

Publications:

List of Journal Publications:

1. J Ganesh Moorthy, Sumit Manual, S Moorthi and P. Raja, "Performance analysis of solar PV based DC optimizer distributed system with simplified MPPT method", Springer **Journal on SN Applied Sciences**, | <https://doi.org/10.1007/s42452-020-2010-2>, available on-line, January 2020.
2. Suryanarayana G, [Raja P](#) , [Selvan M P](#) and [VenkataKirthiga Murali](#)., "An Effective Algorithm for Fault Discrimination and Estimation of Fault Location in Transmission Lines", **IET Generation, Transmission and Distribution**, [10.1049/iet-gtd.2018.5815](#), available on-line, May 2019.
3. Vijayapriya, R, **Raja, P.** and Selvan, M.P., "Systematised Active Power Control of PMSG-based Wind-driven Generators", **IEEE Systems Journal**, Vol. 14, No.1 , March 2020, pp. 708 – 717.
4. G. Suryanarayana, G. Kesava Rao, S. Sarangi and **Raja, P.**, "Directional relaying using parameter estimation approach", **Electrical Power and Energy Systems, an International Journal, Elsevier**, Vol. 107, December 2018, pp. 597-604.
5. Vijayapriya, R, **Raja, P.** and Selvan, M.P., "A Modified Active Power Control Scheme for Enhanced Operation of PMSG based WGs", **IEEE Transactions on Sustainable Energy**, Vol. 9, No.2 , April 2018, pp. 630 – 638.
6. Vijayapriya, R., **Raja, P.** and Selvan, M.P., "Enhanced Method of Rotor Speed and Position Estimation of Permanent Magnet Synchronous Machine based on stator SRF-PLL", **Engineering Science and Technology, an International Journal, Elsevier**, Vol. 20, 2017, pp. 1450-1459.
7. Jithin K.K, S. Venkata Hareesh, **P. Raja** and M.P. Selvan "Design and Implementation of an Algorithm for Diagnosis of Load Encroachment in EHV Lines", **Energy Procedia, Elsevier**, 117(2017), 519-526.
8. K. Sujita Kumar Achary and **P. Raja** "Adaptive design of Distance relay for series compensated transmission line" **Energy Procedia, Elsevier**, 117(2017), 527-534
9. Venkatraman, K., Moorthi, S., Selvan, M.P., **Raja, P.** and Deepa Kurup, "Predictive current control of DSTATCOM for VAR compensation of grid connected wind farms", **Journal of Renewable and Sustainable Energy** 9, 023301 (2017); doi: <http://dx.doi.org/10.1063/1.4977541>.
10. Venkatraman, K., Moorthi, S., Selvan, M.P. and **Raja, P.**, "A Comprehensive Embedded Solution for Data Acquisition and Communication using FPGA", **Journal of Applied Research and Technology, Elsevier**, 2016 In Press, SCImago Indexed ISSN: 1665-6423.
11. Venkatraman, K., Moorthi, S., Selvan, M.P., **Raja, P.** and Deepa Kurup, "Performance Evaluation of FPGA-Controlled DSTATCOM for Load Compensation", **Arabian Journal of Science and Engineering**, Vol. 41, No. 9, September 2016, pp.3355-3367, SCI Indexed ISSN: 2191-4281.
12. **P. Raja**, N. Kumaresan and M. Subbiah (2014) "An Improved Delta-Star Switching Scheme for Reactive Power Saving in Three-Phase Induction Motors" **Frontiers in Energy**, DOI 10.1007/s11708-014-4-8.
13. **P. Raja**, M. P. Selvan and N. Kumaresan (2013) Enhancement of Voltage Stability margin in Radial Distribution System with Squirrel Cage Induction Generator based DGs. **IET Generation, Transmission and Distribution**, 7(8), 898-906.

14. **P. Raja**, N. Kumaresan and M. Subbiah, "A Closed Loop System for Inverter Assisted Wind Driven Induction Generators for Supplying Isolated Loads" *International Review of Automatic Control (Theory and Applications)*, Vol.5, No.4, July 2012, pp. 490-497.
15. **P. Raja**, N. Kumaresan and M. Subbiah, "Grid-connected Induction Generators using Delta-Star Switching of the Stator Winding with a Permanently Connected Capacitor", *International journal of Wind Engineering*, Vol.36 , No.2, 2012, pp.219-232.
16. R. Karthigaivel, N. Kumaresan, **P. Raja** and M. Subbiah, "A novel unified approach for the analysis and design of Wind-driven SEIGs using nested GAs", *International journal of Wind Engineering*, Vol.33 , No.6, 2009, pp.631-647.

