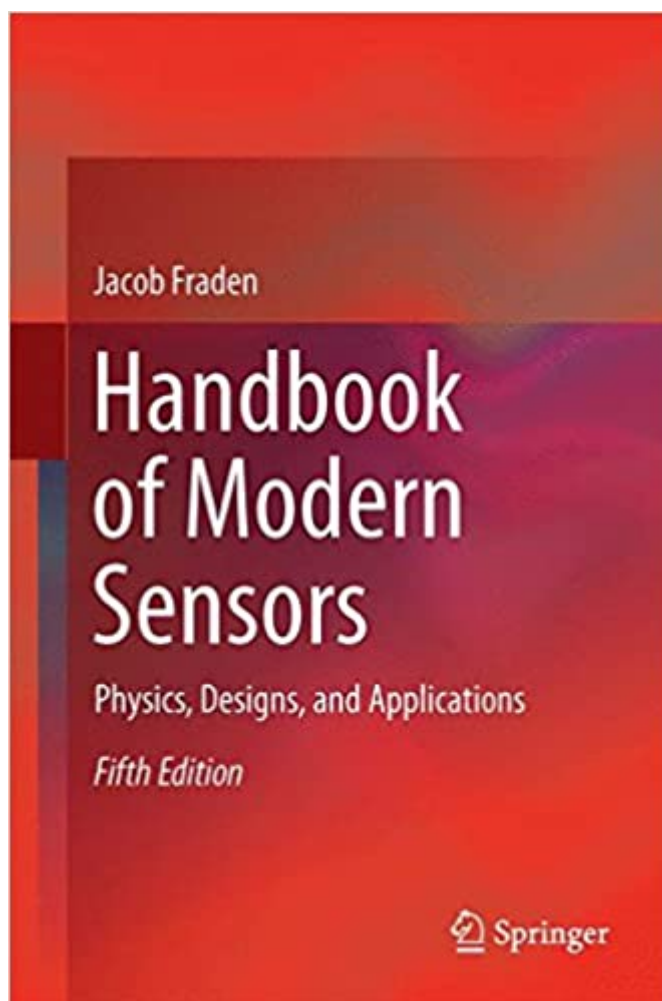


The book was found

Handbook Of Modern Sensors: Physics, Designs, And Applications



Synopsis

This book presents a comprehensive and up-to-date account of the theory (physical principles), design, and practical implementations of various sensors for scientific, industrial, and consumer applications. This latest edition focuses on the sensing technologies driven by the expanding use of sensors in mobile devices. These new miniature sensors will be described, with an emphasis on smart sensors which have embedded processing systems. The chapter on chemical sensors has also been expanded to present the latest developments. Digital systems, however complex and intelligent they may be, must receive information from the outside world that is generally analog and not electrical. Sensors are interface devices between various physical values and the electronic circuits that "understand" only a language of moving electrical charges. In other words, sensors are the eyes, ears, and noses of silicon chips. Unlike other books on sensors, the *Handbook of Modern Sensors* is organized according to the measured variables (temperature, pressure, position, etc.). This book is a reference text for students, researchers interested in modern instrumentation (applied physicists and engineers), sensor designers, application engineers and technicians whose job it is to understand, select and/or design sensors for practical systems.

Book Information

Hardcover: 758 pages

Publisher: Springer; 5th ed. 2016 edition (October 16, 2015)

Language: English

ISBN-10: 3319193023

ISBN-13: 978-3319193021

Product Dimensions: 6.1 x 1.6 x 9.2 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #934,038 in Books (See Top 100 in Books) #92 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Sensors](#) #129 in [Books > Engineering & Transportation > Engineering > Reference > Measurements](#) #281 in [Books > Science & Math > Chemistry > Analytic](#)

