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#### **PUBLICATION UPLOAD (LAST 5 YEARS PUBLICATION LISTS)**

1. Gnanavadivel J, Yogalakshmi P, **N. Senthil Kumar**, Veni KK. Design and development of single phase AC–DC discontinuous conduction mode modified bridgeless positive output Luo converter for power quality improvement. IET Power Electronics. 2019 May 15;12(11):2722-30.
2. Gnanavadivel, J., **N. Senthil Kumar**, S. T. Christa, and S. Muralidharan. "Design and implementation of FPGA-based high power LED lighting system for ships." (2019).
3. Gnanavadivel, J., **Kumar, N. S.**, Christa, S. T. J., & Yogalakshmi, P. (2019). Design and Implementation of High Power LED Lighting System for Health Care Applications. Current Signal Transduction Therapy, 14(1), 31-37.
4. Saiayyappa, O. R., and N. **Senthil Kumar**. "An Indirect Space Vector Scheme for IMC applied to PMSG based Wind Energy Conversion Systems." 2019 Fifth International Conference on Electrical Energy Systems (ICEES). IEEE, 2019.
5. Veni, KS Krishna, **N. Senthil Kumar**, and C. Senthil Kumar. "A comparative study of universal fuzzy logic and PI speed controllers for four switch BLDC motor drive." International Journal of Power Electronics 10.1-2 (2019): 18-32.
6. Gnanavadivel, J., P. Yogalakshmi, **N. Senthil Kumar**, and S. Muralidharan. "High efficient single stage Cuk LED driver for universal input voltage applications with

improved power quality." *Optoelectronics and Advanced Materials-Rapid Communications* 12, no. 11-12 (2018): 694-699.

7. Jayanthi, K., and **N. Senthil Kumar**. "Design of SVM technique for Matrix converter in a PMSG based Wind Energy Conversion System." *International Journal of Pure and Applied Mathematics* 120.6 (2018): 11017-11036.
8. Alagesan, J. Siva, J. Gnanavadivel, **N. Senthil Kumar**, and KS Krishna Veni. "Design and Simulation of Fuzzybased DC-DC Interleaved Zeta Converter for Photovoltaic Applications." In *2018 2nd International Conference on Trends in Electronics and Informatics (ICOEI)*, pp. 704-709. IEEE, 2018.
9. Subha, M., **N. Senthil Kumar**, and KS Krishna Veni. "Artificial Intelligence Based Stator Winding Fault Estimation in Three Phase Induction Motor." *2018 Second International Conference on Electronics, Communication and Aerospace Technology (ICECA)*. IEEE, 2018.
10. Thanzasankaran, R., ST Jaya Christa, J. Gnanavadivel, and **N.Senthil Kumar**. "Design and Analysis of Negative Output Luo Converter for Power Quality Enhancement." In *2018 International Conference on Current Trends towards Converging Technologies (ICCTCT)*, pp. 1-6. IEEE, 2018.
11. Jayanthi, K., **N. Senthil Kumar**, and Sooraj Suresh Kumar. "DESIGN OF BACK TO BACK CONVERTER FOR A PMSG BASED VARIABLE SPEED WIND ENERGY CONVERSION SYSTEM." *International Journal of Pure and Applied Mathematics* 118.18 (2018): 2259-2264.
12. Sudalaimani, M., L. V. Revathi, and **N. Senthilkumar**. "Direct Power based Sliding Mode Control of AC-DC Converter with Reduced THD." *Tehnički vjesnik* 25.1 (2018): 72-79.
13. Gnanavadivel, J., R. Thangasankaran, **N. Senthil Kumar**, K. S. Krishnaveni, and Mepco Schlenk. "Performance Analysis of PI Controller and PR Controller Based Three-Phase AC-DC Boost Converter with Space Vector PWM." *International Journal of Pure and Applied Mathematics* 118, no. 24 (2018): 1-16.
14. Sudalaimani, m., **Dr. N. Senthilkumar**, and Revathi. "Performance Enhancement of unity power factor AC-DC boost converter using bio inspired optimization algorithms." *Journal of Electrical Engineering* 18 (1), 1-8.
15. Veni, KS Krishna, **N. Senthil Kumar**, and J. Gnanavadivel. "Low cost fuzzy logic based speed control of BLDC motor drives." *2017 International Conference on Advances in Electrical Technology for Green Energy (ICAETGT)*. IEEE, 2017.