List of International Conferences

1. Navya V, Sujana Ramesh, Vijaya Priya R and **Raja. P**, "Optimization of wind farm layout based on wake effect modelling", *IEEE International Students' Conference on Electrical, Electronics and Computer Sciences*, Bhopal, February 2020.
2. Ganesh Moorthy. J, Mahima. M and **Raja. P**, "Parallel operation of a grid-connected Microinverters with pulsated power decoupling capability", *35th National Convention of Electrical Engineers & National Conference on Storing Energy for a Sustainable Future-Future Energy in any Isolated World*, Chennai , India, 2019
3. K. Marimuthu, S.Vynatheya, N.Vasudev and **P.Raja**, "Quality Analysis of Ceramic Insulators Under Electro Thermal Stresses" *IEEE International Conference on High Voltage Engineering & Technology (ICHVET-2019)*, Hyderabad, 2019.
4. K.Marimuthu, S.Vynatheya, N.Vasudev and **P.Raja**, "Quality Analysis of Ceramic Insulators Under Steep Front Impulse Voltage" *20th National Power System Conference (NPSC-2018)*, Tiruchirappalli, India, 2018.
5. Harish S, Sarath Sankar.S, Vasishta Burugula, Ganesh Moorthy J, **P. Raja**, "Design and Performance enhancement of small scale Solar PV fed PMDC motor based water pumping system using PI Controlled FOCV method", *2017 IEEE International Conference on Technological Advancements in Power and Energy*, Kerala, 2017.
6. R. Vijaya Priya, S. K. Reddy, M. P. Selvan and **P. Raja**, "Parallel operation of permanent magnet synchronous generator based windmills connected to HVDC-VSC link," *2016 National Power Systems Conference (NPSC)*, Bhubaneswar, India, 2016.
7. S. Venkata Hareesh, **P. Raja** and M. P. Selvan, "Design and implementation of a robust fault detection mechanism for EHV lines," *2016 IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES)*, Delhi, India, 2016.
8. C. Priyanka, R. VijayaPriya and **P. Raja**, "Modelling of wind farm layout based on analytical distance variant method," *2016 IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES)*, Delhi, India, 2016.
9. A. Anantharaman, D. K. Singh and **P. Raja**, "Voltage stability study on radial distribution system incorporating Induction Motor loads," *2016 IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES)*, Delhi, India, 2016.
10. K. S. Achary, S. Behera and **P. Raja**, "Modelling and simulation of impact of SVC on distance protection of EHV transmission line," *2016 IEEE 1st International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES)*, Delhi, India, 2016.

11. S. Dhinesh Kumar, **Raja P** and Moorthi S "Self-adaptive differential relaying for power transformers using FPGA", *Proceedings of the IEEE Conference (CATCON 2015)*, 10-12 December 2015, Bangaluru
12. S. Venkata Hareesh, **Raja P** and Selvan M P "An Effective Implementation of Phasor Measurement Unit (PMU) by using Non-Recursive DFT Algorithm", *Proceedings of the IEEE Conference (CATCON 2015)*, 10-12 December 2015, Bangaluru.
13. Sabyasachi Behera, **Raja P** and Moorthi S "Modelling and simulation of the impact of SVC on existing distance relay for transmission line protection", *Proceedings of the IEEE Conference (CATCON 2015)*, 10-12 December 2015, Bangaluru.
14. Adil Abdul Hameed, Ankush Gupta, AS Kiranraj and Ashwini Devendran G, **Raja P**, "Modeling and implementation of impedance based fault locator for medium transmission line", *Proceedings of the IEEE Conference (CATCON 2015)*, 10-12 December 2015, Bangaluru.
15. [A. S. Ramya](#), [N. Periyasamy](#), [A. Vidhya](#), [S. Sundrapandian](#) **Raja P**, "Design and development of a GUI for an optimal hybrid energy system", *Proceedings of the Power Systems Conference (NPSC)*, 2014.
16. Shashank Kumar De, **Raja P**, " 'A Study on Relay Coordination in a Distribution System with Distributed Generation and Hybrid SFCL", *Proceedings of the IEEE Conference (AFRICON 2013)*, 9-12 September 2013, Mauritius.
17. Sreeram M and **Raja P**, "Implementation of DSP Based Numerical Three-Step Distance Protection Scheme for Transmission Lines", *Proceedings of the IEEE India Conference (INDICON 2013)*, 13-15 December 2013, Mumbai, India.
18. Ashwini Devendran G, Jaikumar M and **Raja P**, " A Simple Methodology for the Steady State Analysis of Doubly Fed Induction Generator", *Proceedings of the IEEE India Conference (INDICON 2012)*, 7-9 December 2012, Kerala, India.
19. S.Ranjith Kumar, **P.Raja** and M.P.Selvan , "Virtual Laboratory Environment using MATLAB- GUI for Teaching of Induction Generators", *Proceedings of the IEEE India Conference (INDICON 2012)*, 7-9 December 2012, Kerala, India
20. Sree Ramya and **Raja P**, "Estimation and Performance Evaluation of an Induction Machine using Optimization Techniques", *Proceedings of the IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES 2012)*, 16th - 19th December 2012, Bangaluru, India.
21. [Surendhar, S](#) , S.Ranjith Kumar and [Raja, P](#). "Assessment and Comparison of Different Neutral Current Compensation Techniques in Three-Phase four-wire Distribution System", *3rd IEEE International Symposium on [Power Electronics for Distributed Generation Systems \(PEDG\)](#), 2012*, 25-28 June 2012, Aalborg, Denmark.
22. S.Senthil Kumar, Ganesh Dharmireddy, **P.Raja** and S.Moorthi, "A Voltage Controller in PhotoVoltaic System without Battery Storage for Stand-Alone Applications", *Proceedings of the IEEE International Conference on Electrical, Control and Computer Engineering*, June 21-22, 2011, Pahang, Malaysia.
23. S.Ranjith Kumar, S.Surendhar, Ashish Negi and **P.Raja**, " Zig Zag Transformer performance analysis on harmonic reduction in distribution load", *Proceedings of the IEEE International Conference on Electrical, Control and Computer Engineering*, June 21-22, 2011, Pahang, Malaysia.
24. Arka Bhattacharya, **P.Raja** and A.Pavan Kumar "Modeling and Simulation of a Controlled DC-AC Converter System Using Sliding Mode Controller Mechanism", *3rd*

IEEE International Conference on [Process Automation, Control and Computing \(PACC 2011\)](#), 20-22 July 2011, Coimbatore, India.

25. J Divya, Y Prathyusha, M Uma Maheshwari and **Raja P** "Modeling and Simulation of BLDC Motor Control" *International conference on Mathematical Modeling and Applications to Industrial Problems* at NIT Calicut during 28th - 31st March 2011.