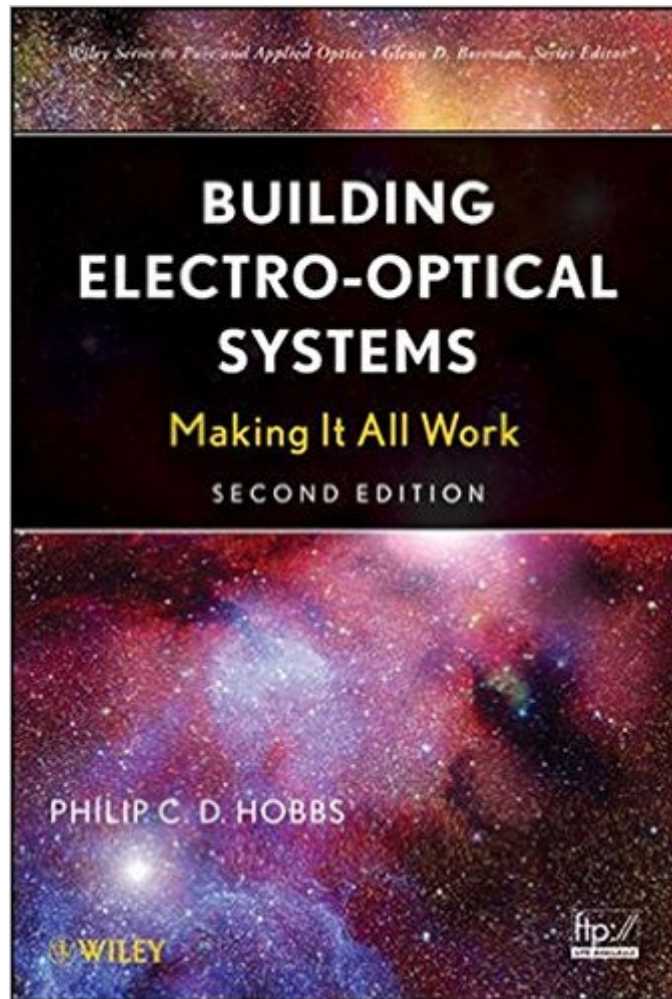


The book was found

Building Electro-Optical Systems: Making It All Work



Synopsis

While most books on electro-optical systems concentrate on an individual subfield, this one presents an overview of the whole field, providing researchers with working knowledge of a number of cross-disciplinary areas. It includes essential information on how to build modern electro-optical instruments such as microscopes, cameras, optical inspection equipment, and spectrometers, and optical-related computer equipment.

Book Information

Hardcover: 820 pages

Publisher: Wiley; 2 edition (August 3, 2009)

Language: English

ISBN-10: 0470402296

ISBN-13: 978-0470402290

Product Dimensions: 7.3 x 1.8 x 10.3 inches

Shipping Weight: 3.4 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 starsÂ Â See all reviewsÂ (5 customer reviews)

Best Sellers Rank: #392,690 in Books (See Top 100 in Books) #23 inÂ Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Optoelectronics #34 inÂ Books > Science & Math > Physics > Light #112 inÂ Books > Science & Math > Physics > Optics

Customer Reviews

If you work on precision measurement, have ever wished for better signal-to-noise ratios (SNR) in your measurements, or have ever designed a sub-optimal optical detection scheme, it is a grave mistake to not read this book. The book is a practical, grad-student-level guide to building optical and electrical systems of the type typically found in physics/engineering labs. Most of the book is a medium-depth guide by the author to the large variety of optics, sensors, and electronics typically employed for such work. The author tells the reader the important things necessary to know in order to work with or design systems around such elements. A good portion of this knowledge is the type normally passed down in an apprentice-style fashion, and while important, is either buried behind formulas or not mentioned in most other textbooks. If I had known about this book earlier, it would have saved me many hundreds of hours when I was a graduate student. This book is the first place I look when designing new systems with parts/devices/methods I am not intimately familiar with. There are many things I like about this book. Here are a few that come to mind: a) When

explaining why a specific device or approach should be employed, an intuitive explanation is always given, rather than sole reliance on equations. b) The author can be counted on to warn readers about obvious pitfalls that are usually learned the hard way. For example, the last handful of bits in a 24 bit Sigma Delta ADC are typically useless, transimpedance amplifiers can push noise out to high frequencies, and metal film resistors are generally best to use over other types. c) The author has a lot, a lot of good tricks he's learned over the years: For example, a flashlight is an excellent shot-noise-limited light source.

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

Photonics Rules of Thumb: Optics, Electro-Optics, Fiber Optics, and Lasers (Optical and Electro-Optical Engineering Series) Building Electro-Optical Systems: Making It all Work Soap Making: 365 Days of Soap Making (Soap Making, Soap Making Books, Soap Making for Beginners, Soap Making Guide, Soap Making Recipes, Soap Making Supplies): Soap Making Recipes for 365 Days Jewelry Making: Jewelry Making Instructions to Easily Create Beautiful Pendants, Bracelets, Earrings, and Necklaces (Jewelry Making Books, jewelry making for dummies, jewelry making tools) Jewelry Making: 33 Tips and Advices For Making Unique Earrings (jewelry making, jewelry making books, jewelry making kits) Fundamentals of Electro-Optic Systems Design: Communications, Lidar, and Imaging Introduction to Optical Communication, Lightwave Technology, Fiber Transmission, and Optical Networks Troubleshooting Optical Fiber Networks: Understanding and Using Optical Time-Domain Reflectometers Handbook of Optical Fibers and Cables, Second Edition (Optical Science and Engineering) Fatasticas ilusiones opticas / Fantastic optical illusions: Alrededor De 150 Imagenes Con Trucos Visuales Y Puzles Opticos / About 150 Images With Visual Tricks and Optical Puzzles (Spanish Edition) Wine Making: Beginner Wine Making! The Ultimate Guide to Making Delicious Wine at Home (Home Brew, Wine Making, Red Wine, White Wine, Wine Tasting, Cocktails, ... Vodka recipes, Jello Shots Beer Brewing) Retro-Electro: Collecting Technology from Atari to Walkman Photonics Rules of Thumb: Optics, Electro-Optics, Fiber Optics and Lasers Electro-Motive E-Units and F-Units: The Illustrated History of North America's Favorite Locomotives Electro- Learning. Una nueva forma de aprendizaje de la electrÃ nica. (Spanish Edition) ElectrocardiografÃ a para profesionales (y estudiantes) de EnfermerÃ a: o cÃ mo interpretar un electro sin morir en el intento (Spanish Edition) Healing Severe Chemical and EMF Sensitivity: Our Breakthrough Cure for Multiple Chemical Sensitivities (MCS) and Electro-hypersensitivity (EHS) Minecraft: Minecraft Building Guide: Ultimate Blueprint Walkthrough Handbook: Creative Guide to Building Houses, Structures, and Constructions with Building ... Minecraft Houses, Minecraft Handbook) Chicken Coop Building: Step by Step Guide for Beginners (Chicken Coop Building,

Backyard Chickens, Chicken Coop Plans, Building Chicken Coops) Chicken Coop Building: The Complete Beginners Guide To Chicken Coop Building - Discover Amazing Plan To Building The Perfect Chicken Coop! (Chicken Coops ... Coop Plans, How To Build A Chicken Coop)

[Dmca](#)