

Dr. N. VINODHKUMAR,

Assistant Professor/ECE,

Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology,

Chennai.

Mail ID: drnvinodhkumar@veltech.edu.in

Mob. No: +919486251374

Journal Publications:

1. Priscilla Scarlet, **N.Vinodhkumar** and Dr.R.Srinivasan, "Performance Enhancement of Junctionless Silicon Nanotube FET using Gate and Dielectric engineering", Journal of Computational Electronics (Springer) (Accepted).
2. **N.Vinodhkumar**, Dr.R.Srinivasan, "Effect of STI and DSL stress on SEU performance", IEEE Transactions on Devices and Materials Reliability (Under Revision).
3. **N.Vinodhkumar**, C.Raja and Satish Addanki "SEU Performance Enhancement in BPJLT Devices by Channel Doping and Film Thickness", International Journal of Innovative Technology and Exploring Engineering, Vol 8, No.12, 2019, pp.1857-1861.
4. **N.Vinodhkumar** and Dr.R.Srinivasan, "SET and SEU Performance of Single, Double, Triple and Quadruple-Gate JunctionlessFETs and SRAMs using Numerical Simulations", Microelectronics (Elsevier), Vol. 67, No. 10, September 2017, pp.38-42.
5. P. Maran, **N.Vinodhkumar**, R.Srinivasan and Premanand V. Chandramani, "Phase displacement study in MOSFET based ring VCOs due to heavy-ion irradiation using 3D-TCAD and circuit simulation", Microelectronics Reliability (Elsevier), Vol. 65, No. 10, October 2016, pp.27-34.
6. **N.Vinodhkumar** and Dr.R.Srinivasan, "Radiation performance of planar junctionless devices and junctionless SRAMs", Journal of Computational Electronics (Springer), Vol. 15, No. 1, March 2016, pp. 61-66.
7. **N.Vinodhkumar**, Y.V. Bhuvaneshwari, K.K.Nagarajan and Dr.R.Srinivasan, "Heavy-Ion Irradiation Study in SOI-based and Bulk-based Junctionless FinFETs Using 3D-TCAD Simulation", Microelectronics Reliability (Elsevier), Vol. 55, No. 12, December 2015, pp.2647-2653.
8. **N.Vinodhkumar** and Dr.R.Srinivasan, "Investigation of Independent-Gate Operation in Junctionless Devices", International Journal of Applied Engineering Research (IJAER), Vol 10, No.11, 2015, pp.27747-27755.
9. K.K.Nagarajan, **N.Vinodhkumar** and R.Srinivasan, "Optimization of Gate – Source/Drain Underlap on 30 nm Gate Length FinFET Based LNA Using TCAD Simulations", WSEAS Transactions on Circuits and Systems, Vol 11, No.11, November 2012, pp.361-370.

Conference Publications:

1. Kumar Harsh, Dr. Francois Bernot and **N.Vinodhkumar**, "Design and Development of Electronic Control Unit for BLDC Motors", International Conference on Recent Trends in Electronics, Computing and Communication Engineering (ICRTECC-19), Saveetha School of Engineering, Chennai, April 2019.
2. R. Bharath Kumar, Dr. Francois Bernot and **N.Vinodhkumar**, "Development of Metalanguage for Programming Small Embedded Systems", International Conference on

Recent Trends in Electronics, Computing and Communication Engineering (ICRTECC-19), Saveetha School of Engineering, Chennai, April 2019 (**Best Paper Award**).

3. **N.Vinodhkumar**, K.Srikanth, Dr.K.K.Nagarajan and Dr.R.Srinivasan, "SEU Study in Different Double Gate FinFET-Based 6T-SRAMs", National Conference on Research Challenges in VLSI Design and Embedded Systems for Wireless Communications (RCVEWC2016), SSN College of Engineering, Chennai, June 2016.
4. R. Jenifer, **N.Vinodhkumar** and Dr. R. Srinivasan, "Optimization of bulk planar junctionless transistor using workfunction, device layer thickness and channel doping concentration with OFF current constraint", 3rd International Conference on Innovations in Information Embedded and Communication Systems" (ICIIECS'16) Karpagam College of Engg., Coimbatore, India, April 2016.
5. D. Gracia, K.K.Nagarajan and **N.Vinodhkumar**, "TCAD Simulation Study of Bulk Planar Junctionless FET-based LC Oscillator", National Conference on Signal Processing, Communication and VLSI Design (NCSCV'15) Anna University, Coimbatore, India, April 2015.