

# SSN COLLEGE OF ENGINEERING

## DEPARTMENT OF EEE

### LIST OF JOURNAL PUBLICATIONS – 2017

#### JANUARY -2017

1. Dr.R.Seyezhai ASSP/EEE, M.Sudharan (part-time Research scholar), " Performance Evaluation of Level Shift PWM Technique for an Cascaded Multilevel Inverter", International Journal of Printing, Packaging & Allied Sciences, Vol.4(3), pp. 2070-2082 Dec.2016. ISSN : 2320-4387. (Annexure-1).
2. M. Venmathi, R. Ramaprabha (ASSP/EEE), "Implementation of zero voltage switched SEPIC/ZETA bidirectional converter for low power applications using FPGA", Turkish Journal of Electrical Engineering & Computer Sciences, Vol. 25, pp. 319-336, 2017 (ISSN online: 1303-6203; 1300-0632) Scopus Index 0.339(DOI: doi:10.3906/elk-1505-81) Thomson Reuters Impact factor : 0.5.

#### FEBRUARY -2017

3. V.S.Nagarajan AP /EEE, M.Balaji ASSP/EEE, V.Kamaraj Prof/EEE, "Design optimization of ferrite assisted synchronous reluctance motor using multi-objective differential evolution algorithm", COMPEL - The international journal for computation and mathematics in electrical and electronic engineering, 36(1), 2017, pp. 219–239. doi: 10.1108/compel-06-2016-0253. (Annexure 1), (Thomson Reuters and scopus indexed), (Impact factor – 0.430).
4. M.Karthikeyan and R.Rengaraj, "Mutual Impedance Based Protection Scheme for Series Compensated Transmission Line", International Journal of Control Theory and Applications, Vol.10 No.2, 2017, PP.165-181. (Scopus Indexed, Annexure-II).
5. M.Karthikeyan and R.Rengaraj, "Fault Classification and Location of an UPFC-Compensated Transmission Line Using Extreme Learning Machine", International Journal of Control Theory and Applications, Vol.10, No.2, 2017, pp.183-194 (Scopus Indexed, Annexure-II).
6. Rajini V, Alagu dheeraj, " Center Clamped Forward Converter for High Current Applications", J. Comput. Theor. Nanosci. 14, 395–402 (2017), ISSN: 1546-1955 (Print): EISSN: 1546-1963 (Online) scopus indexed ( Annexure 1).

7. V. Rajini, W. Abitha Memala , " Wavelet Based Induction Motor Fault Diagnosis Using Zero Sequence Current", J. Comput. Theor. Nanosci. 14, 411–420 (2017) ISSN: 1546-1955 (Print): EISSN: 1546-1963 (Online), ) scopus indexed ( Annexure 1).
8. V.Rajini, W. Margaret Amutha, "A novel self powered wireless sensed network", International Journal of Computer Networks and Wireless Communications (IJCNWC), ISSN: 2250-3501, Vol.7, No 1, Jan-Feb 2017, scopus indexed.
9. Sykarus, V.Rajini, M.G. Danikas, R.Sarathi, "A Study of SiR/EPDM Mixtures for Outdoor Insulators", International journal of Engineering, Technology & Applied Science Research Vol. 7, No. 4, 2017, 1737-1740 1737-1740, Thomson reuters indexed.
10. S. Iyappan, SRA/EEE, R. Ramaprabha, Asso.Prof./EEE, "Design and Implementation of Brushless DC Motor based Solar Water Pumping System for Agriculture using Arduino UNO", International Journal of Engineering and Technology (IJET), ISSN (Print): 2319-8613 ISSN (Online) : 0975-4024, Vol. 9, No. 1, pp. 224-232, Feb 2015 (DOI: 10.21817/ijet/2017/v9i1/170901424). Scopus Index 0.177.
11. Thiyagarajan V., AP/EEE, Gokul Kumar V, Karthickeyan B, Naveen Kumar E, Nikilaesh A (Passed Out Students) "Tesla Turbine Powered Solar Refrigerator" in International Journal of Recent Trends in Electrical and Electronics Engineering, ISSN : 2231-6612, Vol.04, No. 2 (2017), pp. 50-55.
12. V.Krishnakumar, V.Kamaraj, S.Jeevananthan, "Parallel Fuzzy Logic Controllers for Independent Control of Two Permanent Magnet Synchronous Motors fed by a Five Leg Inverter for Electric Vehicles, Journal of Electrical Engineering, vol 17(1)-24, pp: 1-16.(Scopus indexed)
13. V.Krishnakumar, V.Kamaraj, C. Adrien Perianayagam, "Development of New Modulation Technique to Combined Drive for Dual PMSMs applicable in automotive application", Journal of Electrical Engineering, vol 17(1)-43, pp: 1-12.(Scopus indexed)

