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Nota di contenuto	Related Titles; Title page; Copyright page; Dedication; Contents; Preface; List of Contributors; 1: Electronic Process in Organic Solids; 1.1 Introduction; 1.2 Structure Characteristics and Properties of Organic Solids; 1.2.1 Organic Solids; 1.2.2 Molecular Geometries; 1.2.3 Aggregations and Assemblies; 1.3 Electronic Processes in Organic Small Molecules; 1.3.1 Photophysics of Small Molecules; 1.3.2 Excitation for Charge and Energy Transfer in Small Molecules; 1.4 Some Basic Concepts of Electronic Process in Conjugated Polymers; 1.4.1 Excited States in Conjugated Polymers 1.4.2 Interactions between Conjugated Polymer Chains 1.4.3 Photoinduced Charge Transfer between Conjugated Polymers and Electron Acceptors; 1.5 Carriers Generation and Transport; 1.5.1 Charge Carriers; 1.5.2 Carrier Mobility and Its Measurement; 1.5.3 Mobility-Influencing Factors; References; 2: Organic/Polymeric Semiconductors for Field-Effect Transistors; 2.1 Introduction; 2.1.1 Features of Organic/Polymeric Semiconductors; 2.1.2 Classification of Semiconductors for Organic Field-Effect Transistors; 2.1.3 Main Parameters for the Characterization of Organic/Polymeric Semiconductors

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Sommario/riassunto

Written by internationally recognized experts in the field with academic as well as industrial experience, this book concisely yet systematically covers all aspects of the topic. The monograph focuses on the optoelectronic behavior of organic solids and their application in new optoelectronic devices. It covers organic electroluminescent materials and devices, organic photonics, materials and devices, as well as organic solids in photo absorption and energy conversion. Much emphasis is laid on the preparation of functional materials and the fabrication of devices, from materials synthesis a

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