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Recent Publications (Last Five Years)

Journals

- (i) K. Ramash Kumar, S. Jeevananthan,” Design and Implementation of Reduced Order Sliding Mode Controller plus Proportional Double Integral Controller for Negative Output Elementary Super Lift Luo-Converter,” **IET Power Electronics**, pp.1-16, 2013.
- (ii) C. Bharatiraja, S. Jeevananthan, S.S.Dash, “A Vector Selection Approach Based on Control Degree of Freedom to Provide DC-Link Voltage Balancing in Diode Clamped Multilevel Inverter “,International Review of Electrical Engineering (IREE), February 2013 Vol. 8, No.1, Part A.
- (iii) C.Bharatiraja, S.Jeevananthan and S.S. Dash., “ Design And Validation Of Simple Space Vector PWM Scheme For Three-Level NPC– MLI With Investigation Of DC Link Imbalance Using FPGA -IP Core”, Journal of Electrical Engineering (JEE), **13(1)** , pp. 48-53, 2013.
- (iv) S. Thamizharasan, J. Baskaran, S. Ramkumar, S. Jeevananthan, “Cross-switched multilevel inverter using auxiliary reverse-connected voltage sources”, **IET Power Electronics**, vo.7,no.6, pp. 1519 – 1526, 2014.
- (v) Sangeetha.S, and S. Jeevananthan, “Resultant Theory and Jenkins-Traub Algorithm Based SHEPWM using Assimilated Software Environment for a Seven Level VSI.”, *Asian Power Electronic Journal*, vol. 8, no.1, pp.1-9, 2014.
- (vi) K.Ramash Kumar, S.Jeevananthan, S.Ramamurthy, “Improved Performance of the Positive Output Elementary Split Inductor-Type Boost Converter using Sliding Mode Controller plus Fuzzy Logic Controller”, *WSEAS Transactions on Systems and Control*, vol.9, pp.215-228, 2014.
- (vii) Shibu J.V.Bright, V.Suba, S.Ramkumar and S.Jeevananthan,” Investigation on Harmonic Spreading Effect of Conventional and Innovative Multi-Level Inverter Control Strategies”, *Applied Mechanics and Material Tsrans Tech Publications* Vol. 626 (2014) pp 141-149, Switzerland.

- (viii) R. Sridhar, S. Jeevananthan, S. S. Dash, and Kiran Vemula, "Investigation on a Modified 11-Level Cascaded Inverter Fed by Photovoltaic Array for Standalone Applications", **Journal of Solar Energy Engineering**, vol.137, no.2, pp.1-7, 2014.
- (ix) R. Sridhar, S. Jeevananthan, S. S. Dash and S.T. Michael, "Cost Effective Digital Signal Controller based Maximum Power Tracking Technique for Photovoltaic Power System", **International Journal of Control and Automation**, Vol.7, No.6, pp.389-400, 2014.
- (x) R. Sridhar, S. Jeevananthan, S. S. Dash and N. T. Selvan, "Unified MPPT Controller for Partially Shaded Panels in a Photovoltaic Array", *International Journal of Automation and Computing*, Vol.11, No.5, pp. 536-542, 2014.
- (xi) R. Sridhar, S. Jeevananthan, S. S. Dash and N. T. Selvan, "An Intelligent Differential Evolution based Maximum Power Point Tracking (MPPT) Technique for Partially Shaded Photo Voltaic (PV) Array", *Int. J. Advance. Soft Comput. Appl.*, Vol. 6, No.2, pp.1-16, 2014.
- (xii) C.Bharatiraja, S.Jeevananthan, and R.Latha, "FPGA based practical implementation of NPC-MLI with SVPWM for an autonomous operation PV system with capacitor balancing", *International Journal of Electrical Power and Energy Systems*, Vol.61, No., pp.489–509, 2014.
- (xiii) S.Sangeetha and S. Jeevananthan, "Neighbourhood Crossover Embroiled Binary GA Based SHEPWM for Seven Level MLI ", *AMSE JOURNALS –2014-Series: Advances D*; Vol. 19; N°1 ; pp 15-32.
- (xiv) V.Viswanathan and S.Jeevananthan, " A New Approach for Torque Ripple Reduction for Brushless DC Motor Based on Three-Level Neutral-Point-Clamped Inverter with DC-DC Converter", **IET Power Electronics**, vol.8, no.1, pp. 47 - 55, 2015.
- (xv) S. Thamizharasan, J. Baskaran, S. Ramkumar, S. Jeevananthan, "A Carrierless PWM Strategy for Multilevel Inverters", **IET Power Electronics**, vol.8, no.10, pp. 2034–2043, 2015.
- (xvi) V.Krishnakumar, V.Kamaraj, S.Jeevananthan, "Random Pulse Width Modulation Technique for Performance Improvement of Multilevel Inverter Brushless DC Motor Drive", *Australian Journal of Basic and Applied Sciences*, Vol.9, no.16, pp. 162-171, Special 2015.
- (xvii) V.Mohan, N.Stalin and S.Jeevananthan, "A Double Random Pulse Width Modulation Based on Discrete Carrier Frequencies and Random Pulse Position for Induction Motor Drives", *International Journal of Applied Engineering Research*, Vol.10, No.51, pp. 479-484, 2015.
- (xviii) Sridhar Ramasamy, Jeevananthan S, Dash S.S and Krishna Chaitanya, "A dodging algorithm to reconfigure photovoltaic array to negate partial shading effect", **Progress In Photovoltaics: Research and Applications**, 2015.
- (xix) S.Sangeetha and S. Jeevananthan, "Influence of crossover methods used by genetic algorithm-based heuristic to solve the selective harmonic equations (SHE) in multi-level voltage source inverter", **Sadhana- Springer (Journal of Indian Academy of Sciences)**, vol.40, no.8, pp. 2389-2410, 2015.

