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Nota di contenuto	Synthesis and Processing of nanomaterials -- Perspective of nanomaterials in the performance of solar cells -- Materials for Solar cell applications: an overview of TiO2, ZnO, upconverting organic and polymer based solar cells -- Recent advances in Solar cell -- Photovoltaic materials design by computational studies: metal sulfides -- Photovoltaic based Nanomaterials: synthesis and characterization -- Carbon Nanotube: Synthesis and Application in Solar Cells -- Basic concepts, engineering and advances in dye sensitized solar cells -- Quantum dot solar cells -- Organometal halide perovskite-based materials and their applications in solar cell devices -- Effect of Oxygen Vacancies in Electron Transport Layer for Perovskite Solar Cells -- Solar Cells and Opto-electronic Devices in Space -- Multijunction (III-V) Solar

	Cells: From Basics to Advanced Materials Choices.
Sommario/riassunto	This book addresses the rapidly developing class of solar cell materials and designed to provide much needed information on the fundamental principles of these materials, together with how these are employed in photovoltaic applications. A special emphasize have been given for the space applications through study of radiation tolerant solar cells. This book present a comprehensive research outlining progress on the synthesis, fabrication and application of solar cells from fundamental to device technology and is helpful for graduate students, researchers, and technologists engaged in research and development of materials.