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## JOURNAL PUBLICATIONS

List of publications (Conference and Journal)

- 1. T. Deepa and P. Lakshmi(2015), Optimization techniques applied to boiler turbine unit, Indian Journal of Science and technology, vol.8, no. 26,Oct. 2015 pp. 1-8.
- 2.T. Deepa, P. Lakshmi(2015), Performance analysis of bacteria foraging and biogeography based optimization techniques For a non-linear spherical tank process International Journal of Chemical Sciences, vol.13, no. 4, December 2015,pp 1551-1574.
- 3. T.Deepa(2015), Performance Comparison of Boost Converter by using Fuzzy Logic Controller Global Journal of Advanced research, Vol.02, No.3, pp.2394-5788, 2015.
- 4. Shalini Tahunguriya, A.Rakesh Kumar and T. Deepa, Multilevel Inverter with Reduced Number of Switches and Reduction of Harmonics, Middle-East Journal of Scientific Research, Vol. 24, Special Issue 37, August 2016, pp. 184-191.
- 5. T. Mariammal and T. Deepa, Performance Indices of Cuk Converter Implementing PI and PI-SMC Control, International Journal of Control Theory and applications, vol. 9, no. 2, pp. 363-372, 2016.
- 6. S. Vinayagavel and T. Deepa, Traverse Dyadic Wavelets in Stationary and Non Stationary Stray Flux Signatures for Power Quality Disturbances Analysis, International Journal of Control Theory and applications, vol. 9,no. 2, pp.479-489, 2016.
- 7. Sai Teja Karamsetty and Deepa T, Bridgeless Canonical Switching Cell Converter Fed BLDC Motor Drive, International Journal of Control Theory and applications, vol.9, no.2, pp. 429-440, 2016.
- 8. A. Rakesh Kumar and T. Deepa, A New Asymmetric Multilevel Inverter with Reduced Number of Switches and Reduction of Harmonics using Sine Property, 2016 International Conference on Circuit, Power and Computing Technologies [ICCPCT], pp.1-8, 2016.
- 9. Thangavelusamy Deepa, Ponnusamy Lakshmi, Durairaj Subbulekshmi, Control of an Ambiguous Real Time System Using Interval Type 2 Fuzzy Logic Control, International Journal of Applied Engineering Research, vol. 12, no. 21, pp. 11383–11391, 2017.

- 10. D. Subbulekshmi and T. Deepa, A Review Synthesis of Estimation and Implementation of Controllers in Future Challenges, Transylvanian Review, vol. 15, no. 22, pp. 5999-6005, 2017.
- 11. Deepa T, Lakshmi P and Balaji V, Intelligent Based Controllers for Multivariable Boiler Turbine Systems, International journal of chemical sciences, vol.15, no 2, pp.1-15, 2017.
- 12. G.S. Renjini and T.Deepa, Optimal LQR & Predictive Controller for Positive Output LUO Converter, Journal of Advanced Research in Dynamical & Control Systems, vol.10, no.5, pp. 20-30, June 2018.
- 13. T. Deepa and Krithiga S., A Wireless Controller for Electrical Equipment using IoT, International Journal of Mechanical Engineering and Technology, vol.9, no.6, pp. 430-436, June 2018.
- 14. T. Deepa and D. Subbulekshmi, Design and Implementation of 2 Term and 3 Term Controllers for Magnetic Levitation System, International Journal of Mechanical Engineering and Technology, vol.9, no.6, pp. 343-350, June 2018.
- 15. T. Deepa, S. Angalaeswari, V.Balaji, Turning of Pi Controller Parameters using Genetic Algorithm (Ga) for Quarter Car Applications , International Journal of Pure and Applied Mathematics, Vol. 120, no. 6, pp. 2007-2015, June 2018.
- 16. T. Mariammal, T.Deepa, Application of Hybrid optimization technique for tuning PI controller in LabVIEW, Journal of Electrical Engineering, 18 (2), pp. 455-463, 2018.
- 17. S. Angalaeswari, Deepa T, Sarthak Sahni, Abhishek Kumar, Sarvesh Ranjan, Ankit Shrivastav, Smart Safety Helmet, International Conference on Innovations and Discoveries in Science, Engineering and Technology, KCG College of Engineering, Chennai, 17-18th April 2018.
- 18. Deepa T and Angalaeswari S, Tuning of PI Controller Parameters using Genetic Algorithm (GA) for Quarter Car Applications, International Conference on Innovations and Discoveries in Science, Engineering and Technology, KCG College of Engineering, Chennai, 17-18th April 2018.
- 19. A Rakesh Kumar, T.Deepa, Multilevel Inverters: A Review of Recent Topologies and New Modulation Techniques, International Conference on Recent Trends in Electrical, Control and Communication (RTECC), pp.196-203, 2018.
- 20. T.Deepa, D. Subbulekshmi, S.Angalaeswari, Krithiga S. Single Tyre System Design and Implementation using Optimization based PI Controller, International Journal of Recent Technology and Engineering, 8 (25), 90-92, Aug. 2019.
- 21. Sujitha, N. Subudhi, P.S. Krithiga, S., Angalaeswari, S. Deepa, T. Subbulekshmi, D. Grid tied PV System using Modular Multilevel Inverter, International Journal of Power Electronics and Drive Systems, 10 (4), 2013-2020, Dec. 2019.
- 22. A. Rakesh Kumar, DeepaThangavelusamy, SanjeevikumarPadmanaban, and Dwarkadas P. Kothari, A modified PWM scheme to improve AC power quality for MLIS using PV source, Power and Energy Systems, International Journal of 39, 2019. 23. T. Kripalakshmi, T. Deepa, Research on Contact and Non-Contact Power Transfer Methods Discussed for Transport Applications, International Journal of Recent Technology and Engineering, 8 (1S4),pp.485-492, June 2019.
- 24 MariammalThirumeni, T. Deepa, Performance analysis of PI and SMC Controlled Zeta

