1. Record Nr. UNINA9910139190103321

Autore	Li Quan <1965->
Titolo	Self-organized organic semiconductors [[electronic resource]] : from materials to device applications / / edited by Quan Li
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, 2011
ISBN	1-118-00904-5 1-283-02585-X 9786613025852 0-470-94912-0 0-470-94911-2
Descrizione fisica	1 online resource (322 p.)
Classificazione	TEC008090
Disciplina	621.3815/2
Soggetti	Organic semiconductors Self-assembly (Chemistry) Self-organizing systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	SELF-ORGANIZED ORGANIC SEMICONDUCTORS; CONTENTS; Preface; Contributors; 1 Crystal Engineering Organic Semiconductors; 2 Conjugated Block Copolymers and Cooligomers; 3 Charge-Carrier Transport and Its Modeling in Liquid Crystals; 4 Self-Organized Discotic Liquid Crystals as Novel Organic Semiconductors; 5 Self-Organized Semiconducting Smectic Liquid Crystals; 6 Self-Assembling of Carbon Nanotubes; 7 Self-Organized Fullerene-Based Organic Semiconductors; 8 High-Efficiency Organic Solar Cells Using Self-Organized Materials 9 Selective Molecular Assembly for Bottom-Up Fabrication of Organic Thin-Film TransistorsIndex
Sommario/riassunto	"This book focuses on the exciting topic on self-organized organic semiconductors - from materials to device applications. It offers up-to-date and accessible coverage of self-organized semiconductors for organic chemistry, polymer science, liquid crystals, materials science, material engineering, electrical engineering, chemical engineering, optics, optic-electronics, nanotechnology and semiconductors. Chapters cover chemistry, physics, processing, and characterization.

The applications include photovoltaics, light-emitting diodes (LEDs), and transistors"--