



Semiconductor Physics and Applications

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Semiconductor Physics and Applications, , M. Balkanski, Richard Fisher Wallis, Oxford University Press, 2000, 0198517416, 9780198517412, 487 pages. This textbook combines a thorough theoretical treatment of the basic physics of semiconductors with applications to practical devices by putting special emphasis on the physical principles upon which these devices operate. Topics treated are the detailed band structure of semiconductors, the effect of impurities on electronic states, and semiconductor statistics. Also discussed are lattice dynamical, transport, and surface properties as well as optical, magneto-optical, and electro-optical properties. The applied part of the book treats p-n junctions, bipolar junction transistors, semiconductor lasers and photodevices, after which the subject of heterostructures and superlattices is taken up with coverage of electronic, lattice dynamical, optical, and transport properties. The book concludes with treatments of metal-semiconductor devices such as MOSFETs and devices based on heterostructures. Graduate students and lecturers in semiconductor physics, condensed matter physics, electromagnetic theory, and quantum mechanics will find this a useful textbook and reference work..

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Theoretical Solid State Physics , William Jones, Norman Henry March, 1973, Crystals, . .

Fundamentals Of Semicon Dev , Achuthan-Bhat, Oct 1, 2006, Semiconductors, 724 pages. .

Wave mechanics applied to semiconductor heterostructures , Gerald Bastard, 1988, Technology & Engineering, 357 pages. Examines the basic electronic and optical properties of two- dimensional semiconductor heterostructures based on III-V and II-VI compounds. Explores various consequences of one

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Electronics Theory and Applications , S. L. Kakani, Jan 1, 2005, Electronics, 568 pages. This Book Is Designed To Meet The Requirements Of Currently Revised Ugc Syllabi Of Electronics Followed Almost By All Indian And Other Universities For B.Sc. (Pass) And B.Sc

SEMICONDUCTOR DEVICES: PHYSICS AND TECHNOLOGY, 2ND ED , S.M.Sze, Jun 1, 2008, , 572 pages. Market_Desc: Electrical Engineers Scientists Special Features: Provides strong coverage of all key semiconductor devices. Includes basic physics and material properties of

An Introduction to the Physics of Semiconductor Devices, Volume 1 , David J. Roulston, 1999, Science, 290 pages. An introduction to the physical operation of semiconductor devices, this text includes sufficient background physics to be understood by the first-time student. It includes a

X-kit Undergraduate , Achmat Fish, 2006, Electrical engineering, 332 pages. .

Optical Semiconductor Devices , Mitsuo Fukuda, 1999, Science, 422 pages. This book is devoted to optical semiconductor devices and their numerous applications in telecommunications, optoelectronics, and consumer electronics-areas where signal

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Semiconductor Devices Pioneering Paper, Simon Min Sze, 1991, , 1003 pages. .

Modern CMOS Circuits Manual , R. M. Marston, 1996, Technology & Engineering, 276 pages. This Circuits Manual examines operating principles and practical applications of modern medium-speed and 'fast' CMOS digital ICs. 470 carefully selected circuits, diagrams

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