Dr.P.Damodharan Assistant Professor, Electronics and Communication Engineering, Indian Institute of Information Technology, Kanchipuram-600127 9444467897 damodharan@iiitdm.ac.in

Area of Specilization: Permanent Magnet Brushless DC and AC Drives

## **Journal Publications**

- R. Adeline Mellita, D.S. Chandu, S.S. Karthikeyan, and P. Damodharan, "A Miniaturized Wideband Frequency Selective Surface with Interconnected Cell Structure", AEU International Journal of Electronics and Communications, Elsevier Publication, Vol. 120, June 2020.
- Rajin M. Linus and P. Damodharan, "Maximum Power Point Tracking Method using a Modified Perturb and Observe Algorithm for Grid Connected Wind Energy Conversion Systems", IET Renewable Power Generation, 9,6, 2015, 682-689.
- Rajin M. Linus and P. Damodharan, "Wind Velocity Sensorless Maximum Power Point Tracking Algorithm in Grid Connected Wind Energy Conversion System", Electric Power Components and Systems, 43, 15, 2015, 1761-1770.
- Siddharth K.B, K.S. Praveen, B. Raja, and P. Damodharan, "Measurement of Thermal Conductivity of Fluid using Single and Dual Wire Transient Techniques", Measurement, Vol. 46(8), 2746-2752, 2013.
- R. Karthik, N. Harish, B. Raja and P. Damodharan "Measurement of thermal conductivity of fluids using 3-omega method in a suspended micro wire", Journal of Engineering Thermophysics (Springer Publication), Vol. 21, No. 1, pp. 60-68, March 2012.
- R. Karthik, N.Harish, B.Raja and P.Damodharan "Thermal Conductivity of CuO-DI Water Nanofluids using 3-Omega Measurement Technique in a Suspended Micro-wire", Experimental Thermal and Fluid Sciences, 40, 2012, 1-9.
- P. Damodharan and Krishna Vasudevan "Sensorless Brushless DC Motor Drive Based on the Zero crossing Detection of Back-EMF from the Line Voltage Difference", IEEE Transactions on Energy Conversion., 25, 2010, 661-668.
- P. Damodharan and Krishna Vasudevan "Line Voltage Based Indirect Back-EMF Zero Crossing Detection of BLDC Motor for Sensorless Operation", International Journal of Power and Energy Systems, 28, 2008, 91-98.
- P. Damodharan, R. Sandeep and Krishna Vasudevan "Simple Position Sensorless Starting Method for Brushless DC Motor", IET Electric Power Applications, 2, 2008, 49-55.
- P. Damodharan and Krishna Vasudevan "Modeling and Simulation of BLDC Motor Drive System using SABER", IEEMA Journal, 65, 2004, 45-47.

## **Conference Publications**

- Adeline Mellita, S. S. Karthikeyan, and P. Damodharan "Additively Manufactured Conformal All-Dielectric Frequency Selective Surface" 50th European Microwave Conference (EuMW), Utrecht, The Netherlands, 10-15 Jan 2021. (Accepted for Oral Presentation)
- Adeline Mellita, S. S. Karthikeyan, and P. Damodharan "An Ultrathin Quad-band Microwave Absorber with Small Frequency Ratio" 49th European Microwave Conference (EuMW), Paris, France, 29 Sept. - 04 Oct. 2019.
- J. Vijay Prabhu, M. Ashok Kumar Bhupathi, P. Damodharan and Vijayakumar K., "Advanced Controllers for Quadratic Boost Converter A Case Study" 1st IEEE International Conference on Energy, Systems and Information Processing (ICESIP), IIITD&M Kancheepuram, Chennai, 4-6, July 2019.
- Vijaya Prabhu and P. Damodharan "Model Predictive Control of Quadratic Boost Converter for High Step-Up Applications" 8th IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES), IIT Madras, Chennai, 18-21, Dec. 2018.
- Rajin M. Linus and P. Damodharan, "Maximum Power Point Tracking of PMSG Based Grid Connected WECS using Quadrature Axis Current", 4th International Conference on Renewable Energy Research and Applications (ICRERA), Palermo, Italy, 22-25, Nov 2015.
- Rajin M. Linus and P. Damodharan, "Performance of Buck and PWM Rectifier in Permanent Magnet Synchronous Generator Based Wind Energy Conversion System", International Conference on Energy Efficient Technologies for Sustainability (ICEETS), April 2014.
- Rajin M. Linus and P. Damodharan, "Performance Analysis of Field Oriented Controlled Grid Side Inverter for Grid Synchronization of Wind Energy Conversion System Under Different Loaded Conditions", IEEE Region 10 Humanitarian Technology Conference (R10 HTC) 2014, August 2014.
- Rajin M. Linus and P. Damodharan "Maximum Power Point Tracking and Grid Feeding of Permanent Magnet Synchronous Generator Based Wind Energy Conversion System using Modified Hill Climb Searching Algorithm," 5th IEEE India International Conference on Power Electronics (IICPE), New Delhi, pp. 1-6, Dec 2012.
- P. Damodharan and Krishna Vasudevan "Indirect Back-EMF Zero Crossing Detection for Sensorless BLDC Motor Operation", 6th IEEE International Conference on Power Electronics and Drive Systems (PEDS), Kuala Lumpur, Malaysia, 2005.