

Dr.S.SenthilKumar,
AssociateProfessor/DepartmentofEEE,
National Institute of Technology,
Tiruchirappalli-620 015.
E mail: skumar@nitt.edu
Phone: Office: 0431-2503261
Mobile : +91 8778505122 / 9443165211

International Journals

1. P. Rosayyan, **S. Subramaniam** and S. I. Ganesan, (2020) "Decentralized Emergency Service Vehicle Pre-Emption System Using RF Communication and GNSS-Based Geo-Fencing," in IEEE Transactions on Intelligent Transportation Systems, doi: 10.1109/TITS.2020.3007671.
2. Malakondareddy B, **Senthil Kumar S**, Dr, Ammasai Gounden N, Anand I, (2020) "An effective power tracking algorithm for partially shaded solar PV array employing micro converters feeding to DC microgrid" Periodica Polytechnica Electrical Engineering and Computer Science -- **Accepted for publication**
3. Akbarali, M. S., **Subramaniam, S. K.**, & Natarajan, K. (2020). Modeling, analysis, and control of wind-driven induction generators supplying DC loads under various operating conditions. Wind Engineering. (2020) <https://doi.org/10.1177/0309524X20925398>
4. Mahaboob Subahani Akbarali, **Senthilkumar Subramaniam** & Kumaresan Natarajan "Application of CS-PWM rectifier for the operation and control of wind-driven generators" Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, (2020), <https://doi.org/10.1080/15567036.2020.1778140>
5. Vandavasi Hari Krishna, Ramachandran Gunabalan, **Subramaniam Senthil Kumar**, "Pulse width modulation converter for light-emitting diode tube light applications" International Transactions on Electrical Energy Systems,(2020); DOI:10.1002/2050-7038.12294
6. B Malakondareddy, **S Senthilkumar**, Gounder Ammasai Gounden Nanjappa, Anand I, N Babu "Dynamic performance enhancement of Grid-tied PV system under abnormal grid conditions employing an effective peak current limiting control strategy" International Transactions on Electrical Energy Systems, (2020); DOI:10.1002/2050-7038.12542.
7. Malakondareddy, B., **Senthilkumar, S.**, Ammasai Gounden, N., & Anand, I. (2019). An adaptive PI control scheme to balance the neutral-point voltage in a solar PV fed grid-connected neutral point clamped inverter. International Journal of Electrical Power and Energy Systems, 110, 318-331.
8. G. Madhusudan, Namani Rakesh, **S. Senthil Kumar**, and S. Sarojini Mary; "Solar Photovoltaic Array Reconfiguration using Magic Su-Do-Ku algorithm for Maximum Power Production under Partial Shading Conditions"; Taylor & Francis- International Journal of Ambient Energy, pp. 1-24, 2019.
9. Namani Rakesh, **S. Senthil Kumar**, G. Madhusudan; "Mitigation of power mismatch losses and wiring line losses of partially shaded solar PV array using Improved Magic Technique"; IET-Renewable Power Generation, 13, (9), pp. 1522-1532, 2019. DOI: 10.1049/iet-rpg.2018.5927.
10. Gurusamy Madhusudan, **Subramaniam Senthilkumar**, I. Anand, and Padmanaban Sanjeevikumar "A shade dispersion scheme using Latin square arrangement to enhance power production in a Solar photovoltaic array under partial shading conditions ". Journal of Renewable and Sustainable Energy 10, 053506 (2018)
11. Akbarali, M.S., **Subramaniam, S.K.** & Natarajan, K. J. "Real and Reactive Power Control of SEIG Systems for Supplying Isolated DC Loads" Inst. Eng. India Ser. B (2018). <https://doi.org/10.1007/s40031-018-0350->
12. Anand, I., Agarwal, D., Senthilkumar, S. et al. A Dynamic Load Controller for a Standalone Solar PV System Employing a Dual Input/Output Biphasic dc-dc Converter. J Control Autom Electr Syst **30**, 812–821 (2019). <https://doi.org/10.1007/s40313-019-00488-5>

