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# Advances in Solar Energy Research

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**Editors:** [Himanshu Tyagi](#), [Avinash Kumar Agarwal](#),  
[Prodyut R. Chakraborty](#), [Satvasheel Powar](#)

Presents a broad overview of major challenges and  
advancements in solar energy research

Covers both solar thermal and photovoltaic systems

Includes contributions from leading academics in the  
field

**Part of the book series:** [Energy, Environment, and  
Sustainability](#) (ENENSU)

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## About this book

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This book covers major technological advancements in, and evolving applications of, thermal and photovoltaic solar energy systems. Advances in technologies for harnessing solar energy are extensively discussed, with topics including the fabrication, compaction and optimization of energy grids, solar cells and panels. Leading international experts discuss the applications, challenges and future prospects of research in this increasingly vital field, providing a valuable resource for all researchers working in this field.

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## Keywords

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**Solar Energy**      **photovoltaic**

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**solar collectors**

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**Himanshu Tyagi** is an Associate Professor of Mechanical Engineering at the IIT Ropar. He has previously worked at Siemens (Germany and India) and Intel (USA). He received his PhD from Arizona State University, his Master's from the University of Windsor, Canada, and his Bachelor's from the IIT Delhi. His research interests include thermo-fluids, bio-heat transfer, nanofluids, nanoscale heat transfer, clean and sustainable energy, solar energy, energy storage, ignition properties of fuels containing

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