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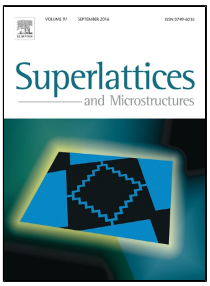


Analog/RF Performance of Source-side Only Dual-k Sidewall Spacer Trigate Junctionless Transistor with Parametric Variations

Gaurav Saini, Sudhanshu Choudhary

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# HIGHLIGHTS

1. Parametric variation study on proposed JLT device (Dual-kS JLT) shows that analog/RF figure of merits of Dual-kS JLT is least sensitive to the parametric variations such as fin-width, oxide thickness, and doping concentration. This study reveals that the proposed structure is more robust to the parametric variation compared with its conventional counterpart.
2. Dual-kS JLT device design guidelines based on aspect ratio of the device is also given in this paper for improved analog/RF performance metrics.