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Titolo	[Pi]-stacked polymers and molecules : theory, synthesis, and properties / / Tamaki Nakano, editor
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Descrizione fisica	1 online resource (xii, 270 pages) : illustrations (some color)
Collana	Gale eBooks
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Soggetti	Conjugated polymers
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Synthesis and Properties of -Stacked Vinyl Polymers -- Reversible Polymerization Techniques Leading to -Stacked Polymers -- Cyclophane-based -Stacked Polymers -- -Stacked Oligomers as Models for Semiconducting Conjugated Organic Materials -- -Stacking on Density Functional Theory: A Review.
Sommario/riassunto	This book covers broad aspects of the chemistry of -stacked polymers and low-molecular-weight molecules, from synthesis through theory. It is intended for graduate students and researchers in academia and industry and consists of chapters written by renowned scientists who have made significant contributions to this field in the past decade. -Stacked polymers and low-molecular-weight molecules are expected to replace main-chain conjugated polymers such as polyacetylenes and polythiophenes as organic conducting and energy-transferring substances that are important as materials for photo-electronic applications. -Stacked polymers and molecules have significant advantages over main-chain conjugated polymers, i.e., high solubility in solvents, large freedom in molecular design, and colorless nature.