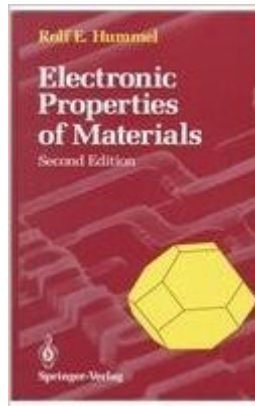


The book was found

Electronic Properties Of Materials



Synopsis

A book on electrical, optical, magnetic, and thermal properties of materials is in many aspects different from other introductory texts in solid state physics. DLC: Solid state physics.

Book Information

Hardcover: 404 pages

Publisher: Springer-Verlag Telos; 2 Sub edition (January 1992)

Language: English

ISBN-10: 0824787412

ISBN-13: 978-0387548395

ASIN: 0387548394

Product Dimensions: 1 x 6.5 x 9.5 inches

Shipping Weight: 1.6 pounds

Average Customer Review: 4.4 out of 5 stars [See all reviews](#) (14 customer reviews)

Best Sellers Rank: #1,500,999 in Books (See Top 100 in Books) [#364 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Polymers & Textiles](#) [#500 in Books > Science & Math > Physics > Solid-State Physics](#) [#1007 in Books > Science & Math > Physics > Electromagnetism](#)

Customer Reviews

It is amazing to me that after four editions, this book is still full of amazingly serious technical errors. The book reflects an extremely poor understanding of physics and quantum mechanics. The equation $p=mc$, for example (p. 8), uses a classical (NOT relativistic) momentum formula for a particle traveling at the speed of light and then implies that an electron can do this in the utterly nonsensical "derivation" of the de Broglie relationship (even given as Problem 2.7!!!). The book falsely implies the high-school level concept that all waves have a linear dispersion relationship (e.g., Eq. 2.4) when many including electron waves do not, gives a solution to the Schrodinger equation (Eq. 2.7) that is obviously NOT a mathematical solution of this equation (such solutions HAVE to contain the imaginary number "i" as that number appears in the equation itself), has an abnormal sign throughout the book in the time-dependent Schrodinger equation, incorrectly states the direction of propagation of waves (Eq. 4.5), gives a completely incorrect form of an evanescent wave inside a barrier (equation below 4.39 and Fig. 4.7) that falsely implies that such a wave oscillates in space when in fact it decays monotonically, incorrectly states that $\psi \cdot \psi(\text{conjugate})$ can not be greater than one (p. 26) when only the integral of that quantity over all x cannot be

greater than one, states that GaAs is doped by excess Ga or As on p. 119 (known to be untrue since the 1970's!), makes a completely false statement that energy levels are "narrow" in quantum wells (p. 278) when the energy including in-plane motion is actually a continuum in this case starting at the lowest quantized level, and on and on and on.

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

Dental Materials: Properties and Manipulation, 9e (Dental Materials: Properties & Manipulation (Craig)) Electronic Properties of Materials Waste Electrical and Electronic Equipment (WEEE) Handbook (Woodhead Publishing Series in Electronic and Optical Materials) Ceramics: Mechanical Properties, Failure Behaviour, Materials Selection (Springer Series in Materials Science) Craig's Restorative Dental Materials, 12e (Dental Materials: Properties & Manipulation (Craig)) Restorative Dental Materials, 11e (Dental Materials: Properties & Manipulation (Craig)) Electronic, Magnetic, and Optical Materials (Advanced Materials and Technologies) Electronic and Optical Properties of d-Band Perovskites Electronic Structure and the Properties of Solids: The Physics of the Chemical Bond (Dover Books on Physics) Concrete: Microstructure, Properties, and Materials Modern Ceramic Engineering: Properties, Processing, and Use in Design, 3rd Edition (Materials Engineering) Handbook of Optics, Third Edition Volume IV: Optical Properties of Materials, Nonlinear Optics, Quantum Optics (set) The Physics of Solar Cells (Properties of Semiconductor Materials) Ceramic and Glass Materials: Structure, Properties and Processing Modern Ceramic Engineering: Properties, Processing, and Use in Design, Third Edition (Materials Engineering) Microstructure and Properties of Ductile Iron and Compacted Graphite Iron Castings: The Effects of Mold Sand/Metal Interface Phenomena (SpringerBriefs in Materials) Dental Materials: Properties and Manipulation, 10th Edition Dental Materials-: Properties and Manipulation Electrical Properties of Materials Low-Dimensional and Nanostructured Materials and Devices: Properties, Synthesis, Characterization, Modelling and Applications (NanoScience and Technology)

[Dmca](#)