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### PUBLICATIONS – JOURNALS (42)

#### International Journals (42 nos.)

1. C.R.Balamurugan, S.P.Natarajan, M.Arumugam, **R.Bensraj**, “Hardware implementation and analysis of new symmetrical multilevel inverter”, International Journal of Information Science and Intelligent System, vol. 4, no.1, pp.21-34, 2015.
2. C.R.Balamurugan, S.P.Natarajan, M.Arumugam, **R.Bensraj**, “Simulation and Hardware Implementation of Various Variable Amplitude MCPWM Strategies of MLI Using dSPACE”, Research Journal of Modeling and Simulation, ISSN No. 2376-4309, vol.2, no.1, pp. 1-11, Jan 2015.
3. C.R.Balamurugan, S.P.Natarajan, **R.Bensraj**, “Control Techniques For Various Bipolar PWM Strategies of Three Phase Five Level Cascaded Inverter”, Journal of Engineering Science and Technology, ISSN No. 1823-4690, vol.10, no.7, July 2015.
4. C.R.Balamurugan, S.P.Natarajan, M.Arumugam, , **R.Bensraj**, “Advanced References and Carriers Based PWM in New Symmetrical Voltage Source Inverter”, Electrical and Electronics Engineering: An International Journal (ELELIJ), ISSN No. 2200 - 5846, Vol 4, No 1, pp. 97-113, Feb 2015.
5. C.R.Balamurugan, S.P.Natarajan, **R.Bensraj**, T.S.Anandhi “Research on Unipolar Inverted Sine Carrier PWM Strategies for Three Phase Five Level CMLI”, International Journal of Energy Science and Engineering, vol 1, no 1, pp. 1-12, March 2015.
6. C.R.Balamurugan, S.P.Natarajan, M.Arumugam, **R.Bensraj**, “Analysis of single phase symmetrical seven level inverter”, i-manager’s journal on electrical engineering, vol. 8, no.3, pp.10-15, Jan-March 2015.
7. C.R.Balamurugan, S.P.Natarajan, S.Shama, **R.Bensraj**, “Embedded and Digital Controller Based Multi-Level Inverter”, International Journal of Hybrid Information Technology, ISSN: 1738- 9968, vol. 8, no.3, pp.367-374, March 2015.
8. C.R. Balamurugan, S.P. Natarajan, M. Arumugam and **R. Bensraj**, “Analysis of A Single Phase Symmetrical Seven Level Inverter”, i-manager’s Journal on Electrical Engineering, 8(3) pp. 10-17, Jan-March 2015.
9. C.R.Balamurugan, S.P.Natarajan, **R.Bensraj**, “New Bipolar Hybrid Carrier PWM Strategies for Symmetrical Multi Level Inverter”, TELKOMIKA Indonesian Journal of Electrical Engineering, ISSN No. 2302-4046, vol. 14, no.2, pp. 228-240, May 2015.
10. C.R.Balamurugan, S.P.Natarajan, T.S.Anandhi, **R.Bensraj**, “Experimental Investigations of RPWM with SPWM Strategies of a Single Phase Cascaded Multilevel Inverter”, International Journal of Applied Engineering and Technology ISSN: 2277-212X, Vol. 5, No. 1, pp. 90-101, Jan-March 2015.
11. S.Shama, C.R.Balamurugan, S.P.Natarajan, **R.Bensraj**, ‘Performance Evaluation of Multilevel Inverter Using Embedded and Digital Control’, International Journal of Engineering Research and Technology, Special issue, pp. 738-744, May 2015
12. C.R.Balamurugan, S.P.Natarajan, **R.Bensraj**, T.S.Anandhi, “ Performance Evaluation On Unipolar PWM Strategies For Three Phase Diode Clamped Multilevel Inverter”,

