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Papers Published in Journals

1. **Kamala, J.** and Umamaheswari, B, " IEEE 1451.0-2007 compatible smart sensor readout with error compensation using FPGA", International Journal of Sensors and Transducers, published by International Frequency Sensor Association Publis. Vol. 102, Issue 3, pp. 10-21 (2009).
2. **Kamala, J.** and Umamaheswari, B, "IEEE 1451.0 standard based smart readout for multi-rate control of system", Sensors and Actuators: A Physical Journal, published by Elsevier Publishers. Vol.154, pp. 169-174 (2009).
3. Vignesh Kumar, R. and **Kamala J.**, "High Accuracy Fixed Width Multipliers Using Modified Booth Algorithm", Procedia Engineering, published by Elsevier Publishers. Vol. 38, pp. 2491 - 2498 (2012).
4. **Kamala, J** and Umamaheswari, B, "Application Specific Integrated Transducer Interface Module - Control Architecture for DC-DC Converters", International Journal of Electrical, Electronics and Computer Engineering, Vol. 1, Issue 2, pp. 1-5 (2012).
5. Krishna K.R. and **Kamala. J.**, "Design Of Grid-Connected Photovoltaic Inverter Digital Control Module", International Journal of Innovative Research and Development, Vol. 2, Issue 5, pp. 69-87 (2013).
6. **Kamala. J** and Alex Joseph, "Solar Tracking for Maximum and Economic Energy Harvesting", International Journal of Engineering and Technology, Vol. 5, Issue 6, pp. 5030-5037 (2014).
7. **Kamala J.**, Janarthanan V, and Santhosh K, "Power MOSFET based Photo-Voltaic Battery Charger Analysis and Implementation", INTERNATIONAL JOURNAL OF CIRCUITS, SYSTEMS AND SIGNAL PROCESSING, published by -. Vol. 9, pp. 33-39 (2015).
8. **Kamala J** and Santhosh K, "Efficient Energy Management System for Solar Energy", AUTOMATIKA, Journal for Control, Measurements, Electronics, Computing and Communications, Vol. 56, Issue 3, pp. 292-302 (2015).
9. Ranjitha A and **Kamala J.**, "Design of Combinational Logic Circuits using Gate Diffusion Input (GDI) Techniques", Internatinal Journal of VLSI system, Design and Communication System, published by -. Vol. 4, Issue 3, pp. 214-217 (2016).
10. **Kamala J** and Umamaheswari B, " Reconfigurable smart controller and interface architecture for Photo-voltaic Energy Storage System", Computer Standards and Interfaces, published by Elsevier. Vol. 46, pp. 37-45 (2016).
11. Ranjani Aruna and **Kamala J.**, "Modified GDI based Time to Digital Converter", International Journal of Systems Applications, Engineering & Development, published by -. Vol. 11, pp. 216-219 (2017).
12. Kanthimathi, R., **Kamala, J.**, Jaibalaganesh, T. and Vasuhi, S, "Hardware design implementation issues of the estimator based controller using FPGA", International Journal of Electronics, published by Taylor and Francis. pp. 1-17 (2019).

13. **J. Kamala**, B. Umamaheswari, and T. Jaibalaganesh, "Efficient Digital System Management using IEEE 1451.0 Enabled Control Architecture", Defence Science Journal, published by DRDO. Vol. 69, Issue 3, pp. 254-258 (2019).
14. C. R. S. Hanuman, **J. Kamala** & A. R. Aruna, "Implementation of multi-precision floating point divider for high speed signal processing applications", The Journal of Supercomputing, published by Springer. Vol. 75, Issue 9, pp. 6038-6054 (2019).
15. C. R. S. Hanuman, **J. Kamala** & A. R. Aruna, "Implementation of high precision/low latency FP Divider using Urdhva-Tiryakbhyam Multiplier for SoC Applications", Design Automation for Embedded systems, published by Springer. pp. - (2019).
16. R Kanthimathi and **J Kamala**, "LYAPUNOV BASED OBSERVER DESIGN FOR FLYBACK CONVERTER", Journal of Electrical Engineering, published by Editura Politehnica. Vol. 19, Issue 4, pp. 1-11 (2019).
17. Kanthimathi Raman, **Kamala Jeyaraman**, Saad Mekhilef and Lincy Grace Alexande, "Design and stability analysis of interleaved flyback converter control using Lyapunov direct method with FPGA implementation", Electrical Engineering, published by Springer. pp.1-15(2020).

