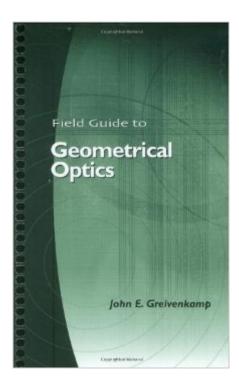
The book was found

Field Guide To Geometrical Optics (SPIE Vol. FG01)





Synopsis

This Field Guide derives from the treatment of geometrical optics that has evolved from both the undergraduate and graduate programs at the Optical Sciences Center at the University of Arizona. The development is both rigorous and complete, and it features a consistent notation and sign convention. This volume covers Gaussian imagery, paraxial optics, first-order optical system design, system examples, illumination, chromatic effects, and an introduction to aberrations. The appendices provide supplemental material on radiometry and photometry, the human eye, and several other topics.

Book Information

Series: Spie Field Guides Spiral-bound: 128 pages Publisher: SPIE Publications (December 2003) Language: English ISBN-10: 0819452947 ISBN-13: 978-0819452948 Product Dimensions: 0.8 × 5.2 × 7.8 inches Shipping Weight: 4.8 ounces (View shipping rates and policies) Average Customer Review: 4.6 out of 5 stars Â See all reviews (8 customer reviews) Best Sellers Rank: #752,804 in Books (See Top 100 in Books) #87 in Books > Science & Math > Physics > Light #251 in Books > Science & Math > Physics > Optics #3566 in Books > Engineering & Transportation > Engineering > Electrical & Electronics

Customer Reviews

This little book is an excellent optics reference book. It collects together the basic concepts and formulas of geometric optics in a clear and concise form, and also defines and explains common optical terminology (pupils, rays, FOV, NA, etc.). It reviews common optical systems like telescopes and microscopes, and has sections on aberrations and chromatic effects. If you do optics, you want to have a copy of this on your desk. The book is particularly useful for those of us who learned basic optics from a book like Hecht's Optics, but now need to actually put what we learned into practice. Beware, though: the sign conventions used may be unfamiliar and may take some getting used to.

When I took the course this Field Guide is based on, I walked away with a binder full of hand-written notes, which I probably never looked at again. 15 years later, I keep this (and about 4 other Field

Guides from the same series) within arm's reach in case I don't feel like deriving a paraxial equation or searching for the scotopic response function or digging up some other not-quite-trivial piece of information. One nice feature is that each page is self-contained and devoted to a single topic. Another nice feature is the spiral binding, so it stays open.

I have extensively used this text as both an optics student and while interning in the industry. Every optical engineer and student should have this book handy. Well organized and comprehensive, it packs a surprising amount of information and equations for the small size. It is a bit flimsy but the spiral bound does help it stay open, as someone else mentioned.

I had this book as a text for a class and as a text book it stinks, I give it 1 star. However it isn't a text book but rather a reference book. As a reference book I give this 5 stars. It is great if you need a little refresher on optics but this is not something to learn optics from.

Download to continue reading...

Field Guide to Geometrical Optics (SPIE Vol. FG01) Handbook of Optics, Third Edition Volume V: Atmospheric Optics, Modulators, Fiber Optics, X-Ray and Neutron Optics Handbook of Optics, Third Edition Volume I: Geometrical and Physical Optics, Polarized Light, Components and Instruments(set) Field Guide to Visual and Ophthalmic Optics (SPIE Vol. FG04) Iso 1101:2012, Geometrical product specifications (Gps) - Geometrical tolerancing - Tolerances of form, orientation, location and run-out Handbook of Optics, Third Edition Volume IV: Optical Properties of Materials, Nonlinear Optics, Quantum Optics (set) Photonics Rules of Thumb: Optics, Electro-Optics, Fiber Optics and Lasers Photonics Rules of Thumb: Optics, Electro-Optics, Fiber Optics, and Lasers (Optical and Electro-Optical Engineering Series) Introduction to Adaptive Optics (SPIE Tutorial Texts in Optical Engineering Vol. TT41) Optics Made Clear: The Nature of Light And How We Use It (SPIE Press Monograph Vol. PM163) Diffractive Optics: Design, Fabrication, and Test (SPIE Tutorial Texts in Optical Engineering Vol. TT62) Field Guide to Linear Systems in Optics (Field Guide Series) Applications of Nonlinear Fiber Optics, Second Edition (Optics and Photonics Series) Handbook of Optics, Third Edition Volume III: Vision and Vision Optics(set) Selected Papers on Optical Pattern Recognition (SPIE Milestone Series Vol. MS156) Scientific Charge-Coupled Devices (SPIE Press Monograph Vol. PM83) Hadamard Transforms (SPIE Press Monograph Vol. PM207) "The Handbook of Nanotechnology. Nanometer Structures: Theory, Modeling, and Simulation (SPIE Press Monograph Vol. PM129)" MASON JAR RECIPES BOOK SET 5 book in 1: Meals in Jars (vol.1); Salads in Jars (Vol. 2); Desserts in Jars (Vol. 3); Breakfasts in Jars (Vol. 4); Gifts in Jars

(Vol. 5): Easy Mason Jar Recipe Cookbooks Field Guide to Digital Micro-Optics

<u>Dmca</u>