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Nota di contenuto	1. CMOS scaling -- 2. Quantum tunneling -- 3. Basics of tunnel field-effect transistor -- 4. Boosting ON-current in tunnel field-effect transistor -- 5. III-V tunnel field effect transistor -- 6. Carbon-based tunnel field-effect transistor -- 7. Nanowire tunnel field-effect transistor -- 8. Models for tunnel field-effect transistor -- 9. Applications of tunnel field-effect transistor -- 10. Future perspective.
Sommario/riassunto	During the last decade, there has been a great deal of interest in TFETs. To the best authors' knowledge, no book on TFETs currently exists. The proposed book provides readers with fundamental understanding of the TFETs. It explains the interesting characteristics of the TFETs, pointing to their strengths and weaknesses, and describes the novel techniques that can be employed to overcome these weaknesses and improve their characteristics. Different tradeoffs that can be made in designing TFETs have also been highlighted. Further, the book provides simulation example files of TFETs that could be run using a commercial

device simulator--