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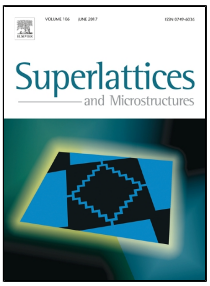

Investigation of Ge based Double Gate Dual Metal Tunnel FET Novel Architecture using Various Hetero dielectric Materials

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Highlights

- The incorporation of Germanium based Ge dual metal double gate TFET(DG-TFET) offers significant improvement in the drive current over Silicon based DGTFET .
- The proposed device gives a SS value of 34 mV/decade which makes the device suitable for low power applications.
- Increase in drive current is observed by increasing the source doping concentration.
- The enhancement of mobility and transconductance is achieved by using high-k dielectric material (HfO_2) in heterodielectric.