Papers Presented in Programmes

1. On National level Conference on Modern Aspects in Wireless Communication MASWIC – 2K4, India .
2. "Spread Spectrum in wireless LANs" presented in a National level conference on National Conference on Wireless Networks, India .
3. **J.Kamala** and B. Umamaheswari, "Smart readout for sensors using FPGA" presented in a National level conference on National Conference on Advances in Sensors for Aerospace Applications, Sensors, organised by DRDO, INDIA .
4. Umamaheswari, B and **Kamala, J**, "IEEE 1451.0 Enabled Control Architecture for DC-DC Converter System" presented in a International level conference on International Conference on Computer Applications and Industrial Electronics ICCAIE-2010, MALAYSIA from 05-Dec-2010 to 07-Dec-2010.
5. **KAMALA J**, "Economic and Backlash Tolerable Solar Tracking System" presented in a International level conference on International Multi-Conference on Automation, Computing, Communication, Control and Compressed Sensing (iMac4s), INDIA from 22-Mar-2013 to 23-Mar-2013.
6. Alex Joseph and **Kamala J**, "PV Array Characteristic Analysis Under Partial Shading & Modeling of P&O MPPT Applied Boost Convertor Using Matlab/Simulink" presented in a International level conference on International Conference on Energy Efficient Technologies for Sustainability , organised by St. Joseph College of Engg. Nagercoil , India from 10-Apr-2013 to 12-Apr-2013.
7. "PV Array Characteristics Analysis Under Partial Shading & Modeling of P&O MPPT Applied Boost Convertor Using Matlab/Simulink" presented in a International level conference on International Conference on Energy Efficient Technologies for Sustainability (ICEETS), INDIA from 10-Apr-2013 to 12-Apr-2013.

8. Umamaheswari, B and **Kamala, J**, "Transducer Interface Module for Smart Control of DC/DC Converter System" presented in a International level conference on World Congress on Engineering and Computer , San Francisco, USA from 24-Oct-2013 to 25-Oct-2013.
9. **Kamala J**, Janarthanan V, and Santhosh K, "Performance Measure of Switching Device (MOSFET) in Photo-voltaic System" presented in a International level conference on International Conference on Circuits, Systems, Communications and Computers (CSCC 2014), organised by Technical University of Sofia, Bulgaria , Santorini Island, Greece from 17-Jul-2014 to 21-Jul-2014.
10. Sivapalanirajan M, **Kamala J** , Umamaheswari B, "Power System Design and Parameter Monitoring for 2U Cubesat" presented in a International level conference on International Conference on Science Engineering and Management Research, India from 27-Nov-2014 to 29-Nov-2014.
11. **Kamala J** and Tamilarasi A, "Characterization of PV Cells with Varying Weather Parameters to Achieve Maximum Power" presented in a International level conference on IEEE 2nd International Conference on Electronics and Communication Systems (ICECS),, India from 26-Feb-2015 to 27-Feb-2015.
12. **Kamala J** and Aishwarya K, "Centralized Architecture to improve the efficiency of PV street lighting system" presented in a International level conference on IEEE 2nd International Conference on Electronics and Communication Systems (ICECS),, India from 26-Feb-2015 to 27-Feb-2015.
13. **Kamala J** and Ashvini JV, "Stability Analysis of Boost Converter Connected to a Photovoltaic Source" presented in a International level conference on IEEE 2nd International Conference on Electronics and Communication Systems (ICECS),, India from 26-Feb-2015 to 27-Feb-2015.
14. "FPGA Implementation of MPPT Based Controller for Multi-level Converter" presented in a International level conference on 2nd International Conference on Next Generation Computing and Communication Technologies 2015, organised by Zelus International, Dubai, UAE from 22-Apr-2015 to 23-Apr-2015.
15. "Analysis of different Flyback Converter Topologies" presented in a International level conference on International Conference on Industrial Instrumentation and Control (ICIC), organised by Col/lege o/Engineering Pune, India from 28-May-2015 to 30-May-2015.
16. "Analysis and Simulation of Flying Capacitor Multilevel Inverter Using PDPWM Strategy" presented in a International level conference on IEEE International Conference on Innovative Mechanisms for Industry Applications (ICIMIA 2017), organised by -, India from 21-Feb-2016 to 23-Feb-2017.
17. **Kamala J** and Jaibalaganesh T, "Modeling of Crystalline a Study the Performance Against Temperature a Shading Effect" presented in a International level conference on International Conference on Contemporary Topics in Power Engineering and Aiding Technologies (ICCPEAT 2017), India from 24-Feb-2017 to 25-Feb-2017.
18. C R S Hanuman and **Kamala J**, "Implementation of High Performance Floating Point Divider using Pipelined Architecture on FPGA" presented in a International level conference on 6th international conference on FICTA, organised by Kalinga Institute of Industrial Technology, Buvaneshwar, India from 14-Oct-2017 to 15-Oct-2017.

19. **Kamala J**, Jaibalaganesh T, Vasuhi S and Kathimathi R, "Smart Control of Photo-Voltaic System with Priority based load scheduling" presented in a International level conference on International Conference on Innovative Engineering Technologies (ICIET 2018), organised by International Institute of Engineers & Researchers, India from 09-Jul-2018 to 10-Jul-2018.
20. "Hardware Implementation of 24-bit Vedic Multiplier in 32-bit Floating-Point Divider" presented in a International level conference on International Conference on Electrical, Electronics and System Engineering (ICEESE), organised by University Tecnology Mara, Kualampur, Malaysia from 08-Nov-2018 to 09-Nov-2018.