

**Dr. S. BALAMURUGAN**

Associate Professor,  
School of Electrical Engineering  
VIT University, Vellore

**Journal Publications:**

1. Ajith, A., Kumar, C.S., Marimuthu, R. and **Balamurugan, S.**, 2020. Design and analysis of majority logic-based multipliers in perpendicular nanomagnetic logic. International Journal of Materials and Product Technology, 60(1), pp.40-57. Scopus and Thomson ISI Indexed
2. Bairabathina, S. and **Balamurugan, S.**, 2020. Review on non-isolated multi-input step-up converters for grid-independent hybrid electric vehicles. International Journal of Hydrogen Energy, 45(41), pp. 21687-21713 Scopus and Thomson ISI Indexed
3. **Balamurugan S**, Aman Bhattad, Vishnu R and Marimuthu R (2019). RFID BASED SMALL TRANSACTION SYSTEM. ARPN Journal of Engineering and Applied Sciences, 14(4), 869-871. Scopus Indexed.
4. R. Marimuthu, **S. Balamurugan** and P.S. Mallick., 2018. Design of 5-3 multicolumn compressor for high performance multiplier. Int. J. Computer Aided Engineering and Technology, Vol. 10, No. 5, 2018. Scopus Indexed.( DOI: 10.1504/IJCAET.2018.10013716)
5. Bhardwaj, P., Uma Sathyakam, P., Marimuthu, M., **Balamurugan, S.** Performance analysis of NAND and NOR logic using 14nm technology node (2018) International Journal of Pure and Applied Mathematics, 118 (18 Special Issue E), pp. 4053-4059. Scopus Indexed.
6. Marimuthu, R., Hardik Bansal, Shubhi Mathur and **Balamurugan, S.**, 2018. Smart Ambulance Services. Research Journal of Pharmacy and Technology, 11(1), pp.27-30. Scopus Indexed.( DOI No: 10.5958/0974-360X.2018.00005.7 ))
7. **Balamurugan, S.**, Ayub, S. and Marimuthu, R., 2017. Design of Smart Medicine Dispenser System. Research Journal of Pharmacy and Technology, 10(8), pp.2507-2509. Scopus Indexed.( DOI No: 10.5958/0974-360X.2017.00443.7)

8. R. Marimuthu, **S. Balamurugan**, H. Patel Darshit and S. Sivanantham, 2017. Voice Controlled Energy Management System. Asian Journal of Applied Sciences, 10: 25-31. Scopus Indexed.( DOI: 10.3923/ajaps.2017.25.31 )
9. **Balamurugan. S**, P. S. Mallick(2017). Error Compensation Techniques for Fixed-Width Array multiplier Design- A Technical Survey. Journal of Circuits, Systems and Computers, Vol. 26 (3), 1730003. Scopus and Thomson Indexed.( <https://doi.org/10.1142/S0218126617300033>)
10. Marimuthu, R., Singh, A.K., **Balamurugan, S.** and Aroul, K.(2016). HOME AUTOMATION USING BLUETOOTH-A REVIEW. ARPN Journal of Engineering and Applied Sciences, 11(21), 12864-12870. Scopus Indexed.
11. Gupta, R.K., **Balamurugan, S.**, Aroul, K. and Marimuthu, R.(2016). IoT Based Door Entry System. Indian Journal of Science and Technology, 9(37). Scopus Indexed(DOI: 10.17485/ijst/2016/v9i37/102136)
12. Singh, A. K., **Balamurugan, S.**, Aroul, K., & Marimuthu, R. (2016). Design of Universal Module for Personal Security. Indian Journal of Science and Technology, 9(30). Scopus Indexed (DOI: 10.17485/ijst/2016/v9i30/99031)
13. Sourav, S., **Balamurugan, S.**, Marimuthu, R., Ramasamy, S., & Bagubali, A. (2015). Acoustic guitar tuner and identification of chords using LabVIEW. Global Journal of Pure and Applied Mathematics, 11(3), 1171-1178. Retrieved from [www.scopus.com](http://www.scopus.com). Scopus Indexed
14. **S. Balamurugan**, R. Kumar and R. Marimuthu, Design of low power reduced delay fixed-width modified booth multiplier, Global Journal of Pure and Applied Mathematics, 11 (2015) 1647-1653. Scopus Indexed
15. **Balamurugan, S.**, P.S. Mallick, (2015). Fixed-width multiplier circuits using column bypassing and decomposition logic techniques. International Journal on Electrical Engineering and Informatics, 7 (4), pp. 655-664.- Scopus Indexed(DOI: 10.15676/ijeii.2015.7.4.9)
16. Hariprasad, R., Ganesh, R., Ravi, S., Marimuthu, R., & **Balamurugan, S.** (2015). Comparative analysis of 4-bit and 8-bit reversible barrel shifter designs using revkit. ARPN Journal of Engineering and Applied Sciences, 10(11), 4826-4831. Retrieved from [www.scopus.com](http://www.scopus.com)– Scopus Indexed

17. Biswal, A., Marimuthu, R., **Balamurugan, S.**, & Ravi, S. (2015). Design of sensor network for real time data acquisition of water level in the agricultural field. ARPN Journal of Engineering and Applied Sciences, 10 (8), pp. 3391-3396. – Scopus Indexed
18. Sai Vignesh, K., **Balamurugan, S.**, Marimuthu, R. High speed application specific integrated circuit (ASIC) design of convolution and related functions using vedic multiplier (2015) ARPN Journal of Engineering and Applied Sciences, 10 (1), pp. 202-206. – Scopus Indexed