

**Dr. P. SIVAKUMAR, Professor /ECE**

**Publications:**

1. Sivakumar Pothiraj, and Radeep Krishna Radhakrishnan Nair “2CTS-3D IC: An Efficient Placement Aware Partitioning and Clock Tree Synthesis in 3D-integrated Circuits” Applied Science and Engineering Progress, Vol. 13, No. 4, pp. 377–393, 2020.
2. Jeya Prakash, K., & Sivakumar, P. (2020)., “Memetic algorithm based on hill climbing algorithm for IC partitioning” 3C Tecnología. Glosas de innovación aplicadas a la pyme. Edición Especial, Marzo 2020, 181-193. <http://doi.org/10.17993/3ctecno.2020.specialissue4.181-193>
3. Karthy Gopalan, Sivakumar Pothiraj “A saboteur and mutant based built-in self-test and counting threshold-based built-in self repairing mechanism for memories”, Journal of Ambient Intelligence and Humanized Computing, 2020. <https://doi.org/10.1007/s12652-020-02284-5>.
4. Sivakumar Pothiraj, and Radeep Krishna Radhakrishnan Nair “A Novel Power Aware Placement and Adaptive Radix Tree based Clock Tree Synthesis for 3D-Integrated Circuits” Journal of Microprocessors and Microsystems.(Accepted)
5. Velmurugan Subbiah Parvathy, Sivakumar Pothiraj and Jenyfal Sampson, “A Novel Approach in Multimodality Medical Image Fusion Using Optimal Shearlet and Deep Learning” International Journal of Imaging system and technology, Vol. 30, issue 4, pp. 847-859. 2020.
6. Karthy, G., & Sivakumar, P. (2020). Design of Modified March-C Algorithm and Built-in self-test architecture for Memories. 3C Tecnología. Glosas de innovación aplicadas a la pyme. Edición Especial, Marzo 2020, 219-229. <http://doi.org/10.17993/3ctecno.2020.specialissue4.219-229>
7. Velmurugan Subbiah Parvathy, Sivakumar Pothiraj, Jenyfal Sampson, “Optimal Deep Neural Network model based multimodality fused medical image classification” Physical Communication 41, 2020. <https://doi.org/10.1016/j.phycom.2020.101119>.
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9. P. Sivakumar, K. Pandiaraj, K. JeyaPrakash, “Optimization of thermal aware multilevel routing for 3D IC” Journal of Analog Integrated Circuits and Signal Processing, 2019. DOI 10.1007/s10470-019-01513-y
10. R. Rajalakshmi, S. M. Ramesh, and P. Sivakumar, “Slew and Skew Analysis for Low Power Clock Tree Synthesis Using Clock Distribution Networks” Sensor Letters, Vol. 17, pp. 1 -13, 2019.
11. Parvathy, V.S., Pothiraj, S. , “Multi-modality medical image fusion using hybridization of binary crow search optimization” . Health Care Manag Sci, 2019. <https://doi.org/10.1007/s10729-019-09492-2>.
12. Subbiah Parvathy Velmurugan, Pothiraj Sivakumar and Murugan Pallikonda Rajasekaran, “Multimodality image fusion using centre-based genetic algorithm and fuzzy logic” , Int. J. Biomedical

Engineering and Technology, Vol. 28, No. 4 pp.328-348. 2018.  
<https://dx.doi.org/10.1504/IJBET.2018.095982>

13. Baskar V, Aarthi N, Jeya Prakash K, Manikandan P, Sivakumar P , “Smart Glass for Visually Challenged Person’s” International Journal of Innovative Research in Management, Engineering and Technology, Vol. 3, Issue 3, March 2018. ISSN (Online): 2456-0448

14. S.P Velmurugan, P. Sivakumar, M. Pallikonda Rajasekaran, “Classification of Brain Tumor using Multimodal Fused Images and PNN” International Journal of Pure and Applied Mathematics, Vol. 115, No.6, pp. 447-457, 2017.

15. Mr. P. Manikandan , Dr. P. Sivakumar “Investigation and Design of a Novel Multiband Fractal Antenna for ISM and Wireless Communication” International Journal of Advanced Information Science and Technology (IJAIST) ISSN: 2319:2682, Vol.4, No.5, pp. 356-361. May 2015 DOI:10.15693/ijaist/2015.v4i2.

16. Rishika S, M Alagirisamy, Jenyfal Sampson, Dr P Sivakumar, “Design of patch antenna of frequency 2.483GHz for Medical Applications” International Journal of Pure and Applied Mathematics, Volume 118 No. 24 2018.