#### **APRIL 2017**

14. A. Sivakumar, N.B. Muthu Selvan published research article, "Reduction of source current harmonics in ANN controlled induction motor", in Alexandria Engineering Journal, Elsevier, Available online 19 April 2017. <http://dx.doi.org/10.1016/j.aej.2017.03.048> (Annexure - II Anna University).
15. K. Kanchana, V.Rajini Prof/EEE, " Experimental Design of Low Loss Filter to mitigate Overvoltage for Long Cable Fed Induction Motor Drive", International journal of electrical engg, vol 17, No1, 2017, ISSN no 1582- 4594( Annexure 1)(Scopus indexed)
16. R. Kavitha, V.Rajini and S.Krishnaveni, "Analysis of Front-End High Gain DC-DC Converters for Pulsed Electric Field Application", International Journal of Electrical and

Electronics Engineering (SSRG-IJEEE) ,Volume4 Issue-3, 2017,pp 14-19, ISSN: 2348-8379.

### **MAY 2017**

17. Thiagarajan V., AP/EEE, published a paper titled, “Modified Seven Level Symmetric Inverter with Reduced Switch Count” in "Advances in Natural and Applied Sciences", ISSN : 1995-0772, Vol.11, No. 7 (2017), PP 264-271. (Anna University Annexure 2, Scopus Indexed).
18. Krishnaveni S AP/EEE, Subhashini R AP/BME, Rajini V Prof/EEE, “Inactivation of bacteria suspended in water by using high frequency unipolar pulse voltage”. Journal of Food Process Engineering. 2017;00:e12574. <https://doi.org/10.1111/jfpe.12574>. ISSN:1745-4530.( Indexed in Scopus and Thomson Reuters)
19. R.Kavitha, V.Rajini Prof/EEE, published a paper titled "Design and Implementation of a High Gain DC-DC Converter with Built-in Transformer Voltage Multiplier Cells", International Journal of Electrical Engineering & Technology ,Volume 8, Issue 2, March- April 2017, pp. 71–80,ISSN Print: 0976-6545 and ISSN Online: 0976-6553.
20. Aslam Amir BE Student, T.M. Jifry Shaheem BE Student, and Muthu Selvan N B ASSP/EEE, published a paper titled “Study of Distribution Factors for Allocation of Power Transaction in a Deregulated Market” International Journal of Advances in Natural and Applied Sciences, Vol.. 11(6); pp: 708-715, April 2017 (Annexure – II Anna University SJR Indexed)
21. Pranati Katyal & Ranganath Muthu, ‘Hardware Implementation of Interleaved Boost Converter for Wind-Solar Hybrid System’, Advances in Natural and Applied Sciences, Vol. 11, No. 7, pp. 241-252, May 2017. SJR 0.115.

### **JUNE 2017**

22. S. Krishnaveni AP/EEE, Dr. V. Rajini, “Resonant Gate Driver for Series Operation of MOSFETs”, Energy Procedia. 117C (2017): pp. 38-45. SJR factor 0.47. (Scopus indexed).
23. M. Venmathi (FT Research Scholar/EEE) and Dr. R. Ramaprabha (Assoc. Prof./EEE), “Fuzzy-PI-based centralised control of semi-isolated FP-SEPIC/ZETA BDC in a PV/battery hybrid system”, International Journal of Electronics, Vol. 103, No. 11, pp. 1909-1927, 2016, Taylor & Francis, UK, (ISSN: 0020-7217, 1362-3060) Scopus Index 0.4 (DOI: <http://dx.doi.org/10.1080/00207217.2016.1138541>) Listed in Thomson Reuters - Published online: 01 Feb 2016.

