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Elementary Processes in Organic Photovoltaics

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Presents a technology for renewable energies

Covers the results from the DFG-Schwerpunktprogramm "Elementary Process in Organic Photovoltaics"

Written by top researchers in the field

Part of the book series: [Advances in Polymer Science](#) (POLYMER, volume 272)

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About this book

This volume presents the results of a multi-year research programme funded by the Deutsche Forschungsgemeinschaft (German Research Council), which explains how organic solar cells work. In this new promising photovoltaic technology, carbon-based materials are deposited by low-cost methods onto flexible substrates, thus allowing devices which open completely new applications like transparent coatings for building, solar cells integrated into clothing or packages, and many more. The investigation of organic solar cells is an interdisciplinary topic, covering physics, chemistry and engineering. The different chapters address topics ranging from the synthesis of new organic materials, to the characterization of the elementary processes such as exciton transport and separation, and the principles of highly efficient device design.

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