

1. Record Nr.	UNINA9910163088003321
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Titolo	Fiber Solar Cells : Materials, Processing and Devices // by Shaocong Hou
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2017
ISBN	981-10-2864-8
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XI, 114 p. 76 illus., 53 illus. in color.)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	621.042
Soggetti	Renewable energy resources Energy harvesting Optical materials Electronic materials Lasers Photonics Nanotechnology Electrochemistry Renewable and Green Energy Energy Harvesting Optical and Electronic Materials Optics, Lasers, Photonics, Optical Devices
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Overview of Solar Photovoltaic technology -- Film deposition on a wire/fiber via in-situ Joule heating process -- Fiber solar cells utilizing polymer fibers -- Carbon fibers as versatile substrates for fiber solar cells -- Graphene electrocatalysts for fiber dye-sensitized solar cells -- Architectures and working principles of fiber solar cells -- Conclusion.
Sommario/riassunto	This thesis presents the fundamental research and latest findings on novel flexible/wearable photovoltaic technology, and comprehensively summarizes the rapid developments in flexible photovoltaics, from traditional planar solar cells to fiber solar cells. It discusses the rational design of fiber solar cell materials, electrodes and devices, as well as

critical factors including cost, efficiency, flexibility and stability . Furthermore, it addresses fundamental theoretical principles and novel fabrication technologies and their potential applications. The book provides practical information for university researchers and graduate students interested in flexible fiber photovoltaics, and inspires them to design other novel flexible/wearable electronics and textiles.
