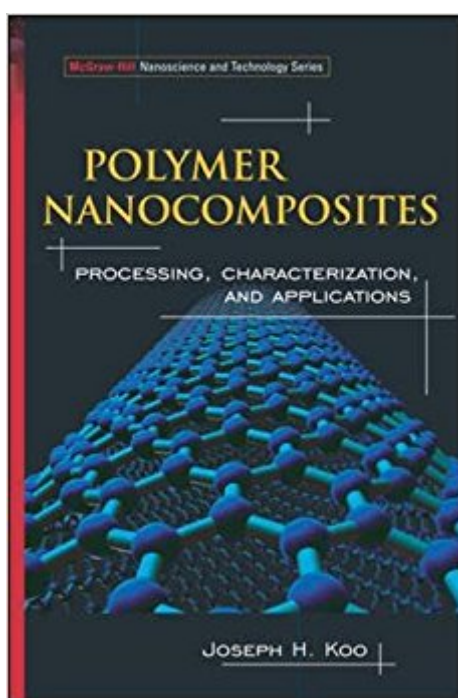


The book was found

# Polymer Nanocomposites: Processing, Characterization, And Applications (McGraw-Hill Nanoscience And Technology)



## Synopsis

Understand the principles, applications, and limitations of a cutting-edge material. Based on the author's 26 years of experience in the field of Nanotechnology, this reference offers researchers and materials scientists a complete reference to the physical concepts, techniques, applications and principles underlying one of the most researched materials. Keeps you abreast of the latest trends, developments, and commercial applications

## Book Information

Series: McGraw-Hill Nanoscience and Technology

Hardcover: 272 pages

Publisher: McGraw-Hill Education; 1 edition (May 9, 2006)

Language: English

ISBN-10: 0071458212

ISBN-13: 978-0071458214

Product Dimensions: 6.3 x 0.8 x 9.4 inches

Shipping Weight: 1.2 pounds (View shipping rates and policies)

Average Customer Review: 4.5 out of 5 stars 2 customer reviews

Best Sellers Rank: #691,172 in Books (See Top 100 in Books) #45 in [Books > Engineering & Transportation > Engineering > Chemical > Plastics](#) #55 in [Books > Engineering & Transportation > Engineering > Materials & Material Science > Extraction & Processing](#) #101 in [Books > Science & Math > Physics > Nanostructures](#)

## Customer Reviews

A State-of-the-Art Guide to the Principles, Applications, and Limitations of the Material Components of Polymer Nanostructured Materials. *Polymer Nanocomposites: Processing, Characterization, and Applications* offers researchers an invaluable tool for understanding and utilizing the special chemical and material principles underlying these cutting-edge polymer nanocomposites. This rigorous guide presents detailed information on the physical concepts, techniques, and applications of such nanomaterials as nanoclays, nanosilicas, carbon nanofibers, polyhedral oligomeric silsesquioxanes (POSS<sup>®</sup>), and carbon nanotubes. With this essential resource, readers can:

- Get expert descriptions of the types of nanoparticles commonly used in polymeric matrices
- Discover methods for transforming polymer matrix resins into nanocomposites used for coatings, adhesives, fire-retardant, ablative, and structural materials
- Examine chemical and thermal properties of various nanoparticles such as nanoclays, nanosilicas, POSS<sup>®</sup>, carbon nanofibers, and carbon

nanotubes Capitalize on new breakthroughs and commercial uses of polymer nanocomposites  
Explore Every Aspect of Today's Widely Used Polymer Nanocomposites: An overview of  
nanoparticles Selecting resin matrix and nanoparticles for applications Processing of nanomaterials  
Characterization of polymer nanomaterials Properties of polymer nanostructured materials Polymer  
nanostructured materials for high-temperature applications Current status, trends, future directions,  
and opportunities

Joseph H. Koo is currently a senior research fellow and director of Solid Freeform Fabrication Consortium in the Department of Mechanical Engineering at the University of Texas at Austin, Austin, TX. He is chairman of the newly established SAMPE Nanotechnology Committee and immediate past chairman of the AIAA Materials Technical Committee. Dr. Koo has 30 years of industrial and academic experience in program and engineering management and has published over 200 papers on thermal, material, and optical sciences in a variety of science journals and conference proceedings.

