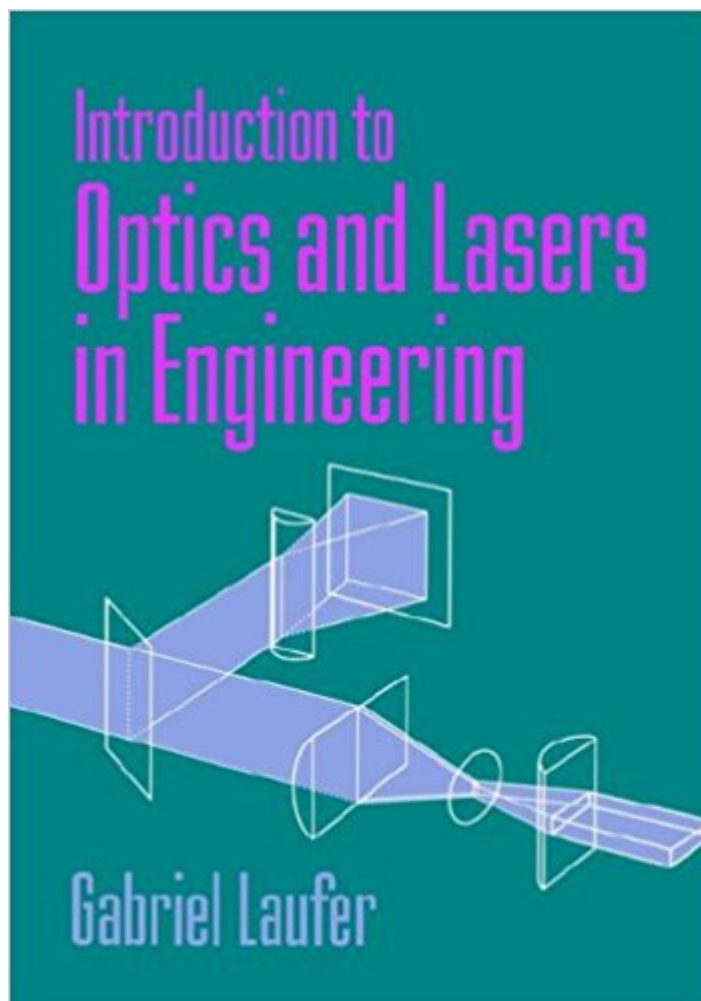


The book was found

Introduction To Optics And Lasers In Engineering



Synopsis

In a very short period of time, lasers have advanced from a mere research interest to an increasingly useful, commercially available tool for material processing, precision measurements, surgery, communication, and entertainment. This book provides the background in theoretical physics necessary to understand the engineering applications of lasers. It summarizes relevant theories of geometrical optics, physical optics, quantum optics, and laser physics while tying them to applications in such areas as fluid mechanics, combustion, surface analysis, material processing, and laser machining. The author clearly and thoroughly explains advanced topics such as laser Doppler velocimetry, laser-induced fluorescence, and holography. The book includes numerous examples and advanced problems that simulate real-world research and encourage independent reading and analysis. The book will benefit researchers and students across all branches of engineering.

Book Information

Paperback: 500 pages

Publisher: Cambridge University Press (September 29, 2005)

Language: English

ISBN-10: 0521017629

ISBN-13: 978-0521017626

Product Dimensions: 7 x 1 x 10 inches

Shipping Weight: 2 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 2 customer reviews

Best Sellers Rank: #1,696,783 in Books (See Top 100 in Books) #111 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Optoelectronics #292 in Books > Science & Math > Physics > Light #661 in Books > Science & Math > Physics > Optics

Customer Reviews

"This book provides the background in theoretical physics necessary to understand engineering applications of lasers and optics....Discussions of advanced optics such as laser Doppler velocimetry, laser-induced fluorescence, and holography are simplified yet are sufficiently detailed to enable the reader to evaluate existing systems and design new ones." International Aerospace Abstracts"A unique feature of this text is that almost every chapter ends with research problems, each based on a published journal article that deals specifically with the topic of that chapter but

goes beyond the coverage of the book....the book can be a valuable reference..." S. Maleki, Choice

This 1996 book provides the background in theoretical physics and optics needed by engineers. Relevant theories are tied to a wide range of engineering applications. Advanced topics such as laser Doppler velocimetry, laser-induced fluorescence, and holography are clearly and thoroughly explained.

Great Book. Recommended for anyone doing research in Optical diagnostics of combustion or fluid flow. Its very detailed and easy to understand if you understand basic fundamental optics.

A very comprehensive, down to earth, book. You will get a good physical explanation to what is going on, beautifully explained, without all the mathematical fuss that blurry the descriptions. Love the examples in the book.

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

Photonics Rules of Thumb: Optics, Electro-Optics, Fiber Optics and Lasers Handbook of Optics, Third Edition Volume V: Atmospheric Optics, Modulators, Fiber Optics, X-Ray and Neutron Optics Introduction to Optics and Lasers in Engineering Handbook of Optics, Third Edition Volume IV: Optical Properties of Materials, Nonlinear Optics, Quantum Optics (set) Lasers and Electro-optics: Fundamentals and Engineering Optics and Lasers: Including Fibers and Optical Waveguides (Advanced Texts in Physics) Handbook of Optics, Third Edition Volume I: Geometrical and Physical Optics, Polarized Light, Components and Instruments(set) Molded Optics: Design and Manufacture (Series in Optics and Optoelectronics) Last-Minute Optics: A Concise Review of Optics, Refraction, and Contact Lenses Nonlinear Fiber Optics, Fifth Edition (Optics and Photonics) Handbook of Optics, Third Edition Volume III: Vision and Vision Optics(set) Advanced Fiber Optics (Engineering Sciences. Electrical Engineering) Introduction to Adaptive Optics (SPIE Tutorial Texts in Optical Engineering Vol. TT41) Introduction to Coastal Engineering and Management (Advanced Series on Ocean Engineering) (Advanced Series on Ocean Engineering (Paperback)) Engineering Fundamentals: An Introduction to Engineering (Activate Learning with these NEW titles from Engineering!) Diffractive Optics: Design, Fabrication, and Test (SPIE Tutorial Texts in Optical Engineering Vol. TT62) Gravity Sanitary Sewer Design and Construction (ASCE Manuals and Reports on Engineering Practice No. 60) (Asce Manuals and Reports on Engineering ... Manual and Reports on Engineering Practice) Tissue Engineering II: Basics of Tissue Engineering and Tissue Applications (Advances in Biochemical Engineering/Biotechnology) Earthquake Engineering: From

Engineering Seismology to Performance-Based Engineering G.Dieter's Li.Schmidt's Engineering
4th (Fourth) edition(Engineering Design (Engineering Series) [Hardcover])(2008)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)