- converter, International Journal of Recent Technology and Engineering, 8 (3), pp.8700-8706, September 2019.
- 25. A. Rakesh Kumar, DeepaThangavelusamy, A Modified Nearest Level Modulation Scheme for a Symmetric Cascaded H-Bridge Inverter, Gazi University Journal of Science, 32(2), pp. 471-481.
- 26. Kumar A Rakesh, DeepaThangavelusamy, A Modified Nearest level modulation scheme for symmetric and Asymmetric configurations of cascaded H- bridge Inverter, International Journal of Electrical Engineering Education, June 2019.
- 27. A. Rakesh Kumar and T. Deepa, Line frequency sine modulation: a novel modulation scheme for multilevel inverters and its application towards enhanced illumination of incandescent bulb, Int. J. Power Electronics, 10 (4), pp. 333-349, 2019.
- 28.P. S. Subudhi, A. R. Kumar, S. Krithiga, T. Deepa, S. Padmanaban and D. P. Kothari, Simulation Analysis of Selective Harmonics Elimination scheme for a Symmetric CHB-Multilevel inverter, 2019 Innovations in Power and Advanced Computing Technologies (i-PACT), Vellore, India, 2019.
- 29. A. R. Kumar, T. Deepa, S. Padmanaban and D. P. Kothari, A guide to Nearest Level Modulation and Selective Harmonics Elimination modulation scheme for multilevel inverters, 2019 Innovations in Power and Advanced Computing Technologies (i-PACT), Vellore, India, 2019.
- 30.A. R. Kumar, P. S. Subudhi, T. Deepa, S. Krithiga, S. Padmanaban and D. P. Kothari, Simulation Analysis of a Nearest Level Modulation Scheme for Cross-Connected Sources based MLI, 2019 Innovations in Power and Advanced Computing Technologies (i-PACT), Vellore, India, 22-23 March, 2019.
- 31. M. Thirumeni and D. Thangavelusamy, Design and analysis of hybrid PSO–GSA tuned PI and SMC controller for DC–DC Cuk converter, IET Circuits, Devices & Systems, 13 (3), pp. 374-384, May 2019.
- 32. D. Subbulekshmi, T. Deepa, Krithiga S., S. Angalaeswari, Execution of various types of controllers to fix the ball position of magnetic levitation system, International Journal on Emerging Technologies, 11(3), 809-815, June 2020.
- 33. K Eswaran, MSS Kumar, D Thangavelusamy, V Murugadoss, <u>Smart Servomotor for Robotics and its Cyber security</u>, 2020, IEEE internation conference on Advanced Computing and Communication Technologies for High Performance Applications.
- 34. T.Deepa, G S.Renjini, Evaluation of Time Response Analysis using Fuzzy PI Controller for Luo Converter, International journal of control theory and applications 9 (2), 771-780, 2016.

## **List of Patent**

Patent Title	Application No. / Patent No.	Name of the Patentee	Status (Published/	Year (Published/
	T decite 1 vo.	1 atentee	Filed)	Filed)
Optimal linear quadratic regulator	201741009116 A	Dr. T. Deepa & Ms. G.S. Renjini	Published	2017
for LUO converter		O.S. Kenjini		
Control of magnetic levitation system	201841004609 A	Dr. T.Deepa & Dr.D.Subbulekshmi	Published	2018
Stability control over	201941043432A	Dr. T.Deepa &	Published	2019
the DC servo motor		Dr.D.Subbulekshmi		