1. Record Nr. UNINA9910253975703321

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| Titolo | Anti-reflection and Light Trapping in c-Si Solar Cells / / by Chetan Singh Solanki, Hemant Kumar Singh |
| Pubbl/distr/stampa | Singapore : , : Springer Singapore : , : Imprint : Springer, , 2017 |
| ISBN | 981-10-4771-5 |
| Edizione | [1st ed. 2017.] |
| Descrizione fisica | 1 online resource (186 pages) : illustrations |
| Collana | Green Energy and Technology, , 1865-3529 |
| Disciplina | 621.31244 |
| Soggetti | Energy storage<br>Optical materials<br>Electronics - Materials<br>Lasers<br>Photonics<br>Renewable energy resources<br>Energy Storage<br>Optical and Electronic Materials<br>Optics, Lasers, Photonics, Optical Devices<br>Renewable and Green Energy |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Solar cells: Overview -- c-Si cell: Physics and Technology -- Principle of dielectric based anti-reflection and light trapping -- Principle of texturization for enhanced light trapping -- Texturing process of c-Si wafers -- Anti-reflection coatings with textured surface for c-Si solar cells -- Advancement in traditional lighting trapping structures -- Plasmonics based advanced anti-reflection and light trapping: Principles and Technology -- Plasmonics based light trapping for c-Si solar cell applications -- Future scope in advanced lighting trapping structure development. |
| Sommario/riassunto | This book offers essential insights into c-Si based solar cells and fundamentals of reflection, refraction, and light trapping. The basic physics and technology for light trapping in c-Si based solar cells are covered, from traditional to advanced light trapping structures. Further, |

the book discusses the latest developments in plasmonics for c-Si solar cell applications, along with their future scope and the requirements for further research. The book offers a valuable guide for graduate students, researchers and professionals interested in the latest trends in solar cell technologies.