Supramolecular Soft Matter: Applications in Materials and Organic Electronics
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DESCRIPTION

The pivotal text that bridges the gap between fundamentals and applications of soft matter in organic electronics

Covering an expanding and highly coveted subject area, Supramolecular Soft Matter enlists the services of leading researchers to help readers understand and manipulate the electronic properties of supramolecular soft materials for use in organic opto-electronic devices, such as photovoltaics and field effect transistors, some of the most desired materials for energy conservation. Rather than offering a compilation of current trends in supramolecular soft matter, this book bridges the gap between fundamentals and applications of soft matter in organic electronics in an effort to open new directions in research for applying supramolecular assembly into organic materials while also focusing on the morphological functions originating from the materials' self-assembled architectures. This unique approach distinguishes Supramolecular Soft Matter as a valuable resource for learning to identify concepts that hold promise for the successful development of organic/polymeric electronics for use in real-world applications. Supramolecular Soft Matter:

• Combines important topics to help supramolecular chemists and organic electronics researchers work together

• Covers an interdisciplinary field of prime importance to government-supported R&D research
Discusses the concepts and perspectives in a dynamic field to aid in the successful development of organic electronics.

Includes applications for energy conservation like photovoltaics and field effect transistors.

Teeming with applicable information on both molecular design and synthesis, as well as the development of smart molecular assemblies for organic electronic systems, Supramolecular Soft Matter provides more practical in-depth coverage of this rapidly evolving technology than any other book in its field.

ABOUT THE AUTHOR

Takashi Nakanishi, PhD, is a principal researcher at the National Institute for Materials Science, Japan. He is a reviewer for more than twenty journals, including Angewandte Chemie International Edition, Journal of the American Chemical Society, Langmuir, Chemistry of Materials, Journal of Physical Chemistry, Advanced Materials, Advanced Functional Materials, Chemistry # A European Journal, Chemistry # An Asian Journal, Small, and has also written sixty-eight papers and thirty-two reviews or book chapters.

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