DESCRIPTION

A comprehensive overview of functional nanosystems based on organic and polymeric materials and their impact on current and future research and technology in the highly interdisciplinary field of materials science. As such, this handbook covers synthesis and fabrication methods, as well as properties and characterization of supramolecular architectures. Much of the contents are devoted to existing and emerging applications, such as organic solar cells, transistors, diodes, nanowires and molecular switches.

The result is an indispensable resource for materials scientists, organic chemists, molecular physicists and electrochemists looking for a reliable reference on this hot topic.

ABOUT THE AUTHOR

Paolo Samorì is full professor of Physical Chemistry and senior member as well as deputy director of the Institut de Science et d'Ingénierie Supramoléculaires (ISIS) of the Université de Strasbourg (UdS) & CNRS where he is also Director of the Nanochemistry Laboratory. He is also a junior member of the Institut Universitaire de France (IUF). After his PhD in Chemistry from the Humboldt University Berlin, Germany, he was permanent research scientist at the National Research Council in Bologna, Italy. His research interests span applications of scanning probe microscopies, supramolecular electronics and the fabrication of molecular-scale nanodevices. Paolo Samorì has received numerous awards, including the IUPAC Prize for Young Chemists 2001,
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