Research Publications:

International Journal

- 1. N. Vengadachalam, **R.Karthigaivel**, and V. SubhaSeethalakshmi, "Intrinsic Power Management Strategy based improvement of power stability in a single-phase AC–DC converter system", Journal of Microprocessors and Microsystems, Volume 73, March 2020.
- 2. V.SubhaSeethalakshmi, **R.Karthigaivel**, N.Vengadachalam and S. Selvakumaran, "Application of Machine Learning and Big Data in Doubly Fed Induction Generator based Stability Analysis of Multi Machine System using Substantial Transformative Optimization Algorithm", Journal of Microprocessors and Microsystems, Volume 73, March 2020.
- 3. S Saravanan, **R Karthigaivel**, V Magudeeswaran "A brain tumor image segmentation technique in image processing using ICA-LDA algorithm with ARHE model" Journal of Ambient Intelligence and Humanized Computing, pp.1-9,2020.
- 4. S Saravanan, **R Karthigaivel** "A fuzzy and spline based dynamic histogram equalization for contrast enhancement of brain images" International Journal of Imaging Systems and Technology,pp.1-26,2020.
- 5. V Rajasekaran, S K Nandha Kumar, S Selvakumaran and **R Karthigaivel,** "Module Integrated PV Balancer for PV Applications", International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-9 Issue-1, November 2019, pp. 2624 2628.
- 6. S.K. Nandha Kumar, S. Selvakumaran, **R. Karthigaivel**, and S. Muthukumaran, "Application of bat algorithm to optimal reactive power

dispatch", Journal of International Pharmaceutical Research, Vol. 9, Issue 1, 2018, pp. 346-349.

- 7. R EssakiRaj ; C Kamalakannan ; **R Karthigaivel,** "Genetic algorithm-based analysis of wind-driven parallel operated self-excited induction generators supplying isolated loads", IET Renewable Power Generation, Vol. 12, Issue 4, March 2018, pp. 472 483.
- 8. Saravanan S, **Karthigaivel R** and K. Thiagarajan, "Analysis of image Stodgy in clude ordered topology Fixed point theorem", International Journal of Pure and Applied Mathematics, Vol. 119 No. 10, 2018, pp. 1001-1011.
- 9. S. Suresh, S.Kannan and R.**Karthigaivel**, "Reactive Power Compensation using Fuzzy Logic Controlled Multilevel Inverter for Power Distribution System", Journal of Computer Science & Control Systems. Oct. 2016, Vol. 9, Issue 2, pp.41-47.
- 10. **R. Karthigaivel** and A.S.F.Subhamathi, "Design and Simulation of Hybrid Renewable Energy System With Single DC-DC Converter For Grid Connected Distributed Generating System", Pakistan Journal of Biotechnology, Vol. 13, pp. 351- 356, 2016.
- 11. J.KavithaJosline and **R.Karthikaivel**, "Performance of DC-DC Converter with MPPT Controller", International Journal of Applied Engineering Research, Vol. 10 No.20, June 2015, (ISSN 0973-4562).

International Conference

- 1. **R.Karthigaivel** and P. Mahalakshmi, "High step up integrated converter for PV generation systems", 4th International conference on Renewable Energy Utilisation (ICREU 2018), 8-10th January 2018, organized by Coimbatore Institute of Technology, Coimbatore.
- 2. **R.Karthigaivel**, Subha V.Seethalakshmi and N.Vengadachalam, "Review of stability analysis of DFIG based offshore wind farm Fed to system using FACTS devices", International conference on Engineering, Energy and Environment (ICEE 2017), during 31st march to 02nd April 2017, organized by TRP Engineering College, Trichy.
- 3. Saravanan S, **Karthigaivel R** and K. Thiagarajan, "Analysis of image Stodgy in clude ordered topology Fixed point theorem", 13th international conference on Science, Management and Engineering (ICSME 2017), 17-18th March 2017, Kerala India.
- 4. **R.Karthigaivel** and A.S.F.Subhamathi, "Design And Simulation of Hybrid Renewable Energy System With Single DC-DC Converter For Grid Connected Distributed Generating System", IEEE sponsored 2016 3rd International Conference on Innovations in Information Embedded and Communication Systems (ICIIECS) during 17th and 18th March 2016 organised by Karpagam College of Engineering, Coimbatore, India.
- 5. J. Kavitha Josline and **R.Karthigaivel**, "Performance of DC-DC converter with MPPT controller", Proceedings of the DRDO sponsored 2nd IEEE International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS'15) during 19th and 20th March 2015 organised by Karpagam College of Engineering, Coimbatore, India.

- 6. **R. Karthigaivel**, N. Kumaresan and M. Subbiah, "Performance Predetermination of Single-Phase Induction Motors Using Thevenin's, Norton's and Maximum Power Transfer Theorems", Proceedings of the IEEE 2015 International Conference on Computer Communication and Informatics (ICCCI -2015), Jan. 08 10, 2015, Coimbatore, INDIA.
- 7. **R. Karthigaivel**, N. Kumaresan and M. Subbiah, "Classification and Analysis of Operating Modes of Three-Phase Semi-Converters Feeding Battery Charging Loads using Phase Angle Control Scheme A Monograph", Proceedings of the IEEE 2015 International Conference on Computer Communication and Informatics (ICCCI -2015), Jan. 08 10, 2015, Coimbatore, INDIA.