## Dr. T. S. Arun Samuel M.E., Ph.D., MIE.,

Associate Professor

Department of Electronics and Communication Engineering
National Engineering College
Kovilpatti, Tamilnadu, India.

Mobile: +91-7502102107

Email: arunsamuelece@nec.edu.in

## List of publications

- 1. **Arun Samuel, TS,** Balamurugan, NB, Bhuvaneswari,S, Sharmila, D & Padmapriya, K 2013, 'Analytical modelling and simulation of single-gate SOI TFET for low-power applications', **International Journal of Electronics**, **Publisher: Taylor & Francis**, Vol. 101, No. 6, pp.779–788 (ISSN: 0020-7217 **Impact Factor: 0.737**).
- 2. **Arun Samuel, TS** & Balamurugan, NB, Sibitha,S, Saranya,R & Vanisri, D 2013, 'Analytical Modeling and Simulation of Dual Material Gate Tunnel Field Effect Transistors', **Journal of Electrical Engineering & Technology**, vol. 8, no. 6, pp. 1481-1486. (ISSN: 1975-0102 **Impact Factor: 0.579**).
- 3. **Arun Samuel, TS** & Balamurugan, NB 2013, 'An Analytical Modeling and Simulation of Dual Material Double Gate Tunnel Field Effect Transistor for Low Power Applications', **Journal of Electrical Engineering & Technology**, vol. 9, no. 1, pp. 247-253. (ISSN: 1975-0102, **Impact Factor: 0.579**)
- 4. **Arun Samuel, TS**, Balamurugan, NB 2014, Niranjana, T & Samyuktha, B 'Analytical Surface potential model with TCAD simulation verification for evaluation of Surrounding Gate TFET', **Journal of Electrical Engineering & Technology**, vol.9, no.2, pp. 655-661. (ISSN: 1975-0102, **Impact Factor: 0.579**)
- 5. **Arun Samuel, TS** & Balamurugan, NB 2014, 'Analytical Modeling and Simulation of Germanium Single Gate Silicon on Insulator TFET', **Journal of Semiconductors Publisher: IOP Science**, Vol.35, No.3, pp.034002-1-4 (ISSN: 1674-4926, **Impact Factor: 0.378**).
- 6. Arun Samuel T.S & Helen Ramya.J, 2015, 'Potential and electric field model for 18 nm Germanium based Dual Material Gate tunnel field effect transistor', International Journal of Applied Engineering Research, Publisher: Research India Publications, Vol.10, No.1, pp.253-257. (ISSN 0973-4562)
- 7. S.Rama Kalangiam and **T. S. Arun Samuel**, 2015, 'A QOS Based EQGOR Protocol for WSN and VANET, **International Journal of Applied Engineering Research**, **Publisher: Research India Publications**, Vol.10, No.55, pp.1762-1766. (ISSN 0973-4562)
- 8. Vanitha.P, Balamurugan.N.B, **ArunSamuel.T.S** 2015, "2-D Analytical Modeling and Simulation of Dual Material Surrounding Gate Tunnel FET (DMSGTFET) For Diminished SCES", **International Journal of Applied Engineering Research**,

- **Publisher: Research India Publications,** Vol.10, No.7, pp. 18551-18564. (ISSN 0973-4562).
- 9. **T.S.Arun Samuel** and M.Karthigai Pandian 2016, "Comparative Performance Analysis of Multi Gate Tunnel Field Effect Transistors", **Journal of Nano Research**, Vol. 41, pp 1-8). (ISSN: 1661-9897).
- T.S. Arun Samuel, N. Arumugam and A. Shenbagavalli 2016, "Drain Current Characteristics Of Silicon Nanowire Field Effect Transistor", ICTACT Journal On Microelectronics, Vol. 2, No.3, pp 284-287.
- 11. **T.S. Arun Samuel**, S. Darwin and N. Arumugam 2017, "Design of adiabatic logic based comparator for low power and high speed applications", **ICTACT Journal On Microelectronics**, Vol.3, No.1, 365-369.
- 12. R. Anand, **T.S. Arun Samuel** and P. Melba Mary 2017, "Improved dynamic response of isolated full bridge DC to DC converter using BATA optimization tuned fuzzy sliding mode controller for solar applications", **International Journal of Hydrogen Energy-Elsevier** Vol. 42, pp. 21648 -21658.
- 13. G. Rajakumar, A. Andrew Roobert, **T. S. Arun Samuel** & D. Gracia Nirmala, 2017 "Low power VLSI architecture design of BMC, BPSC and PC scheme" **Analog Integrated Circuits and Signal Processing-Springer,** Vol.93, pp.169-178.
- 14. **T.S.Arun Samuel**, N. Arumugam and S.Theodore Chandra 2017 "Analytical Approach and Simulation of GaN Single Gate TFET and Gate All around TFET", **ECTI transactions on electrical eng., electronics, and communications**, Vol.15, No.02, pp. 1-7. (ISSN: 1685-9545).
- 15. G. Rajakumar, T.Ananth Kumar and **T.S. Arun Samuel**, 2018 "IOT Based Milk Monitoring System For Detection Of Milk Adulteration", International Journal of Pure and Applied Mathematics, Vol.118, No.9, pp.21-32.
- 16. R. Solomon Roach, N.Nirmal Singh and **T. S. Arun Samuel**, 2018 "Resource Minimization and Power Reduction of ESPFFIR Filter Using Unified Adder/Subtractor", **Analog Integrated Circuits and Signal Processing-Springer**, (published online), (ISSN: 0925-1030, **Impact Factor: 0.8**).
- 17. **T. S. Arun Samuel** and S. Komalavalli, 2018, Mathematical Modeling and TCAD Simulation of TMQG Tunnel Field Effect Transistors for Low Power Applications, **Journal of Nano Research**, **Vol.54**, **pp.146-157**, **Aug 2018**. (ISSN: 1661-9897, **Impact Factor: 0.8**).

**Supervisor** (Signature with Name, date and Seal)

HOD/ Director of the Centre of the Supervisor (Signature with Name, date and Seal)