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Functional Organic and Hybrid Nanostructured Materials: Fabrication, Properties, and Applications

Edited by Quan Li

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本書の内容

The first book to explore the potential of tunable functionalities in organic and hybrid nanostructured materials in a unified manner.

The highly experienced editor and a team of leading experts review the promising and enabling aspects of this exciting materials class, covering the design, synthesis and/or fabrication, properties and applications.

The broad topical scope includes organic polymers, liquid crystals, gels, stimuli-responsive surfaces, hybrid membranes, metallic, semiconducting and carbon nanomaterials, thermoelectric materials, metal-organic frameworks, luminescent and photochromic materials, and chiral and self-healing materials.

本書の目次

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- Functional Molecular Gels
- Guest-Host Nanostructured Supramolecular Polymers
- Photochromic Organic & Hybrid Self-Organized Nanostructures
- Stimuli-Directed Self-Assembled One-Dimensional Organic Semiconductors
- Functional Block Copolymer and Their Self-Assembly
- Self-Assembled Graphenes and Their Applications
- Aligned Carbon Nanotubes
- Organic-Inorganic Hybrid Nanostructured Materials for Thermoelectric Energy Conversion
- Piezoelectric Organic-Inorganic Hybrid Nanostructured Materials for Mechanical Energy Harvesting
- Organic-Inorganic Hybrid Nanostructured Materials for Perovskite Solar Cells
- Organic Frameworks based on Carbon and Nitrogen as Novel Semiconductor Systems and Advanced Catalysts
- Metal-Organic Frameworks
- Bioinspired Organic and Hybrid Nanostructured Materials
- Hybrid Supramolecular Nanomaterials
- Hybrid Luminescent Nanostructures
- Organic and Hybrid Mesoporous Materials

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Quan Li is Director of the Organic Synthesis and Advanced Materials Laboratory at Liquid Crystal Institute (LCI), Kent State University, where he is also Adjunct Professor in the Chemical Physics Interdisciplinary Program. He received his Ph.D. in Organic Chemistry from the Chinese Academy of Sciences (CAS) in Shanghai, where he was promoted to a youngest Full Professor of Organic Chemistry and Medicinal Chemistry in February of 1998. In 1999, he was awarded as a One-Hundred Talent Scientists (BeiRenJiHua) in CAS. He held visiting appointments in Department of Chemistry, Hong Kong University of Science & Technology, Hong Kong (1996-1997); Department of Protein Engineering, French Commission of Atomic Energy, Saclay/CEA, Paris, France (1998-1999); Institute of Organic Chemistry, University of Göttingen, Germany (1999-2000); and Department of Chemistry, University of Oregon, USA (2001-2004). He was Alexander von Humboldt Fellow in Germany. He has directed the cutting edge research projects funded by U.S. Air Force Office of Scientific Research, U.S. Air Force Research Laboratory, U.S. Army Research Office, U.S. Department of Defense Multidisciplinary University Research Initiative, U.S. National Science Foundation, U.S. National Aeronautics and Space Administration, U.S. Department of Energy, Ohio Board of Regents under Its Research Challenge Program, Ohio Third Frontier, Samsung Electronics, etc. He has won the Kent State University Outstanding Research and Scholarship award. He has also been honored as Guest Professor and Chair Professor by several Universities.

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