- International Journal of Soft Computing, Mathematics and Control (IJSCMC), ISSN No. 2201-4160, vol. 4, no. 2, pp. 11-31, May 2015.
13. C.R.Balamurugan, S.P.Natarajan, T.S.Anandhi, **R.Bensraj**, “MATLAB Based Simulation and Hardware Implementation of Various Bipolar PWM Strategies Using dSPACE”, International Journal of Energy and Power Engineering Science, ISSN No. 2376-6360, vol. 2, no. 2, pp. 53-74, May 2015.
  14. P.Sureshpandiyarajan, S.P.Natarajan, C.R.Balamurugan, **R.Bensraj**, “Assessment of Single Phase Cascaded Multilevel Inverter using Equal and Unequal Amplitude carriers”, International Journal of Signal Processing, Image Processing and Pattern Recognition, ISSN No. 2005-4254, vol.8, no.5, pp. 9-22, May 2015.
  15. C.R.Balamurugan, S.Shama, S.P.Natarajan, V.Padmathilagam, **R.Bensraj**, “Control of Multilevel Inverter Using Embedded Controller and Flip Flops”, Research Journal of Modeling and Simulation, ISSN No. 2376-4309, vol.2, no.2, pp. 60-70, May 2015.
  16. C.R.Balamurugan, K.Meenakshi, S.P.Natarajan, **R.Bensraj**, ‘Investigations on New Three Phase Multilevel Inverter With Reduced Switches’, Journal of Electrical Engineering, Romania. ISSN No. 1582- 4594, Vol. 3, No. 6, pp. 1-8, 2015.
  17. C.R.Balamurugan, S.P.Natarajan, **R.Bensraj**, T.S.Anandhi, “Design of New Bipolar Variable Amplitude PWM Strategies for Three Phase Cascaded Multilevel Inverter”, Journal of Modeling, Simulation, Identification, and Control , Vol. 3 , No. 1, pp. 13-34, 2015.
  18. C.R.Balamurugan, S.P.Natarajan and **R.Bensraj** “Elucidation of Various PWM Techniques for a Modified Multilevel Inverter”, Indonesian Journal of Electrical Engineering and Computer Science, Vol. 1, No. 3, pp. 512-522, March 2016.
  19. C.R.Balamurugan, S.P.Natarajan and **R.Bensraj** “Analysis of a New Reduced Switch Nine Level Inverter ”,Indonesian Journal of Electrical Engineering and Computer Science, Vol. 1, No. 3, pp. 490-501, March 2016.
  20. C.R.Balamurugan, S.P.Natarajan and **R.Bensraj** “Prediction of a New Cascaded Hybrid Multilevel Inverter with Less Device Count”, Indonesian Journal of Electrical Engineering and Computer Science, Vol. 1, No. 2, pp.273-281, Feb. 2016.
  21. A.Charles and **R. Bensraj**, “Mobility and Bandwidth Aware QoS Routing Protocol for MANET” , Research Journal of Applied Sciences, Engineering and Technology 10(1): 48-55, 2015.
  22. S.Senthamil Selvan, **R.Bensraj**, K.Ramash Kumar and N.P.Subramaniam, “Design, Analysis, Simulation Study and Corroboration of Classical Controller for a Negative Output KY Boost Converter”, International Journal of Applied Engineering Research (IJAER) Vol.10, No.51, pp.485-494, 2015.
  23. S. Senthamil Selvan, **R. Bensraj** and N.P. Subramaniam, “Performance Analysis of Adaptive Neuro-Fuzzy Controller in Transient Modes of Positive Output KY Voltage Boosting Converter”, International Journal of Computer Technology and Applications. Vol.8, No.5, pp.2313-2326, 2015.
  24. Sudhakar, B. and **Bensraj, R**, “Sentiment Based Text to Speech Synthesis Using Forward Parsing With Prosody Feature For Tamil”, *International Journal of Emerging Technology and Advanced Engineering* , Vol. 05(02) , pp. 216-221, 2015.
  25. E. Gnanamanoharan and **R. Bensraj**, “Impact of Mobility Speed on Proactive and Reactive Routing Protocols in Mobile Adhoc Networks”, ARPN Journal of Engineering and Applied Sciences, Vol. 10, No. 8, May 2015 , ISSN 1819-6608 , pp.3468-3473.

