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Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Advancement in Copper Indium Gallium Diselende (CIGS) Based Thin Film Solar Cells -- Chapter 3. Recent Advances in the Kesterite based Thin Film Solar Cell Technology: Role of Ge -- Chapter 4. CdTe based thin film solar cells -- Chapter 5. Advances in perovskite solar cells: Prospects of lead-free perovskite-materials -- Chapter 6. Dye Sensitized and Quantum Dot Sensitized Solar Cell -- Chapter 7. Antimony Chalcogenides based Thin Film Solar Cell -- Chapter 8. Oxides for Photovoltaic applications -- Chapter 9. Ultra-Thin Plasmonic Optoelectronic Devices.
Sommario/riassunto	This book provides recent development in thin-film solar cells (TFSC). TFSC have proven the promising approach for terrestrial and space

photovoltaics. TFSC have the potential to change the device design and produce high efficiency devices on rigid/flexible substrates with significantly low manufacturing cost. TFSC have several advantages in manufacturing compared to traditional crystalline Si-solar cells like less requirement of materials, can be prepared with earth’s abundant materials, less processing steps, easy to dispose, etc. Several universities/research institutes/industry in India and abroad are involved in the research area of thin-film solar cells. The book helps the readers to find the details about different thin-film technologies and its advancement at one place. Each chapter covers properties of materials, its suitability for PV applications, simple manufacturing processes and recent and past literature survey. The issues related to the development of high efficiencyTFSC devices over large area and its commercial and future prospects are discussed.