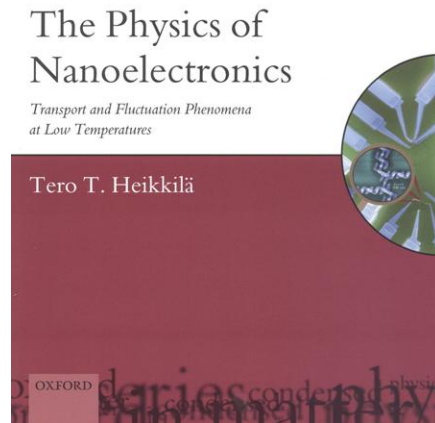


| OXFORD MASTER SERIES IN CONDENSED MATTER PHYSICS |



T. T. Heikkilä, *The Physics of Nanoelectronics*, (Oxford, New York, 2013).

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Book Review

This is a 279 page monograph on nanoelectronics organized in 11 chapters. Besides the introduction the chapters are entitled semiclassical theory, scattering approach to quantum transport, quantum interference effects, introduction to superconductivity, fluctuations and correlations, single-electron effects, quantum dots, tunnel junctions with superconductors, grapheme, and nanoelectromechanical systems. This reviewer enjoyed the coverage and discussion on topics such as SQUIDS, graphene, and nanomechanical systems. As a way of a slight constructive criticism, this reviewer would have expected a more prominent use of Dirac's notation in the chapter on quantum interference. Nevertheless, *The Physics of Nanoelectronics* is a timely, well-written exposition of an important quantum technology. It should be useful for students, engineers, and practicing scientist. It is decisively recommended for technical libraries and for the bookshelf of physicists interested in practical quantum phenomena.

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