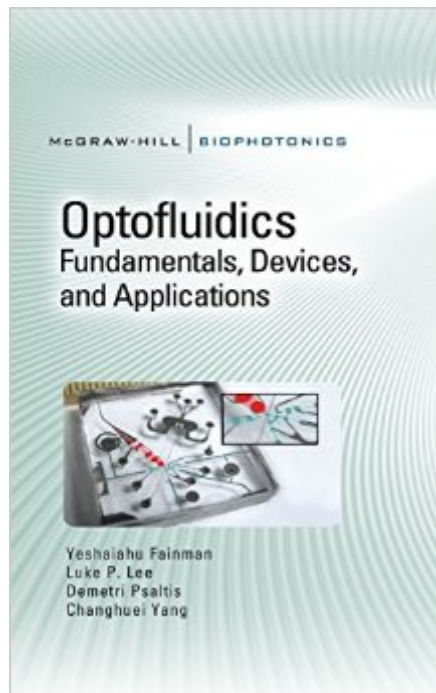


The book was found

Optofluidics: Fundamentals, Devices, And Applications (McGraw-Hill Biophotonics)



Synopsis

Cutting-Edge Optofluidics Theories, Techniques, and Practices Add novel functionalities to your optical design projects by incorporating state-of-the-art microfluidic technologies and tools. Co-written by industry experts, *Optofluidics: Fundamentals, Devices, and Applications* covers the latest functional integration of optical devices and microfluidics, as well as automation techniques. This authoritative guide explains how to fabricate optical lab-on-a-chip devices, synthesize photonic crystals, develop solid and liquid core waveguides, use fluidic self-assembly methods, and accomplish direct microfabrication in solutions. The book includes details on developing biological sensors and arrays, handling maskless lithography, designing high-Q cavities, and working with nanoscale plasmonics. Research outcomes from the DARPA-funded Center for Optofluidics Integration are also discussed. Discover how to:

- Work with optofluidic sources, lenses, filters, switches, and splitters
- Use dielectric waveguiding devices to input, move, and manipulate fluids
- Integrate colloidal crystals and fibers with microfluidic systems
- Develop bio-inspired fluidic lens systems and aspherical lenses
- Deploy miniaturized dye lasers, microscopes, biosensors, and resonators
- Analyze microfluidic systems using flow injection and fluorescent spectroscopy
- Build optofluidic direct fabrication platforms for innovative microstructures
- Accomplish optofluidic liquid actuation and particle manipulation

Book Information

Series: McGraw-Hill Biophotonics

Hardcover: 528 pages

Publisher: McGraw-Hill Education; 1 edition (September 8, 2009)

Language: English

ISBN-10: 0071601562

ISBN-13: 978-0071601566

Product Dimensions: 6.3 x 1.4 x 9.3 inches

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

Average Customer Review: Be the first to review this item

Best Sellers Rank: #2,526,296 in Books (See Top 100 in Books) #54 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Solid State #178 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Optoelectronics #452 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Semiconductors

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

Optofluidics: Fundamentals, Devices, and Applications (McGraw-Hill Biophotonics) Biomedical Applications of Light Scattering (McGraw-Hill Biophotonics) McGraw-Hill's 500 ACT English and Reading Questions to Know by Test Day (Mcgraw Hill's 500 Questions to Know By Test Day) McGraw-Hill's National Electrical Safety Code 2017 Handbook (Mcgraw Hill's National Electrical Safety Code Handbook) McGraw-Hill Nurses Drug Handbook, Seventh Edition (McGraw-Hill's Nurses Drug Handbook) McGraw-Hill's Conversational American English: The Illustrated Guide to Everyday Expressions of American English (McGraw-Hill ESL References) McGraw-Hill's I.V. Drug Handbook (McGraw-Hill Handbooks) Fundamentals of Engineering Thermodynamics/Book and Disk (Mcgraw Hill Series in Mechanical Engineering) Fundamentals of Radar Signal Processing, Second Edition (McGraw-Hill Professional Engineering) Fundamentals of Mechanical Vibrations: IBM PC 3.5 Version (Mcgraw Hill Series in Mechanical Engineering) Private Branch Exchange Systems and Applications (Mcgraw-Hill Series on Computer Communications) Programming and Customizing the PICAXE Microcontroller (McGraw-Hill Programming and Customizing) Power Boiler Design, Inspection, and Repair: Per ASME Boiler and Pressure (McGraw-Hill Professional Engineering) Design With Operational Amplifiers And Analog Integrated Circuits (McGraw-Hill Series in Electrical and Computer Engineering) Juran's Quality Planning and Analysis for Enterprise Quality (McGraw-Hill Series in Industrial Engineering and Management) The Odbc Solution: Open Database Connectivity in Distributed Environments/Book and Disk (Mcgraw-Hill Series on Computer Communications) Introduction to Computer Organization and Data Structures, Pdp-11 Edition (McGraw-Hill computer science series) Building Construction Estimating (Mcgraw-Hill Series in Construction Engineering and Project Management) VLSI Design Techniques for Analog and Digital Circuits (McGraw-Hill Series in Electrical Engineering) Natural Gas Engineering: Production and Storage (McGraw-Hill Series in Management)

[Dmca](#)