24. J.AnithaRoseline ASSP/EEE , M.SenthilKumaran ASSP/EEE , Dr.V.Rajini, , Prof/EEE, Published a paper titled “ Unified Algorithm for Multilevel Inverters” in IET Power Electronics, Vol.10, issue 7, pp. 808-816, June 2017.

### **JULY 2017**

25. Dr.S.Tamil Selvi, ASSP/EEE, “HCC based Interleaved Boost Converter with Optimal Switching Frequency Control of Wind Energy Conversion System for DC Microgrid Application” IET: The Journal of Engineering, ISSN 2051-3305.
26. Thiyagarajan V., AP/EEE, “Design and Simulation of Modified Symmetric and Asymmetric Multilevel Inverter”, "Research Journal of Pharmaceutical, Biological and Chemical Sciences", ISSN: 0975-8585, 8(3S), 2017, PP 283-290. (Anna University Annexure 2, Scopus Indexed).
27. M. Venmathi (FT Research Scholar/EEE) and Dr. R. Ramaprabha (ASSP. /EEE), “Impact of modified perturb and observe control on MPPT of PV/battery fed three - port DC-DC converter”, Acta Scientiarum Technology Journal, Vol. 39, No. 3, pp. 313-323, July-Sept., 2017 ISSN 1806-2563 (Print) e ISSN 1807-8664 (on-line) Scopus Index 0.527 (DOI: <http://dx.doi.org/10.4025/actascitechnol.v39i3.29502>) Listed in Thomson Reuters.
28. R. Supriya, V. Aishwhariya (UG Students) and Dr. R. Ramaprabha (ASSP/EEE), “Development of an Economic Photovoltaic Array Simulator using an Off-The-Shelf Power Supply”, Research Journal of Pharmaceutical, Biological and Chemical Sciences (RJPBCS), RJPBCS 8(3S), pp. 317-324, May – June 2017(Suppl.), ISSN: 0975-8585 Scopus Index 0.35.
29. P. Priya, G. Shabbeer Basha, S. V. Sujith Niranjana, R. Seyezhai , “Analysis and Experimentation of Quadratic Boost Converter for Photovoltaic Applications,” Indian Journal of Science and Technology, Vol. 10(37), 2017/v10i37/117553, October 2017. ISSN (Print) : 0974-6846. ISSN (Online) : 0974-5645.Indexed in Scopus.
30. T.Thamizhselvan (part-time research scholar), Dr.R. Seyezhai and K. Premkumar ( AP/RIT College, “Comparative Evaluation of Pulse Width Modulation Strategies For Hybrid Multilevel Inverter for Application in Photovoltaic Power Extraction”, World Applied Sciences Journal 35 (5): 692-702, 2017, ISSN 1818-4952, © IDOSI Publications, 2017,DOI: 10.5829/idosi.wasj.2017.692.702.
31. Dr.R.Seyezhai, ASSP/EEE and Pridhvi Prasanth (passed out UGstudent), “Performance Analysis of Four Phase Interleaved Boost Converter for Photovoltaic Applications" Journal of Renewable energy and Resources, Volume 2 Issue 2, 2017 Mantech Publications.