13. Anand I, **Senthilkumar Subramaniam**; Dipankar Biswas; Kaliamoorthy M "Dynamic Power Management System employing single-stage Power Converter for Standalone Solar PV Applications " *IEEE Transactions on Power Electronics* - DOI: 10.1109/TPEL.2018.2804658 - 2108
14. K. Arthishri, K. Anusha, N. Kumaresan and **S. Senthil Kumar**, "Simplified methods for the analysis of self-excited induction generators", *IET Electr. Power Appl.*, Vol.11, Issue. 9, 2017, pp.1636-1644. (SCIE indexed: Print ISSN: 1751-8660 and Online ISSN 1751-8679).
15. Sumedha Mahajan, **Senthil Kumar Subramaniam**, Kumaresan Natarajan, Ammasai Gounden Nanjappa Gounder, Devendra Varma Borru, "Analysis and control of induction generator supplying stand-alone AC loads employing a Matrix Converter" *Engineering Science and Technology, an International Journal*, Vol.20, issue.2, April 2017, pp.649-661. (ISSN: 2215-0986)
16. S. M. Mahajan, **S. Senthil Kumar**, N. Kumaresan, N. G. Ammasai Gounden, and E. Rajkumar, "Decoupled control strategy for the operation of capacitor-excited induction generator for DC power applications," in *IET Power Electronics*, vol. 9, no. 13, pp. 2551-2561, October 2016.
17. Sarojini Mary Samikannu , Rakesh Namani , and **Senthil Kumar Subramaniam** "Power enhancement of partially shaded PV arrays through shade dispersion using magic square configuration" *J. Renewable Sustainable Energy*, Vol.8. No.06 December 2016; doi: 10.1063/1.4972285
18. Samikannu Sarojini Mary, **Subramaniam Senthil Kumar**, Syam Prasad Poluru & Maddikara Jaya Bharata Reddy, "A Dual DC Output Power Supply for a Stand-alone Photovoltaic System", *Electric Power Components and Systems*, Taylor and Francis, 2015, 43:8-10, 939-950, DOI: 10.1080/15325008.2015.1012769.
19. **Subramaniam Senthil Kumar**, Natarajan Kumaresan, Muthiah Subbiah, "Analysis and control of capacitor-excited induction generators connected to a micro-grid through power electronic converters", *IET-Generation, Transmission and Distribution*, Vol.9, No.10, February 2015, pg.911–920.
20. **S. Senthil Kumar**, N. Kumaresan, M. Subbiah and Mahendhar rageeru "Modelling, analysis and control of standalone self-excited induction generator-PWM rectifier systems feeding constant dc voltage applications" *IET-Generation, Transmission and Distribution*, Vol.8 , No.6, 2014, pg. 1140–1155.
21. **S.Senthil Kumar**, N. Kumaresan, N. Ammasai Gounden, Namani Rakesh, "Analysis and control of wind-driven self-excited induction generators connected to the grid through power converters", *Frontiers in Energy*, Springer - Vol.6, issue.4, 2012, pp. 403–412.
22. **S.Senthil Kumar**, N.Kumaresan, N. Rakesh, K.Vijayakumar and M. Subbiah, "Wind-driven SEIGs for supplying isolated loads employing DSP based power electronic controllers", *International journal of Wind Engineering*, Vol.36, issue.6, 2012, pp. 739–758.
23. J. Chelladurai, G. Saravana Ilango, C. Nagamani, and **S. Senthil Kumar** "Investigation of Various PWM Techniques for Shunt Active Filter" *International Journal of Electrical Systems Science and Engineering* Vol. 1 No. 02 , pp. 1-7.
24. **S. Senthil Kumar**, S. Moorthi and K. Lakshmi Narayana "Investigation of Various PWM Techniques for Solar Powered Three-Phase UPS Inverter Application" *The IUP Journal of Electrical & Electronics Engineering*, Vol. V, No. 1, January 2012, pp. 29-41.
25. M. Kaliamoorthy, B. Ramireddy, B. Saravanan, **S. Senthil Kumar**, "A Novel Carrier for Sinusoidal Pulse Width Modulation Based Full Bridge Inverter", *i-manager's Journal on Electrical Engineering*, Vol.1, No.2, dec.2007, pp. 64-69.

International Conferences

1. Behera, D. K., Anand, I., Reddy, B. M., & Senthilkumar, S. (2018) A Robust Power Control Scheme for a Dual-Input Single-Output converter with a Standalone Solar PV System. *Proceedings of IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES)* December, 2018, Chennai.
2. Agarwal, D., Dash, D., Dalai, S. S., Anand, I., & Subramaniam, S. (2018). A power flow controller for a Standalone solar PV system employing a three al Power Systems Conference (NPSC), December, 2018 . IEEE.

