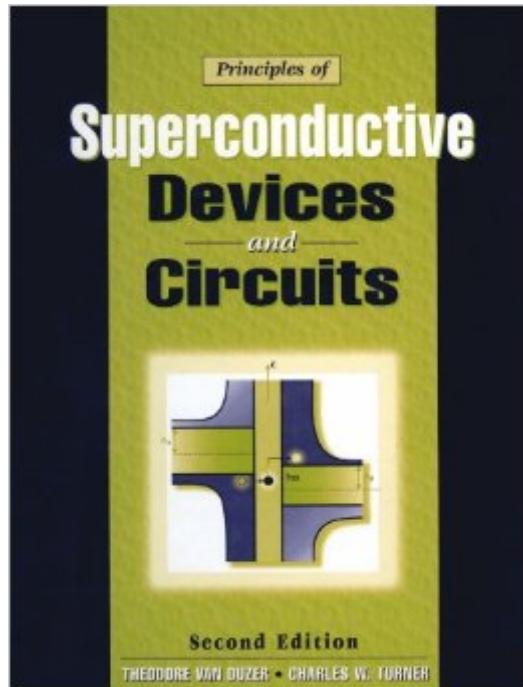


The book was found

Principles Of Superconductive Devices And Circuits (2nd Edition)



Synopsis

KEY BENEFIT: The field of applied superconductivity has been transformed by new materials, new fabrication methods, innovative device and circuit concepts, and the discovery of high-temperature superconductors. In this book, two of the field's leading experts present an authoritative, up-to-date guide to the theory and current practice of superconductivity. **KEY TOPICS:** The book begins by introducing normal metal behavior at low temperatures, and the phase transition to superconductivity. It presents the classic Meissner experiment, and reviews several key theories essential to practical analysis. In each case, the book helps readers develop an intuitive understanding, while minimizing the quantum mechanics and thermodynamics required. Coverage includes an up-to-date analysis of microwave and millimeter-wave applications; a richly-developed treatment of Josephson junctions and devices; advanced high-temperature oxide superconductor applications; Ginzburg-Landau equations; Type II superconductivity theories and technologies; and more. The CD-ROM contains valuable software for circuit simulation and inductance calculations. **MARKET:** All electrical engineering and applied physics professionals working in R&D in industrial, university or government settings; as well as advanced students of applied superconductivity.

Book Information

Paperback: 448 pages

Publisher: Prentice Hall; 2 edition (December 17, 1998)

Language: English

ISBN-10: 0132627426

ISBN-13: 978-0132627429

Product Dimensions: 7 x 1 x 9.2 inches

Shipping Weight: 2.1 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars Â See all reviews Â (2 customer reviews)

Best Sellers Rank: #705,915 in Books (See Top 100 in Books) #41 in Â Books > Engineering & Transportation > Engineering > Electrical & Electronics > Superconductivity #208 in Â Books > Science & Math > Physics > Solid-State Physics #1458 in Â Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics

Customer Reviews

This book starts from the basic physics of superconductivity and deals with superconducting devices, such as SQUIDs, SIS mixers and Single Flux Quantum devices. The treatments of each

device are based on the current research, so that readers easily get the front of the fields. It also includes a plenty of important papers as the references and thus you can easily get into the deep level. I found one disadvantage that there is no statements on single electron/Cooper pair tunneling phenomena. I recommend this book for the persons to study superconducting electronics from students to the experts in this field. This book is valuable even for the persons who read the first edition because each treatments are updated.

There is a more expensive next edition, but all the basics are here. The math is not for the timid, but it doesn't get in the way of the physical effects.

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

Principles of Superconductive Devices and Circuits (2nd Edition) Principles of Superconductive Devices and Circuits Design of 3D Integrated Circuits and Systems (Devices, Circuits, and Systems) Principles of Transistor Circuits, Eighth Edition: Introduction and guide to the design of amplifiers, function generators, receivers and digital circuits Electronic Circuits: The Definitive Guide to Circuit Boards, Testing Circuits and Electricity Principles Advances in 3D Integrated Circuits and Systems (Series on Emerging Technologies in Circuits and Systems) Low-Voltage/Low-Power Integrated Circuits and Systems: Low-Voltage Mixed-Signal Circuits (IEEE Press Series on Microelectronic Systems) Introductory Electronic Devices and Circuits: Conventional Flow Version, Sixth Edition Sensors, Actuators, and Their Interfaces: A Multidisciplinary Introduction (Materials, Circuits and Devices) Electronics: Circuits and Devices Lab Manual to Accompany Introductory Electronic Devices and Circuits Introductory Electronic Devices and Circuits US Army Technical Manual, ARMY DATA SHEETS FOR CARTRIDGES, CARTRIDGE ACTUATED DEVICES AND PROPELLANT ACTUATED DEVICES, FSC 1377, TM 43-0001-39, 1991 Advanced Mos Devices (Modular Series on Solid State Devices, Vol 7) ISO 14971:2007, Medical devices - Application of risk management to medical devices The Complete Works of Herbert Spencer: The Principles of Psychology, The Principles of Philosophy, First Principles and More (6 Books With Active Table of Contents) Electromechanics: Principles Concepts and Devices Semiconductor Physics And Devices: Basic Principles Principles of Semiconductor Devices (The Oxford Series in Electrical and Computer Engineering) Android Tips and Tricks: Covers Android 5 and Android 6 devices (2nd Edition)

[Dmca](#)