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## **INTERNATIONAL JOURNALS:**

- 1. **S. Moorthi** and D. Sairam, "Real time embedded system development for missile angular position acquisition through image processing", **CSI Transactions on Information and Communication Technology, Springer**, Vol. 08, No. 2, June 2020.
- 2. Ganeshmoorthy J., Sumit Manual, **S. Moorthi**, P. Raja, "Performance analysis of solar PV based DC optimizer distributed system with simplified MPPT method", **SN applied Sciences, Springer**, January 2020.
- 3. R. Ramya and S. Moorthi, "Frequency response masking based FIR filter using approximate multiplier for bio-medical applications", Sadhana Academy Proceedings in Engineering Sciences, Springer, Vol. 44, No.11, November 2019.
- S. Aditya and S. Moorthi, "A wide tunable fast settling 4-bit Digitally Controlled Oscillator for reconfigurable multi-band RF applications", Microelectronics Journal, Elsevier, Vol. 92, October 2019.
- A. Dheepanchakkravarthy, M. R. Jawahar, K. Venkatraman, M. P. Selvan and S. Moorthi, "Performance Evaluation of FPGA Based Predictive Current Controller for Four-leg DSTATCOM in Electric Distribution System", IET Generation, Transmission and Distribution, Vol.13, No.19, October 2019.
- 6. S. Aditya and **S. Moorthi**, "Digitally tunable active inductor for RF-DCO applications", **International Journal of Electronics Letters, Taylor and Francis** (https://doi.org/10.1080/21681724.2019.1625966), June 2019.
- 7. R. Ramya and S. Moorthi, "Performance Evaluation of Wordlength Reduction Based Area and Power Efficient Approximate Multiplier for Mobile Multimedia Applications", Circuits, Systems, and Signal Processing, Springer, 38, 5699–5716, May 2019.
- 8. A. Dheepanchakkravarthy, M. P. Selvan and S. Moorthi, "Alleviation of Power Quality Issues Caused by Electric Arc Furnace Load in Power Distribution System using 3-Phase Four-Leg DSTATCOM", Journal of The Institution of Engineers (India) Series B, Springer, Vol. 100, No.1, pp. 09-22, February 2019.
- 9. R. Ramya and **S. Moorthi**, "Modeling and Simulation of Frequency Response Masking FIR Filter Bank using Approximate Multiplier for Hearing Aid Application", **Advances in System Science and Applications**, an International Journal, Vol. 18, No.4, pp. 74 91, December 2018.
- 10. Nikhil K.A., P. Bharat Chandra, M.R. Jawahar, **S. Moorthi**, M.P. Selvan and N. Kumaresan, "FPGA-based closed-loop monitoring and control of doubly fed induction generator with single inverter and battery for wind energy conversion", **Australian Journal of Electrical and Electronics Engineering, Taylor and Francis**, Vol. 15, No. 4, pp. 175-183, December 2018.
- 11. A. Dheepanchakkravarthy, K. Venkatraman, M. P. Selvan and **S. Moorthi,** "Performance analysis of FPGA controlled four-leg DSTATCOM for multifarious load compensation in electric distribution system", **Engineering Science and Technology, an International Journal, Elsevier,** Vol. 21, No. 4, pp. 692 703, Aug. 2018.
- 12. R. Ramya, **S. Moorthi,** "Review of recent trends in Coarse Grain Reconfigurable Architectures for signal processing applications", **Advances in System Science and Applications, an International Journal**, Vol. 18, No.1, pp. 41 58, May 2018.
- 13. A. Dheepanchakkravarthy, K. Venkatraman, M. P. Selvan, **S. Moorthi** and M. Venkata Kirthiga, "Capability evaluation of four-leg DSTATCOM for compensating multifarious loads", **Australian Journal of Electrical and Electronics Engineering**, Pages 229-243, https://doi.org/10.1080/1448837X.2017. 1407015
- 14. Venkatraman, K., Selvan, M.P., **Moorthi, S.**, Raja, P. and Deepa Kurup, "Predictive Current Control of DSTATCOM for VAR Compensation of Grid Connected Wind Farms", **Journal of Renewable and Sustainable Energy**, March 2017, **SCI Indexed**, ISSN: 1941-7012.
- Venkatraman, K., Moorthi, S., Selvan, M.P. and Raja, P., "A Comprehensive Embedded Solution for Data Acquisition and Communication using FPGA", Journal of Applied Research and Technology, Elsevier, Vol. 15, No. 1, February 2017, pp.45-53, SCImago Indexed ISSN: 1665-6423.

- 16. Venkatraman, K., **Moorthi, S.** and Selvan, M.P., "Modelling and Control of Transformer-less Universal Power Quality Conditioner (TUnPQC): An Effective Solution for Power Quality Enhancement in Distribution System", **Journal of Control, Automation and Electrical Systems, Springer**, 2016 In Press, **SCImago Indexed** ISSN: 2195-3899
- 17. Venkatraman, K., Dastagiri Reddy, B., Selvan, M.P., **Moorthi, S.**, Kumaresan, N. and Ammasaigounden, N., "Online Condition Monitoring and Power Management System for Standalone Micro-grid using FPGAs", **IET Generation, Transmission and Distribution**, 2016, In Press, **SCI Indexed** ISSN: 1751-8687
- 18. Venkatraman, K., Selvan, M.P. and **Moorthi, S.**, "Predictive Current Control of Distribution Static Compensator for Load Compensation in Distribution System", **IET Generation, Transmission and Distribution**, Vol.10, No. 10, October 2016, pp. 2410-2423, **SCI Indexed** ISSN: 1751-8687
- 19. Venkatraman, K., **Moorthi, S.**, Selvan, M.P., Raja, P. and Deepa Kurup, "Performance Evaluation of FPGA-Controlled DSTATCOM for Load Compensation", **Arabian Journal of Science and Engineering**, Vol. 41, No. 9, September 2016, pp.3355-3367, **SCI Indexed** ISSN: 2191-4281

## **CONFERENCE PUBLICATIONS**

- 1. Jawahar, M.R., Ajay Kumar, V., **Moorthi, S.** and Selvan, M.P., "FPGA based SHEPWM Switching Scheme for Single Phase Cascaded H-Bridge Multi-Level Inverter", IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems(ICPEICES-2016), 4-6 July 2016, Delhi Technological University, Delhi INDIA, pp.3257-3261.
- 2. S.P. Jayasri, N. Vyshnavi, **S. Moorthi**, "Wireless monitoring, control and automation in pulp and paper industry", IEEE- INDICON 2017, IIT Roorkee, INDIA, December 15 17, 2017.
- 3. P. Dinesh, K. Kumar Teja, Shashank Singh, Selvan MP, **S. Moorthi**, "FPGA Based SoC Estimator and Constant Current Charging/Discharging Controller for Lead-Acid Battery", IEEE- INDICON 2018, INDIA, December 2018.
- 4. Devansh Sharma, Sarika Sharma, Shreya Paul, Deepak Rawat, **S Moorthi**, "Design of photo-voltaic source fed efficient corridor lighting system in Green buildings", 2020 3rd IEEE International Conference on Emerging Technologies in Computer Engineering: Machine Learning and Internet of Things (ICETCE), Jaipur, India, February 2020.
- 5. Pydimarri Manoj Kumar, Timmaraju Ganesh Sai Kumar, R. Aravindhan, D. Sairam, **S. Moorthi,** "Design and Development of an Embedded Framework to test Soil for Urban Terrace Farming", 2020 3rd IEEE International Conference on Emerging Technologies in Computer Engineering: Machine Learning and Internet of Things (ICETCE), Jaipur, India, February 2020.