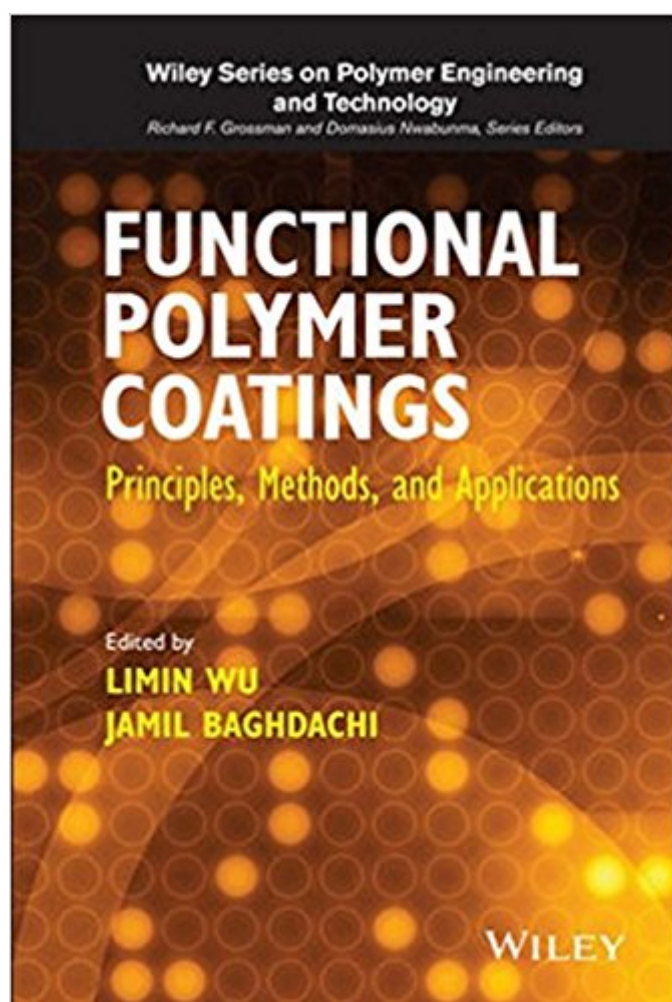


The book was found

Functional Polymer Coatings: Principles, Methods, And Applications (Wiley Series On Polymer Engineering And Technology)





Synopsis

Focusing on a variety of coatings, this book provides detailed discussion on preparation, novel techniques, recent developments, and design theories to present the advantages of each function and provide the tools for better product performance and properties. **•** Presents advantages and benefits of properties and applications of the novel coating types **•** Includes chapters on specific and novel coatings, like nanocomposite, surface wettability tunable, stimuli-responsive, anti-fouling, antibacterial, self-healing, and structural coloring **•** Provides detailed discussion on recent developments in the field as well as current and future perspectives **•** Acts as a guide for polymer and materials researchers in optimizing polymer coating properties and increasing product performance

Book Information

Series: Wiley Series on Polymer Engineering and Technology (Book 12)

Hardcover: 368 pages

Publisher: Wiley; 1 edition (June 15, 2015)

Language: English

ISBN-10: 1118510704

ISBN-13: 978-1118510704

Product Dimensions: 6.4 x 0.9 x 9.5 inches

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

Average Customer Review: Be the first to review this item

Best Sellers Rank: #3,207,637 in Books (See Top 100 in Books) #69 in Books > Science & Math > Chemistry > Polymers & Macromolecules #155 in Books > Engineering & Transportation > Engineering > Chemical > Coatings, Ceramics & Glass #276 in Books > Engineering & Transportation > Engineering > Chemical > Plastics

Customer Reviews

Used to manufacture products such as cars, appliances, packaging, electronics, plastics, buildings, fibers, ships, and aircraft; coatings can improve the performances and appearance of these products. In a world where polymers are a necessary component in a variety of industries, polymer coating science and technology is a rapidly growing field and has extensively developed over the past decades. Continuing research on designs and coating technologies through novel theories and technologies lead the way for better product performance and new high-performance materials. Focusing on a variety of coatings, this book introduces principles and methods for the

fabrication of functional polymer coatings. Each chapter provides detailed discussion on the preparation, properties, design theory, and applications. The book compares and contrasts various types of coatings to help determine the benefits and advantages of each. Although there are many articles and related books on the topic, this book's compilation of broad aspects, novel technologies, and recent developments stands out as offering a comprehensive resource for polymer scientists. Among the key features the book offers are:

- Inclusion of chapters on specific and novel coatings like nanocomposite, surface wettability tunable, stimuli-responsive, anti-fouling, antibacterial, self-healing coatings, self-stratifying coatings, and structural coloring
- Detailed discussion on novel preparation principles and techniques, recent developments, and current and future perspectives
- Guidance for polymer and materials researchers in optimizing polymer coating properties and increasing product performance

Limin Wu is the director of the Advanced Coatings Research Center of the Ministry of Education of China and a Professor of the Department of Materials Science at Fudan University in Shanghai. He has over 20 years of experience in the areas of nano/micro hybrid colloidal spheres and functional polymer coatings. Jamil Baghdachi is the Interim Director of the Coatings Research Institute and a Professor in the Polymers and Coatings department at Eastern Michigan University. He has over 25 years of experience in polymers, coatings, adhesives, paints, and composites and has acted as a consultant for national and international firms.

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

Functional Polymer Coatings: Principles, Methods, and Applications (Wiley Series on Polymer Engineering and Technology) Polyurethanes: Science, Technology, Markets, and Trends (Wiley Series on Polymer Engineering and Technology) Coatings Tribology, Volume 56, Second Edition: Properties, Mechanisms, Techniques and Applications in Surface Engineering (Tribology and Interface Engineering) 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) The Engineering Design of Systems: Models and Methods (Wiley Series in Systems Engineering and Management) Elements of Polymer Science & Engineering, Second Edition: An Introductory Text and Reference for Engineers and Chemists (The Elements of Polymer Science and Engineering) The Elements of Polymer Science and Engineering, Third Edition (Elements of Polymer Science & Engineering) The Elements of Polymer Science and Engineering (Elements of Polymer Science & Engineering) Wiley Not-for-Profit GAAP 2014: Interpretation and Application of Generally Accepted Accounting Principles (Wiley Not-For-Profit GAAP: Interpretation

... of Generally Accepted Accounting Principles) Compounding Materials for the Polymer Industries: A Concise Guide to Polymers, Rubbers, Adhesives, and Coatings System Engineering Analysis, Design, and Development: Concepts, Principles, and Practices (Wiley Series in Systems Engineering and Management) Cute Polymer Clay Popsicles & Ice Cream: Polymer Clay Kawaii Food Charms (Polymer Clay Kawaii Charms Book 1) Numerical Methods with Chemical Engineering Applications (Cambridge Series in Chemical Engineering) Electrodeposition: The Materials Science of Coatings and Substrates (Materials Science and Process Technology) Organic Coatings: Science and Technology Coatings Technology: Fundamentals, Testing, and Processing Techniques Coatings Technology Handbook, Third Edition Tribology of Polymeric Nanocomposites, Volume 55, Second Edition: Friction and Wear of Bulk Materials and Coatings (Tribology and Interface Engineering) 3D Reconstruction: Methods, Applications and Challenges (Computer Science, Technology and Applications) Methods of X-ray and Neutron Scattering in Polymer Science (Topics in Polymer Science)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)