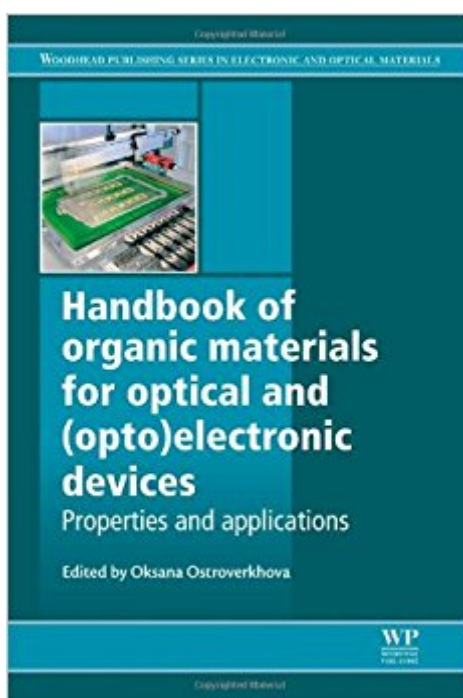


The book was found

Handbook Of Organic Materials For Optical And (Opto)Electronic Devices: Properties And Applications (Woodhead Publishing Series In Electronic And Optical Materials)



Synopsis

Small molecules and conjugated polymers, the two main types of organic materials used for optoelectronic and photonic devices, can be used in a number of applications including organic light-emitting diodes, photovoltaic devices, photorefractive devices and waveguides. Organic materials are attractive due to their low cost, the possibility of their deposition from solution onto large-area substrates, and the ability to tailor their properties. The Handbook of organic materials for optical and (opto)electronic devices provides an overview of the properties of organic optoelectronic and nonlinear optical materials, and explains how these materials can be used across a range of applications. Parts one and two explore the materials used for organic optoelectronics and nonlinear optics, their properties, and methods of their characterization illustrated by physical studies. Part three moves on to discuss the applications of optoelectronic and nonlinear optical organic materials in devices and includes chapters on organic solar cells, electronic memory devices, and electronic chemical sensors, electro-optic devices. The Handbook of organic materials for optical and (opto)electronic devices is a technical resource for physicists, chemists, electrical engineers and materials scientists involved in research and development of organic semiconductor and nonlinear optical materials and devices. Comprehensively examines the properties of organic optoelectronic and nonlinear optical materials. Discusses their applications in different devices including solar cells, LEDs and electronic memory devices. An essential technical resource for physicists, chemists, electrical engineers and materials scientists.

Book Information

Series: Woodhead Publishing Series in Electronic and Optical Materials

Hardcover: 832 pages

Publisher: Woodhead Publishing; 1 edition (September 14, 2013)

Language: English

ISBN-10: 0857092650

ISBN-13: 978-0857092656

Product Dimensions: 6.1 x 1.8 x 9.2 inches

Shipping Weight: 3 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #1,867,868 in Books (See Top 100 in Books) #118 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Optoelectronics](#) #304 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics](#)

Customer Reviews

"Overall this book is well-organized, and the individual Chapters have been written by leading scientists in each area of expertise" – "I do really appreciate the good balance between discussing introductory versus advanced topics, scientific versus technological/application issues, and materials versus device structure/applications" – "Buy it!"--MaterialsViews.com, March 27, 2014

Oksana Ostroverkhova is Associate Professor in Physics at the Department of Physics, Oregon State University, USA.

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

Handbook of Organic Materials for Optical and (Opto)Electronic Devices: Properties and Applications (Woodhead Publishing Series in Electronic and Optical Materials) Principles and Applications of Organic Light Emitting Diodes (OLEDs) (Woodhead Publishing Series in Electronic and Optical Materials) Quantum Information Processing with Diamond: Principles and Applications (Woodhead Publishing Series in Electronic and Optical Materials) Lasers for Medical Applications: Diagnostics, Therapy and Surgery (Woodhead Publishing Series in Electronic and Optical Materials) Advances in Wrought Magnesium Alloys: Fundamentals of Processing, Properties and Applications (Woodhead Publishing Series in Metals and Surface Engineering) Microfluidic Devices for Biomedical Applications (Woodhead Publishing Series in Biomaterials) Supramolecular Materials for Opto-Electronics (Smart Materials Series) Coal Power Plant Materials and Life Assessment: Developments and Applications (Woodhead Publishing Series in Energy) Regulatory Affairs for Biomaterials and Medical Devices (Woodhead Publishing Series in Biomaterials) Sterilisation of Biomaterials and Medical Devices (Woodhead Publishing Series in Biomaterials) Biocompatibility and Performance of Medical Devices (Woodhead Publishing Series in Biomaterials) Optical Thin Films: User's Handbook (Macmillan Series in Optical and Electro-Optical Engineering) Organic Electronic Materials: Conjugated Polymers and Low Molecular Weight Organic Solids (Springer Series in Materials Science) Porous Silicon for Biomedical Applications (Woodhead Publishing Series in Biomaterials) Mems for Biomedical Applications (Woodhead Publishing Series in Biomaterials) Shape Memory Polymers for Biomedical Applications (Woodhead Publishing Series in Biomaterials) Encapsulation Technologies for Electronic Applications (Materials and Processes for Electronic Applications) Advances in Wind Turbine Blade Design and Materials (Woodhead

Publishing Series in Energy) Materials for Ultra-Supercritical and Advanced Ultra-Supercritical Power Plants (Woodhead Publishing Series in Energy) Ultra-Supercritical Coal Power Plants: Materials, Technologies and Optimisation (Woodhead Publishing Series in Energy)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)