32. R.Seyezhai, R.Sreemallika, "A Novel SEPIC Power Factor Correction Converter for HBLED Applications," MAGNT Research Report (ISSN. 1444-8939) Vol.4(3). PP. 135-141, 2017 ISSN. 1444-8939. Indexed in Thomson Reuters.
33. Dr.U.Shajith Ali, ASSP/EEE, "Performance Enhancement of Modular Multilevel Inverter Using Trapezoidal PWM Control" International Journal of Control Theory and Applications, Vol.10, No.37, pp. 265-271.
34. Subhitcha.R, V.Sowmya (IV Yr.EEE, B) & Dr.R.Seyezhai, ASSP/, "Performance Analysis of PWM based Voltage Source Inverter", International Journal of Advanced Research in Basic Engineering Sciences and Technology (IJARBEST) Vol.3 Issue.7 July 2017,pp.1-12.
35. E. Narmadha, M. Sudhakaran (research scholar), K. Vijayakumar, ( PG Students, Ganadipathy Tulsi's Jain Engineering College) & Dr. R. Seyezhai, "Wireless Based Four Quadrant Operation of Three Phase BLDC Motor with Fuzzy Logic Using FPGA Controller", International Scientific Global Journal in Engineering, Science and Applied Research (ISGJESAR), Vol. 2, No. 3, June, 2017 | ISSN: 2456-1894.
36. K.Suganthi, Mr.M.Sudhakaran, Mr.C.Yuvaraj, Dr.R.Seyezhai, ANFIS Based Maximum Power Point Tracking For Solar PV Panel with Cockcroft-Walton Converter Using Modified INC Algorithm," International Scientific Global Journal in Engineering, Science and Applied Research (ISGJESAR), Vol. 2, No. 3, June, 2017. ISSN: 2456-1894.
37. K.Sharmila, Mr.M.Sudhakaran, Mr.S.Iyyappan, R.Seyezhai, "Webcam Enabled Raspberry PI Fire Detection System International Scientific," Global Journal in Engineering, Science and Applied Research (ISGJESAR), Vol. 2, No. 3, June, 2017. ISSN: 2456-1894

### **AUGUST 2017**

38. Thiyagarajan V., AP/EEE, "Analysis of Multicarrier PWM techniques for Photovoltaic fed Cascaded H-Bridge Multilevel Inverter", Journal of Electrical and Electronics Engineering (JEEE), P-ISSN: 1844-6035, Vol.10, No. 1 (2017), PP 85-90. (Anna University Annexure 2, Scopus Indexed).
39. Dr.R.Seyezhai, ASSP/EEE and M.Sudhakaran ( part-time research scholar), "A Simplified Direct Torque Control-Space Vector Modulation Based Induction Motor Drive for Trinary Hybrid Cascaded H-Bridge Multilevel Inverter", Journal of Computational and Theoretical Nanoscience, Vol. 14, 1190–1198, 2017, pp.1190-1198. (AU, Annx. -1) (Scopus indexed)
40. Dr.R.Seyezhai, ASSP/EEE and Chitra Vallavan ( part-time research scholar), "Study and Analysis of Switched Mode DC – DC Converter Topologies for Telecommunication

System”, International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS) Volume VI, Issue VI, June 2017 | ISSN 2278-2540. (UGC Approved journal).

41. R.Mahalakshmi (passed out PG Student) and Dr. R. Seyezhai, ASSP/EEE, “ Design and Simulation of an Integrated PFC AC-DC Converter for Telecoms, International Journal of Control Theory and Applications, ISSN : 0974-5572 International Science Press, Volume 10, Number 29, 2017.(Scopus Indexed).

