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Soggetti	Polymers Renewable energy resources Optical materials Electronic materials Polymer Sciences Renewable and Green Energy Optical and Electronic Materials
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Truxenone Based Electron Acceptors -- A Simple Linear Acceptor with Dye-Based Flanking Groups -- Extended Linear Acceptors with an Indacenodithiophene Core -- Experimental Procedures.
Sommario/riassunto	This book reports on the design, synthesis and characterization of new small molecule electron acceptors for polymer solar cells. Starting with a detailed introduction to the science behind polymer solar cells, the author then goes on to review the challenges and advances made in developing non-fullerene acceptors so far. In the main body of the book, the author describes the design principles and synthetic strategy for a new family of acceptors, including detailed synthetic procedures and molecular modeling data used to predict physical properties. An indepth characterization of the photovoltaic performance, with transient absorption spectroscopy (TAS), photo-induced charge extraction, and grazing incidence X-ray diffraction (GIXRD) is also

included, and the author uses this data to relate material properties and device performance. This book provides a useful overview for researchers beginning a project in this or related areas.

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