Dr. Joseph Koo's Polymer Nanocomposites text is an outstanding reference for the study and utilization of polymer nanocomposite materials. This book covers a wide range of topics including polymer types, processing and characterization of nanomaterials, and special applications. It includes up to date information on current trends and ongoing research in this emerging field of nanoscience. The general theme of this work is on the utility afforded by polymer nanocomposites in dynamic and demanding applications.

This is a good book, it covers all various types of polymer nanocomposites (from nano-clays, carbon black, CSCNTs (CNFs), CNTs) in sufficient detail to grasp an understanding of what each is all about. One of the better reference texts on the subject, especially given its wide range material covered.

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

Polymer Nanocomposites: Processing, Characterization, And Applications (McGraw-Hill  
Nanoscience and Technology) Polymer Clay: The Ultimate Beginners Guide to Creating Animals in  
30 Minutes or Less! (Polymer Clay - Polymer Clay for Beginners - Clay - Polymer Clay Animals -  
Polymer Clay Jewelry - Sculpture) Functional Polymer Coatings: Principles, Methods, and  
Applications (Wiley Series on Polymer Engineering and Technology) McGraw-Hill's Dictionary of  
American Slang and Colloquial Expressions: The Most Up-to-Date Reference for the Nonstandard

Usage, Popular Jargon, and Vulgarisms of Contempos (McGraw-Hill ESL References) McGraw-Hill Education 500 Financial Accounting and Reporting Questions for the CPA Exam (McGraw-Hill's 500 Questions) McGraw-Hill Education 500 Auditing and Attestation Questions for the CPA Exam (McGraw-Hill's 500 Questions) McGraw-Hill Education 500 Business Environment and Concepts Questions for the CPA Exam (McGraw-Hill's 500 Questions) 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 Education: Top 50 ACT English, Reading, and Science Skills for a Top Score, Second Edition (Mcgraw-Hill Education Top 50 Skills for a Top Score) The McGraw-Hill 36-Hour Course: Finance for Non-Financial Managers 3/E (McGraw-Hill 36-Hour Courses) McGraw-Hill Education 500 Regulation Questions for the CPA Exam (McGraw-Hill's 500 Questions) Product Management [McGraw-Hill/Irwin Series in Marketing] by Lehmann,Donald, Winer,Russell [McGraw-Hill/Irwin,2004] [Hardcover] 4TH EDITION McGraw-Hill's National Electrical Code 2017 Handbook, 29th Edition (Mcgraw Hill's National Electrical Code Handbook) McGraw-Hill Education: 10 ACT Practice Tests, Fifth Edition (Mcgraw-Hill's 10 Act Practice Tests) McGraw-Hill Education: Top 50 ACT Math Skills for a Top Score, Second Edition (Mcgraw-Hill Education Top 50 Skills for a Top Score) McGraw-Hill Education 10 ACT Practice Tests, Fourth Edition (Mcgraw-Hill's 10 Act Practice Tests) McGraw-Hill Education 5 TEAS Practice Tests, Third Edition (Mcgraw Hill's 5 Teas Practice Tests) McGraw-Hill Education Strategies for the GED Test in Mathematical Reasoning with CD-ROM (Mcgraw Hill's Ged Mathematics) McGraw-Hill's Catholic High School Entrance Exams, 3rd Edition (McGraw-Hill's Catholic High School Entrance Examinations) McGraw-Hill Education SAT Subject Test Literature 3rd Ed. (Mcgraw-Hill's Sat Subject Test Literature)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)