- (xx) C.Bharatiraja, S.Jeevananthan, R.Latha, and V.Mohan, A Vector Selection Approach Based Hexagonal Hysteresis - Space Vector Current Controller for a Three Phase Diode Clamped MLI with Capacitor Voltage Balancing, *IET Power Electronics*, Vol. 9, no.7, pp.1350-1361, 2016.
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- (xxiii) R. Sridhar, S. Jeevananthan, and Pradeep Vishnuram “Particle swarm optimisation maximum power-tracking approach based on irradiation and temperature measurements for a partially shaded photovoltaic system” *International Journal of Ambient energy* (Taylor and Francis Online), 2016.
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- (xxv) R.Sridhar, S.Jeevananthan, S.S.Dash, N.ThamizhSelvan, “Unified MPPT controller for partially shaded panels in a photovoltaic array”, *International Journal of Automation and Computing*, vol 11, issue 5, Pages 536-542, October 2014.
- (xxvi) R. Kalaivani, K. Ramash Kumar, S. Jeevananthan, “Implementation of VSBSMC plus PDIC for Fundamental Positive Output Super Lift-Luo Converter,” *Journal of Electrical Engineering*, Vol. 16, Edition: 4, 2016, pp. 243-258.
- (xxvii) R. Sridhar, S. Jeevananthan, S. S. Dash and PradeepVishnuram, “A new maximum power tracking in PV system during partially shaded conditions based on shuffled frog leap algorithm”, *Journal of Experimental & Theoretical Artificial Intelligence* Vol. 29, no.3, 2017 ((Taylor and Francis Online)).
- (xxviii) V. Viswanathan , and S.Jeevananthan," Commutation Torque Ripple Reduction in BLDC Motor Using Modified SEPIC Converter and Three-level NPC Inverter", *IEEE Transactions on Power Electronics*, Vol.33, no.1, pp.535-546, 2018.
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- (xxxii) K.Gayathri, and S. Jeevananthan, "Candid inquest on modeling methods of doubly fed induction generator, and corroboration through simulation study", *AMSE Journal on Modelling, Measurement and Control-A*, Vol.91, No.4, December, 2018.
- (xxxiii) P.Muthukumar, L.Padmasuresh, K.Eswaramoorthy, and S.Jeevananthan, "Critical Analysis of Random Frequency Inverted Sine Carrier PWM Fortification for Half Controlled Bipolar Three Phase Inverters", *Journal of Power Electronics*, 20, 479-491, <https://doi.org/10.1007/s43236-020-00034-6>, January 2020.
- (xxxiv) Rajan Palanisamy, Jeevananthan Seenithangam and Ranjith Palanisamy, "A Hybrid Output Multiport Converter for Standalone Loads and Photovoltaic Array Integration", *International Transactions on Electrical Energy Systems*, 2020;e12410. <https://doi.org/10.1002/2050-7038.12410>.