### **SEPTEMBER 2017**

42. Thiyagarajan V., AP/EEE, “New Asymmetric Seven Level Inverter with Minimum Number of Voltage Sources and Switches”, Journal of Electrical Engineering (JEEE), ISSN: 1582-4594, Vol.17, No. 3 (2017), PP 354-359. (Anna University Annexure 1, Scopus Indexed).
43. J. Raji and V. Kamaraj Prof/ EEE, "Analysis of Stability and Dynamic Behaviour of Ultra Lift Luo Converter", Journal of Electrical Engineering & Technology, Vol 12, No5, September 2017(Thomson, Scopus indexed).
44. G. Ramya (FT Research Scholar/EEE), M. Mohana Krishnan (PG Student/EEE) and R. Ramaprabha (Asso.Prof./EEE, “ Comparative Study on Control Methods for PMSM Based Wind Energy Using PI and Fractional Order Controller”, International Journal of Control Theory and Applications (International Science Press) Vol. 10, No.29, pp. 253-263, 2017 ISSN: 0974-5572 Scopus Index 0.2
45. M. Venmathi (FT Research Scholar/EEE) and R. Ramaprabha (Asso.Prof./EEE), “Investigation on Isolated Derived Topology For Differential Power Processing in Photovoltaic System”, International Journal of Control Theory and Applications (International Science Press) Vol. 10, No.29, pp. 265-272, 2017 ISSN: 0974-5572 Scopus Index 0.2
46. S. Malathy (Asso.Prof./EEE), R. Ramaprabha (Asso.Prof./EEE), B. Kabilram, K. Manirajan, K. Marriappan and G. Vignesh (UG Students), “ Performance Analysis of Reduced Device Count Multilevel Inverter with Low Frequency PWM Schemes”, International Journal of Control Theory and Applications (International Science Press) Vol. 10, No.29, pp. 345-354, 2017 ISSN: 0974-5572 Scopus Index 0.2
47. Ramya (Full Time Research Scholar), Dr.M. Balaji (ASSP/EEE), " A new approach for minimizing torque ripple in a BLDC motor drive with a front end IDO dc-dc converter" in Turkish Journal of Electrical Engineering & Computer Sciences, Vol.25, pp.2910-2921, 2017. (Thomson Reuters indexed, Scopus), (Impact factor – 0.578).
48. S. Gowtham (Part Time Research Scholar), M. Balaji (ASSP/EEE), S. Harish, M.S. Abraham Pinto, G. Jagadeesh, " Fault Tolerant Single Switch PWM DC-DC Converters

for Battery charging Applications", Energy Procedia,(Scopus) Vol. 117,pp. 753–760, 2017.

49. P. Saravanan, M. Balaji, K. Balaji Nagaraj and R. Arumugam, "Analysis of Neural Network Approaches for Nonlinear Modeling of Switched Reluctance Motor Drive" Journal of Electrical Engineering and Technology, Vol.12, No.4, 2017, pp.1548-1555. (Thomson Reuters indexed), (Impact factor – 0.679).
50. M. Joly and R. Ramaprabha ASSP/EEE, published a paper titled "Design of Battery less Hybrid PV System for DC Distribution System in Building Applications with Improved Transient Response", Journal of Electrical Engineering (ISSN 1582-4594), Vol. 17, No. 3, pp. 384-391, Sep 2017. Scopus Index 0.16. (Listed in AU Annexure 1).
51. V.K.Vishwak (passed out PG) & Dr.R.Seyezhai, ASSP/EEE published a paper titled, "Design and Simulation of Superlift DC-DC Converter for Solar PV Applications International Journal of Advances in Computer and Electronics Engineering Volume 2, Issue 9, September 2017, pp. 22–28 ISSN: 2456 – 3935.
52. Mrunal Deshpande, Senthil Kumaran Mahadevan, Ranganath Muthu, 'FPGA based direct three level matrix converter', International Journal of Electronics, Electrical and Computational System (IJCEES), Vol. 6, No. 9, pp. 730-741, September 2017.

## **OCTOBER 2017**

53. Dr.R.Seyezhai, ASSP/EEE and S.T.Namitha Shanili (passed out PG Student) , "A Review of Multi-Input DC-DC Converter Topologies for DC Micro Grid", International Journal of Control Theory and Applications, Vol.10, No: 29,2017. (**Scopus Indexed**).
54. Dr.R.Seyezhai, ASSP/EEE and N.Hemalatha (Full-time scholar) published a paper titled, "A Single Stage Power Conditioning of Extended Boost Quasi Z-Source Inverter for PV Applications", Journal of Electrical Engineering, Vol.3, 2017. ( AU Annexure-1 & Indexed in Scopus)
55. Dr.R.Deepalaxmi , Asso.Prof/EEE, D.Janani , B.Kaviya, Manisha V Bachpai and M.Durgai Vadivu (Passed out BE/EEE students) published a paper titled PAPER ID : V2S10\_348 "Modelling and Implementation of Long Duration Impulse Current Measurement Circuit" in International Journal of Advance Scientific Research and Management IJASRM Volume 2, Issue 10, PP. 34-40, October 2017. IF-3 ISSN [ONLINE] : 2455-6378

