

1. Record Nr.	UNINA990008127310403321
Autore	Goethe, Johann Wolfgang von <1749-1832>
Titolo	La metamorfosi delle piante : e altri scritti sulla scienza della natura / J. W. Goethe ; a cura di Stefano Zecchi
Pubbl/distr/stampa	Parma : Ugo Guanda, c1983
ISBN	88-7746-187-X
Descrizione fisica	165 p. ; 22 cm
Disciplina	581
Locazione	FAGBC
Collocazione	60 581 B 143
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9910300534803321
Autore	Poelking Carl. R
Titolo	The (Non-)Local Density of States of Electronic Excitations in Organic Semiconductors // by Carl. R Poelking
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-69599-1
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XIV, 133 p. 42 illus. in color.)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	530.416
Soggetti	Semiconductors Optical materials Electronics - Materials Polymers Physics Optical and Electronic Materials Polymer Sciences Applied and Technical Physics
Lingua di pubblicazione	Inglese

Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Organic Electronics in a Nutshell -- Particle-Based Models -- Long-Range Polarized Embedding of Electronic Excitations -- Charge Carriers at Organic–Organic Interfaces -- Charge Carriers in Disordered Bulk Mesophases -- Charge Transfer States at Donor–Acceptor Heterojunctions -- Conclusions & Outlook.
Sommario/riassunto	<p>This book focuses on the microscopic understanding of the function of organic semiconductors. By tracing the link between their morphological structure and electronic properties across multiple scales, it represents an important advance in this direction. Organic semiconductors are materials at the interface between hard and soft matter: they combine structural variability, processibility and mechanical flexibility with the ability to efficiently transport charge and energy. This unique set of properties makes them a promising class of materials for electronic devices, including organic solar cells and light-emitting diodes. Understanding their function at the microscopic scale – the goal of this work – is a prerequisite for the rational design and optimization of the underlying materials. Based on new multiscale simulation protocols, the book studies the complex interplay between molecular architecture, supramolecular organization and electronic structure in order to reveal why some materials perform well – and why others do not. In particular, by examining the long-range effects that interrelate microscopic states and mesoscopic structure in these materials, the book provides qualitative and quantitative insights into e. g. the charge-generation process, which also serve as a basis for new optimization strategies.</p>