

Dr. S.Senthil Kumar

Publications

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 Harikrishna, 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. Madhusudanan, 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. Madhusudanan; "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 Madhusudanan, 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

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