International Conferences

- (i) L.Ananda Padmanaban, N.Umadevi, V.Kamaraj, S.Jeevananthan, "A Simulation Study on Dimensional Dependency of Cogging Torque in Interior Rotor BLDC Motor", *Proceeding of IEEE International Conference on Research and Development prospects on Engineering and Technology (ICRDPET2013)*, March 29,30-2013, Vol. 2, pp.407-410, India.
- (ii) S.Viswam, T.Sreedhar and K.Udhayakumar, "A Selective Harmonic Elimination Technique for three-phase Multilevel Inverters Working with Unequal Voltage Sources", *Proceeding of IEEE International Conference on Research and Development prospects on Engineering and Technology (ICRDPET2013)*, March 29,30-2013 Vol. 2, pp. , India.
- (iii) V.Suba and S.Jeevananthan, "Investigation on Fundamental Fortification, Harmonic Distortion and Harmonic Spreading Effects of Modified Carrier and Reference Functions Based PWM Strategies in VSI Drives", *Proceedings of the IEEE Sponsored third International Conference on Computation of Power, Energy, Information and Communication (ICCPEIC'14)*, India, April 2014.
- (iv) Hithu Anand and S. Jeevananthan, "Comparative Study on Hard and Soft Switched POESLL Converters with Design Procedure", *Proceedings of the IEEE Sponsored third International Conference on Computation of Power, Energy, Information and Communication (ICCPEIC'14)*, India, April 2014.
- (v) Viswanathan, V., and S. Jeevananthan. "Torque ripple comparison of a two-level and a three-level inverter fed brushless DC motor drives at different switching frequency," *Proceedings of International IEEE Conference on Green Computing Communication and Electrical Engineering (ICGCCCE)*, pp. 1- 4, March, 2014, Coimbatore.

- (vi) Viswanathan, V., and S. Jeevananthan. " Novel space-vector current-control method for torque ripple reduction of brushless DC motor based on three-level neutral-point-clamped inverter," *Proceedings of International IEEE Conference on Green Computing Communication and Electrical Engineering (ICGCCEE)*, March, 2014, Coimbatore.
- (vii) Krishnakumar, V. ; Kamaraj, V. ; Jeevananthan, S. ,"Random pulse width modulation for performance improvement of brushless DC motor drive", *Proceedings of IEEE 2nd International Conference on Electrical Energy Systems (ICEES)*, pp.157 – 163, 2014 .
- (viii) S.Jeevananthan, D.Karthik, and S.Viswam, "Investigation on Input Power Factor in Power Conversion Systems and Influence of Topology", *Proceedings of International Conference on Futuristic Trend in Electronics Engineering (ICFTEE'15)*, Tamil nadu India.
- (ix) S.Sangeetha and S.Jeevananthan," An Effective Optimization Technique Using Flower Pollination Algorithm for SHEPWM in Seven Level VSI", *Proceedings of International Conference on Contemporary Topics in Power Engineering and Aiding Technologies (ICCPEAT'2017)*, 24th-25th, Paper ID: PEC076, February 2017, Puducherry, INDIA.
- (x) P.Rajan, S.Jeevananthan and P.Ranjith, "An Extensive Review on Evolution of Multiport DC-DC and DC-AC Converters", *Proceedings of International Conference on Contemporary Topics in Power Engineering and Aiding Technologies (ICCPEAT'2017)*, 24th-25th, Paper ID: PEC201, February 2017, Puducherry, INDIA.
- (xi) P Ajay-D-Vimal Raj, R.Sundaramurthy, S Jeevananthan and M.Sudhakaran," Luenberger Algorithm Based Harmonics Estimator for Front End Rectifier and PWM-VSI", *Proceedings of International Conference on Contemporary Topics in Power Engineering and Aiding Technologies (ICCPEAT'2017)*, 24th-25th, Paper ID: PEC069, February 2017, Puducherry, INDIA.
- (xii) K.Gayathri and S.Jeevananthan, "Performance Evaluation Of Switching Strategies Of Three To Three Phases Matrix Converter" *Proceedings of International Conference on Contemporary Topics in Power Engineering and Aiding Technologies (ICCPEAT'2017)*, 24th-25th, Paper ID: PEC001, February 2017, Puducherry, INDIA.
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