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| Autore                  | Sivasankaran K. <1977->                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Titolo                  | Multigate transistors for high frequency applications / / K. Sivasankaran and Partha Sharathi Mallick                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| Descrizione fisica      | 1 online resource (98 pages)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Collana                 | Springer Tracts in Electrical and Electronics Engineering, , 2731-4219                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Disciplina              | 780                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Soggetti                | Metal oxide semiconductor field-effect transistors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| Nota di bibliografia    | Includes bibliographical references.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Nota di contenuto       | 1. Introduction -- 2. Rf Transistor and Design Challenges -- 3. Radio Frequency Stability Performance of Dg Mosfet -- 4. Radio Frequency Stability Performance of Dg Tunnel Fet -- 5. Radio Frequency Stability Performance of Finfet -- 6. Radio Frequency Stability Performance Of Silicon Nanowire Transistor -- 7. References.                                                                                                                                                                                                                                                                                        |
| Sommario/riassunto      | This book discusses the evolution of multigate transistors, the design challenges of transistors for high-frequency applications, and the design and modeling of multigate transistors for high-frequency applications. The contents particularly focus on the cut-off frequency and maximum oscillation frequency of different multigate structures. RF stability modeling for multigate transistors is presented, which can help to understand the relation between the small-signal parameter and the physical parameter of the device for optimization. This is a useful reference to those in academia and industry. |