## **November - 2017**

56. S. Malathy and R. Ramaprabha, published a paper titled "Reconfiguration strategies to extract maximum power from photovoltaic array under partially shaded conditions", International Journal on Renewable & Sustainable Energy Reviews (ISSN 1364-0321), Vol. 81, pp. 2922-2934, 2018. (DOI: <http://dx.doi.org/10.1016/j.rser.2017.06.100>), Scopus Index 3.12, Thomson Reuters Impact factor : 9.122 – Available online.

57. Dr.R.Seyezhai, ASSP/EEE and V.Chamundeeswari ( part-time research scholar) published a paper titled, “ PSO-PID maximum power point tracking controller using modified superlift Luo Converter”, Energy Procedia,, 2017, pp.87-94.

**December- 2017**

58. Dr P Saravanan ASSP/EEE published a paper titled, “Image coding using Cellular Automata based LDPC codes”, in International Journal of Computer Science and Network Security, Vol.17 No.11, pp. 146-150, 2017, (Thomson Reuters).

59. Dr.A.Bharathi sankar & Dr.R.Seyezhai, ASSP/EEE, published a paper titled, “ Implementation of Solar based Electric Vehicle,” International Journal of Engineering Research in Electrical and Electronic Engineering Volume-4 ,November 2017 ISSN (Online) 2395-2717.

60. V.K.Vishwak (passed out PG) & Dr.R.Seyezhai, ASSP/EEE published a paper titled, “ Design and Simulation of Superlift DC-DC Converter for Solar PV Applications International Journal of Advances in Computer and Electronics Engineering Volume 2, Issue 9, September 2017, pp. 22–28 ISSN: 2456 – 3935.

61. Mrunal Deshpande, M Senthil Kumaran & Ranganath Muthu, ‘Direct Torque Control of the Direct Three Level Matrix Converter Based on Induction Motor Drive’, Rev. Téc. Ing. Univ. Zulia, Vol. 39, No.11, pp. 194 - 204, 2016, doi:10.21311/001.39.11.24, Impact Factor 0.033, SNIP 0.27, SJR 0.118.

62. A. Balasubramanian & Ranganath Muthu, ‘Model Based Fault Detection and Diagnosis of Doubly Fed Induction Generators – A Review’, Energy Procedia, Vol.117, pp. 935–942, 2017, Elsevier. SNIP 0.586, SJR 0.467.

63. AD Senthil Kumar, TS Anandhi, Ranganath Muthu, ‘Secure Video Compression and Integration Technique for Data Transmission, International Journal of Computer Network and Information Security, Vol. 11, pp. 63-70, 2017.

64. Lakshmi D, Peerfathima Abdulkareem, Ranganath Muthu, ‘Two-area load frequency control with redox flow battery using intelligent algorithms in a restructured scenario’, Turkish Journal of Electrical Engineering & Computer Sciences, Available online, 2017. Impact Factor 0.578.

65. Murugesan K, Senthil Kumaran M, Anitha Roseline, Ranganath Muthu, ‘Decoupled indirect duty cycle PWM technique with carrier frequency adjustment for a matrix converter’, Turkish Journal of Electrical Engineering & Computer Sciences, Available online, 2017. Impact Factor 0.578.



66. Leo Raju, Antony Amalraj Morais, Ramyaa Rathnakumar, P. Soundaryaa, L. D. Thavam, "Micro-grid Grid Outage Management using Multi Agent Systems," *Energy Procedia.*, vol.117, pp. 112–119, 2017. (SJR: 0.47, JCR: 1.16, Scopus Indexed, ISSN: 1876-6102).
67. V. Thiyagarajan and P. Somasundaram, "Modified Nine Level Inverter with Reduced Number of Switches", *International Journal of Control Theory and Applications*, Vol.10, No. 2 (2017), PP 217-225. (ISSN : 0974-5572, Anna University Annexure 2, Scopus Indexed, Impact factor 0.169)