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Nota di contenuto	Introduction -- A Brief Insight into the Vertical Super-Thin Body (VSTB) MOSFET -- Effect of Noise and Temperature on the Performance of Ferro-Tunnel FET -- An Introduction of Organic Photovoltaic Application from Material and Fabrication Perspective -- Recent Development and Future Prospects of Rigid and Flexible Dye-Sensitized Solar Cell: A Review -- Theory of Nanostructured Kesterite Solar Cell -- Nano-Material based Sensitized Solar Cells -- Lateral Straggle Parameter and its Impact on Hetero-stacked Source Tunnel FET -- Fabrication of ZnO and ZnO-heterostructures for Gas Sensing Applications -- Significance of Optimal Positioning of the Reference Electrode for an ISFET.
Sommario/riassunto	This book covers evolution, concept and applications of modern semiconductor devices such as tunnel field effect transistors (TFETs), vertical super-thin body MOSFETs, ion sensing FETs (ISFETs), non-conventional solar cells, opto-electro mechanical devices and thin film transistors (TFTs). Comprising of theory, experimentation and

applications of devices, the chapters describe state-of-art methods and techniques which shall be highly assistive in having an overall perspective on emerging technologies and working on a research area. The book is aimed at the scholars, enthusiasts and researchers who are currently working on devices in the contemporary era of semiconductor devices. Additionally, the chapters are lucid and descriptive and carry the potential of serving as a reference book for scholars in their undergraduate studies, who are looking ahead for a prospective career in semiconductor devices.