16. Gnanavadivel, J., **N. Senthil Kumar**, CN Naga Priya, and KS Krishna Veni. "Investigation of Power Quality Improvement in Super Lift Luo Converter." *International Journal of Power Electronics and Drive Systems* 8, no. 3 (2017): 1240.
17. PERUMAL, N. **SENTHIL KUMAR**, JAGATHEESA, and Senthil Kumar Natarajan. "Investigation of adaptive control of robot manipulators with uncertain features for trajectory tracking employing HIL simulation technique." *Turkish Journal of Electrical Engineering & Computer Sciences* 25.3 (2017): 2513-2521.
18. **Kumar, N. Senthil**. "Study and development of feedback controllers for single phase ac dc two stage power converters to enhance power quality."
19. Jothimani, Gnanavadivel, **Senthil Kumar Natarajan**, and Yogalakshmi Palanichamy. "Fuzzy controller based power quality improvement in three level converter with multiloop interleaved control for marine AC/DC applications." (2017).
20. Gnanavadivel, J., **N. Senthil Kumar**, and P. Yogalakshmi. "Comparative Study of PI, Fuzzy and Fuzzy tuned PI Controllers for Single-Phase AC-DC Three-Level Converter." *Journal of Electrical Engineering and Technology* 12.1 (2017): 78-90.
21. Gnanavadivel, J., **N. Senthil Kumar**, and P. Yogalakshmi. "Comparative Study of PI, Fuzzy and Fuzzy tuned PI Controllers for Single-Phase AC-DC Three-Level Converter." *Journal of Electrical Engineering and Technology* 12.1 (2017): 78-90.
22. Gnanavadivel, J., **N. Senthil Kumar**, and P. Yogalakshmi. "Implementation of FPGA based three-level converter for LIED drive applications." *Journal of Optoelectronics and Advanced Materials* 18.5-6 (2016): 459-467.
23. Smiline, E. Therese Reena, J. Gnanavadivel, ST Jaya Christa, and **N. Senthil Kumar**. "Performance evaluation of PI and fuzzy tuned PI controllers for single phase bridgeless modified SEPIC converter." In 2016 International Conference on Circuit, Power and Computing Technologies (ICCPCT), pp. 1-6. IEEE, 2016.
24. **Kumar, N. Senthil**, and S. Vimala Devi. "Design of power electronic transformer based variable speed wind energy conversion system." 2016 International Conference on Circuit, Power and Computing Technologies (ICCPCT). IEEE, 2016.
25. Kavitha, A., N. Senthil Kumar, and N. Vanaja. "Design and control of grid synchronization of renewable energy sources." 2016 International Conference on Circuit, Power and Computing Technologies (ICCPCT). IEEE, 2016.
26. Maheswari, M., and N. Senthil Kumar. "Design and control of power electronic transformer with power factor correction." 2015 International Conference on Circuits, Power and Computing Technologies [ICCPCT-2015]. IEEE, 2015.

27. Gnanavadivel, J., **N. Senthil Kumar**, and ST Jeya Christa. "Implementation of FPGA based fuzzy and hysteresis controllers for power quality improvement in single phase three-level rectifier." *Optoelectronics and Advanced Materials-Rapid Communications* 9.9-10 (2015): 1264-1272.
28. Jacob, J. Augustin, and **N. Senthil Kumar**. "FPGA implementation of optimal 3D-integer DCT structure for video compression." *The Scientific World Journal* 2015 (2015).
29. Gnanavadivel, J., Devapriya, R., **Senthil Kumar, N.**, & Jaya Christa, S. T. (2015). Performance investigation of fuzzy controller, PI controller and hysteresis current controller based three-Phase AC-DC boost converter. *International Journal of Applied Engineering Research*, 10(66), 276-283.
30. Veni, KS Krishna, C. Senthil Kumar, and **N. Senthil Kumar**. "SPEED CONTROL OF Z SOURCE FED FOUR SWITCH BLDC MOTOR DRIVE." *International Journal of Applied Engineering Research* 10, no. 9: 2015.
31. K.Aishwarya J.Gnanavadivel, **N.Senthil Kumar**, S.T.Jaya Christa, "Comparison And Analysis Of Fuzzy Logic Controller With Conventional PI Controller For Modified SEPIC Converter With Improved Power Quality" *International Journal of Applied Engineering Research (IJAER)*, Vol. 10, issue no. 9, page no. 7430-7434.