Double-gate (DG) MOSFET has emerged as one of the most promising architecture for scaling CMOS devices down to nanometer size as compared to the planar single-gate MOSFETs. In this work, the impact of channel engineering on double gate MOSFET has been investigated. Further, the comparison of double-gate MOSFETs with the graded channel double-gate MOSFETs has been done in terms of performance parameters such as I-V characteristics,
Performance Analysis of Graded Channel Double-Gate MOSFET in Nano-Regime using TCAD Simulation

electric field, electron current density, space charge density using TCAD Simulator.

References

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- ISE TCAD: Synopsys Sentaurus Device simulator.

Index Terms

Computer Science
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Keywords
Dg-mosfet  Mosfet Scaling  Very Large Scale Integration (vlsi)  Sces  Graded Channel (gc)