Abstract

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

References

- ISE TCAD: Synopsys Sentaurus Device simulator.

Index Terms

Computer Science

Circuit And Systems
Keywords
Dg-mosfet  Mosfet Scaling  Very Large Scale Integration (vlsi)  Scscs  Graded Channel (gc)