26. C.R.Balamurugan, S.P.Natarajan and **R.Bensraj**, "Design of Embedded Controller for various Multilevel Inverter Topologies", *Asian Power Electronics Journal (APEJ)*, Vol.9, No.1, 2015, pp.28-35.
27. Shama, S., Balamurugan, C.R., Natarajan, S.P., **Bensraj, R.** A new symmetrical multilevel inverter using embedded and digital control (2015) *International Journal of Applied Engineering Research*, 10 (20), pp. 15526-15530.
28. Balamurugan, C.R., Meenakshi, K., Natarajan, S.P., **Bensraj, R.** Investigations on new three phase multilevel inverter with reduced switches (2015) *Journal of Electrical Engineering*, 15 (3), pp. 41-48.
29. B Sudhakar and **R Bensraj**, "Enhanced Evaluation of Sentiment Analysis for Tamil Text-to-Speech Synthesis using Hidden Semi- Markov Model", *Communications on Applied Electronics* 3(6):13-16, December 2015, ISSN 2394-4714.
30. S. Sentamil Selvan, K. Ramash Kumar and **R. Bensraj**, "Modeling, Simulation and Design of Variable Structure Based Sliding Mode Controller for KY-Voltage Boosting Converter", *WSEAS Transactions on Circuits and Systems*, Vol.15, 2016, pp. 143-154.
31. Charles and **R. Bensraj**, "Bandwidth and Delay Aware QoS Provisioning and Admission Control in MANET", *Asian Journal of Information Technology*, Vol.15, No.15, pp.2594-2601, 2016, ISSN:1682-3915.
32. A Charles and **R.Bensraj**, "Enhanced weighted fair-queueing technique for improving the QoS in MANET", *International Journal of Advanced Engineering Technology*, E-ISSN 0976-3945, Vol. 7, No.2, April-June,2016, pp.1308-1311.
33. Sudhakar, B. and **Bensraj R**, "Enhanced Sentimental Analysis For Speech Synthesis Based on Prosody Feature Modification Using TD-PSOLA Technique For Tamil", *International Journal of Innovative Research in Computer and Communication Engineering*, Vol. 04(03), pp. 2939-2946, 2016, ISSN:2320-9801.
34. Sudhakar, B. and **Bensraj, R**, "Performance Analysis of Text to Speech Synthesis System using HMM and Prosody Features with Parsing for Tamil Language," *International Research Journal of Engineering and Technology*, Vol.3, No.6, ISSN :2395-0056, pp.2233-2241, 2016.
35. Gnanamanoharan and **R. Bensraj**, "Performance analysis of Broadcast Neighbors Discovery Protocol for Mobile Ad hoc Networks based on node mobility", *International Journal of Innovation and Scientific Research* , ISSN 2351-8014 Vol. 25 No. 1 Jun. 2016, pp. 352-359.
36. Gnanamanoharan and **R. Bensraj**, "Performance Analysis of Probabilistic Broadcast on Demand Route Discovery Protocol for Mobile Ad Hoc Networks Based on Node Mobility" *International Journal of Advanced Engineering Technology*, E-ISSN 0976-3945, Vol.7, No.3, 2016, pp.174-178.
37. S. Senthamil Selvan, **R. Bensraj** and N. P. Subramaniam, (2016), Fuzzy Logic Controller on Positive Output KY Voltage Boosting Converter, *International Journal of Emerging Technology and Advanced Engineering* , Vol. 06 (02) , pp. 92-99. ISSN 2250-2459.
38. E.Gnanamanoharan and **R.Bensraj**, "Performance Analysis of Neighbor Discovery and Location Verification (NDLV) Scheme in Mobile Ad Hoc Networks against Adversarial Nodes", *Communications on Applied Electronics* 4(4), pp.19-25, December 2016. ISSN 2394-4714.
39. Sengolrajan, T., Shanthi, B., and **Bensraj, R.** Prediction of trapezoidal variable amplitude PWM techniques for three phase trinary source nine level inverter (2016) *International Journal of Control Theory and Applications*, 9 (15), pp. 7425-7435.

40. Balamurugan, C.R. and **Bensraj, R**, (2018). "Hardware realisation of self propelled safety monitoring system using can protocol", Journal of Engineering Science and Technology, 13 (1), pp.83-101, ISSN 1823-4690.
41. Balamurugan, C.R. and **Bensraj, R**, (2020). "Automatic E-Toll Ticketing and Vehicle Safety Using Embedded Technology", Journal of Electrical Engineering, Romania, 20(2), pp.29-35, ISSN 1582-4594.
42. R. Pazhanimurugan, **R. Bensraj** and C.R. Balamurugan, (2020). "Time response of FOPID controlled PV based cascaded Landsman converter-Inverter fed induction motor and electric drives applications", International Journal of Power Electronics and Drive Systems, ISSN:2088-8694, 11 (3).  
DOI:<http://doi.org/10.11591/ijpeds.v11.i3.pp%25p>.

#### INTERNATIONAL CONFERENCE PUBLICATIONS (02 NOS.)

1. S.Shama, C.R.Balamurugan, S.P.Natarajan, **R.Bensraj**, 'A New Symmetrical Multilevel Inverter Using Embedded and Digital Control', IEEE Sponsored 2nd International Conference on Innovations in Information Embedded and Communication Systems (ICIIECS'15), ISBN No: 978-1-4799-6816-9, Karpagam College of Engineering, Coimbatore, 19th and 20th March, 2015, pp. 156 - 161.
2. S.Shama, C.R.Balamurugan, S.P.Natarajan, **R.Bensraj**, 'Performance Evaluation of Multilevel Inverter Using Embedded and Digital Control', Trends in technology for convergence (TITCON'15), AVS Engineering College, Salem, 10th and 11th April, 2015, pp. 150.