invaluable textbook, Prof. Dick emphasizes the importance of advanced quantum mechanics for materials science and all experimental techniques which employ photon absorption, emission, or scattering. Important aspects of introductory quantum mechanics are covered in the first seven chapters to make the subject self-contained and accessible for a wide audience. *Advanced Quantum Mechanics, Materials and Photons* can therefore be used for advanced undergraduate courses and introductory graduate courses which are targeted towards students with diverse academic backgrounds from the Natural Sciences or Engineering. To enhance this inclusive aspect of making the subject as accessible as possible Appendices A and B also provide introductions to Lagrangian mechanics and the covariant formulation of electrodynamics.

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- Sales Rank: #4122095 in Books
- Published on: 2016-07-01
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x 1.50" w x 6.14" l, .0 pounds
- Binding: Hardcover
- 692 pages

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