



Metal-Polymer Nanocomposites

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DESCRIPTION

A unique guide to an essential area of nanoscience

Interest in nano-sized metals has increased greatly due to their special characteristics and suitability for a number of advanced applications. As technology becomes more refined-including the ability to effectively manipulate and stabilize metals at the nanoscale-these materials present ever-more workable solutions to a growing range of problems.

Metal-Polymer Nanocomposites provides the first guide solely devoted to the unique properties and applications of this essential area of nanoscience. It offers a truly multidisciplinary approach, making the text accessible to readers in physical, chemical, and materials science as well as areas such as engineering and topology.

The thorough coverage includes:

- The chemical and physical properties of nano-sized metals
- Different approaches to the synthesis of metal-polymer nanocomposites (MPN)
- Advanced characterization techniques and methods for study of MPN
- Real-world applications, including color filters, polarizers, optical sensors, nonlinear optical devices, and more
- An extensive list of references on the topics covered

A unique, cutting-edge resource for a vital area of nanoscience development, *Metal-Polymer Nanocomposites* is an invaluable text for students and practitioners of materials science, engineering, polymer science, chemical engineering, electrical engineering, and optics.

ABOUT THE AUTHOR

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