Customer Reviews

Selected by Choice magazine as an "Outstanding Academic Title" for 2016. Each class of sensors is individually addressed in detail from its basics to modern usage. Besides the physics behind the operation of the sensors, sensor applications and limitations are explained well. | This

clearly written work would be an excellent resource for most technical readers who want to understand, use, and design with sensors. Summing Up: Highly recommended. Upper-division undergraduates through professionals/practitioners; two-year technical program students. • (M. Mehrubeoglu, Choice, Vol. 53 (10), June, 2016) • This book appeared at a time of increasing need for sensor handbooks and is therefore a good choice for students as well as engineers. It presents an overview giving a comprehensive and up-to-date physical principles, design, and practical implementations of various sensors for scientific, industrial, and consumer applications. • | Owing to the amount of content, this is still a worthwhile handbook, which would be interesting for a lot of readers coming from different scientific disciplines. • (Gerald Urban, Analytical and Bioanalytical Chemistry, May, 2016)

This book presents a comprehensive and up-to-date account of the theory (physical principles), design, and practical implementations of various sensors for scientific, industrial, and consumer applications. This latest edition focuses on the sensing technologies driven by the expanding use of sensors in mobile devices. These new miniature sensors will be described, with an emphasis on smart sensors which have embedded processing systems. The chapter on chemical sensors has also been expanded to present the latest developments. Digital systems, however complex and intelligent they may be, must receive information from the outside world that is generally analog and not electrical. Sensors are interface devices between various physical values and the electronic circuits that "understand" only a language of moving electrical charges. In other words, sensors are the eyes, ears, and noses of silicon chips. Unlike other books on sensors, the Handbook of Modern Sensors is organized according to the measured variables (temperature, pressure, position, etc.). This book is a reference text for students, researchers interested in modern instrumentation (applied physicists and engineers), sensor designers, application engineers and technicians whose job it is to understand, select and/or design sensors for practical systems.

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

Handbook of Modern Sensors: Physics, Designs, and Applications
Chemical Sensors and Biosensors: Fundamentals and Applications
Environmental Electrochemistry: Fundamentals and Applications in Pollution Sensors and Abatement
Solid State Electrochemistry and Its Applications to Sensors and Electronic Devices (Materials Science Monographs)
Direct-Write Technologies for Rapid Prototyping
Applications: Sensors, Electronics, and Integrated Power Sources
Physics for Scientists and Engineers with Modern Physics: Volume II (3rd Edition) (Physics for Scientists & Engineers)
Engineering Physics: Fundamentals & Modern Applications (Physics) Just Cross Stitch

May/June 2009 (15 Exclusive Designs, Two Canadian Lighthouse Designs, Discover Donna Vermillion Giampa's Fabulous Floral Pillows, Elegant Blackwork Designs, Create a Summer Ornament, Vol. 27, No. 3) CRC Handbook of Chemistry and Physics, 88th Edition (CRC Handbook of Chemistry & Physics) The Solid State: An Introduction to the Physics of Crystals for Students of Physics, Materials Science, and Engineering (Oxford Physics Series) Head First Physics: A learner's companion to mechanics and practical physics (AP Physics B - Advanced Placement) Physics for Kids : Electricity and Magnetism - Physics 7th Grade | Children's Physics Books Quantum Electrodynamics: Gribov Lectures on Theoretical Physics (Cambridge Monographs on Particle Physics, Nuclear Physics and Cosmology) Six Ideas that Shaped Physics: Unit N - Laws of Physics are Universal (WCB Physics) Six Ideas That Shaped Physics: Unit R - Laws of Physics are Frame-Independent (WCB Physics) Problem-Solving Exercises in Physics: The High School Physics Program (Prentice Hall Conceptual Physics Workbook) Nuclear Physics: Principles and Applications (Manchester Physics Series) Physics: Principles with Applications with MasteringPhysics with Get Ready for Physics (6th Edition) Interior Designs: An Adult Coloring Book with Beautifully Decorated Houses, Inspirational Room Designs, and Relaxing Modern Architecture Encyclopedia of Electronic Components Volume 3: Sensors for Location, Presence, Proximity, Orientation, Oscillation, Force, Load, Human Input, Liquid and ... Light, Heat, Sound, and Electricity

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)