3. D. K. Behera, I. Anand, B. Malakonda Reddy, and **S. Senthil kumar**, "A Novel Control Scheme for a Standalone Solar PV System Employing a Multiport DC-DC Converter," 2018 9th International Conference on Computing, Communication and Networking Technologies (ICCCNT), Bengaluru, India, 10 - 12 July 2018, pp. 1-6. doi: 10.1109/ICCCNT.2018.8494101
4. Namani Rakesh, N. Kumaresan, **S. Senthil Kumar** and M. Subbiah, "Major methods of steady-state analysis of three-phase SEIGs-A summary", Proceedings of the 3rd IEEE International Conference on Sustainable Energy Technologies (IEEE ICSET 2012), 24th – 27th September 2012, Kathmandu, Nepal, pp. 415-419.
5. Namani Rakesh, N. Kumaresan, **S. Senthil Kumar** and M. Subbiah, "Performance predetermination of variable speed wind-driven grid-connected SEIGs", Proceedings of the IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES 2012), 16th – 19th December 2012, Bengaluru, India.
6. **S. Senthil Kumar**, N. Kumaresan, and T. Karthikeyan, "A Simple Analog Voltage Controller for Three-Phase Single Switch Boost Rectifier", Proceedings of 10th International Conference on Environment and Electrical Engineering (EEEIC- 2011), 8-11, May 2011, Rome, Italy.
7. **Kumar, S.S.** ; Dharmireddy, G. ; Raja, P. ; Moorthi, S. " A voltage controller in photo-voltaic system without battery storage for Stand-Alone Applications " International Conference on Electrical, Control and Computer Engineering (INECCE), 2011, Page(s): 269 – 274.
8. M.Kaliyamoorthi, **S.Senthil Kumar** " Solar Powered Boost Inverter with Neural Network Based MPPT algorithm" International Conference on Energy Conversion Technologies, ICAECT 2010, January 7th to 10th 2010.
9. Tukaram, J.; **Kumar, S.S.**; Ganesh, D.; Kumar, V.S., "Investigation of PWM current mode controllers for UPF three phase - Rectifier with split DC bus based on the Scott transformer," Advances in Power Conversion and Energy Technologies (APCET), 2012 International Conference on , vol., no., pp.1,6, 2-4 Aug. 2012 doi: 10.1109/APCET.2012.6302057

National Conferences

1. A.Mary Beula , S.Mageshwari and **S.Senthil Kumar**, "Simplified Topology For Single-Phase To Three-Phase Conversion For Induction Motor Drive Using A Single-Phase Half-Bridge PWM Boost Rectifier And A Three-Leg Inverter" National Conference on Electrical Engineering and Embedded Systems. March 20th and 21st 2008, Anna University, Chennai, India.
2. **S. Senthil Kumar** and S. Sampath Kumar, "Fuzzy Logic Based Sensorless Direct Torque Control Of Induction Motor Drive" National Conference on Power Electronics And Intelligent Control March 17-18, 2007, Malaviya National Institute of Technology, Jaipur-302017, India.
3. **S. Senthil Kumar** and S. Sampath Kumar, "Reduction Of Ripples And Flux Droop In Sensorless Direct Torque Controlled Induction Motor " National Conference on Power Electronics And Intelligent Control March 17-18, 2007, Malaviya National Institute of Technology, Jaipur-302017, India.
4. **S. Senthil Kumar**, S.Himavathi and B. Geethalakshmi "DSP Based Implementation of Flux, Torque and Speed Estimators for Sensorless High Performance Drives" National Power Electronic Conference (NPEC 2005), December 2005, IIT, Kharagpur, India.
5. **S. Senthil Kumar**, S. Carthikeyan, "Implementation of DSP Based Speed Estimator Using Extended Kalman Filter for Sensorless Vector Controlled Drives" National Conference on Recent Trends in Electrical Engineering, 29th and 30th August 2005, KSR Engg College, Thiruchangcode, India.
6. **S. Senthil Kumar**, S.Himavathi and B. Geethalakshmi "Design and Implementation of Analog Estimators in Sensorless Vector Controlled Drives" National Conference on Recent Advances in Electrical Engineering (EAR 2004) 4th December 2004 , JNTU Ananthapur. India.