

# **Dr.J.Gnanavadivel**

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## **International Journal Publications ( Last 5 Years)**

1. Dr.N.Rathina Prabha, Dr.J.Gnanavadivel, Ms.K.S.Krishna Veni published "Performance Investigation of Single Switch Dual Output DC-DC SEPIC Converter for PV Applications" International Journal of Advanced Science and Technology, Vol.29, Issue.5, pp.4676-4683, May-2020
2. Mrs.K.Jayanthi, Dr.N.Senthil Kumar, Dr.J.Gnanavadivel published "Energy management of distributed renewable energy sources for residential DC microgrid applications" International Transactions on Electrical Energy Systems, Vol.30, Issue.3, pp.1-15, March-2020
3. Dr.J.Gnanavadivel, Miss.P.Yogalakshmi, Dr.N.Senthil Kumar, Ms.K.S.Krishna Veni published "Design and development of single phase AC–DC discontinuous conduction mode modified bridgeless positive output Luo converter for power quality improvement" IET Power Electronics, Vol.12, Issue.11, pp.2722-2730, September-2019
4. Dr.J.Gnanavadivel, Dr.N.Senthil Kumar, Dr.S.T.Jaya Christa, Dr.S.Muralidharan published "Design and implementation of FPGA-based high power LED lighting system for ships" Indian Journal of Geo-Marine Sciences (IJMS), Vol.48, Issue.5, pp.724-729, May-2019
5. Dr.J.Gnanavadivel, Dr.N.Senthil Kumar, Dr.S.T.Jaya Christa, Miss.P.Yogalakshmi published "Design and Implementation of High Power LED Lighting System for Health Care Applications" Current Signal Transduction Therapy, Vol.14, Issue.1, pp.31-37, March-2019
6. Dr.J.Gnanavadivel, Miss.P.Yogalakshmi, Dr.N.Senthil Kumar, Dr.S.Muralidharan published "High efficient single stage Cuk LED driver for universal input voltage applications with improved power quality" OPTOELECTRONICS AND ADVANCED MATERIALS – RAPID COMMUNICATIONS , Vol.12, Issue.11-12, pp.694-699, December-2018
7. Dr.S.Muthukaruppasamy, Dr.A. Abudhahir, Dr.A.Gnana Saravanan, Dr.J.Gnanavadivel, Dr.P.Duraipandi published "Design and Implementation of PIC/FLC plus SMC for Positive Output Elementary Super Lift Luo Converter working in Discontinuous Conduction Mode" Journal of Electrical Engineering & Technology, Vol.13, Issue.5, pp.1886-1900, September-2018
8. Dr.J.Gnanavadivel, Mr.Thangasangaran, Dr.N.Senthil Kumar, Ms.K.S.Krishna Veni published "Performance Analysis of PI Controller and PR Controller Based Three - Phase AC-DC Boost Converter with Space Vector" International Journal of Pure and Applied Mathematics, Vol.118, Issue.24, pp.1-16, June-2018
9. Dr.J.Gnanavadivel, Dr.N.Senthil Kumar, Mrs.C.N. Naga Priya, Ms.K.S.Krishna Veni published "Investigation of Power Quality Improvement in Super Lift Luo Converter" International Journal of Power Electronics and Drive System, Vol.8, Issue.3, pp.1240-1250, September-2017

10. Dr.J.Gnanavadivel, Dr.N.Senthil Kumar, Miss.Yogalakshmi P published "Fuzzy controller based power quality improvement in three level converter with multiloop interleaved control for marine AC-DC applications " Indian Journal of Geo-Marine Sciences, Vol.46, Issue.09, pp.1908-1919, September-2017
11. Dr.J.Gnanavadivel, Dr.N.Senthil Kumar, Miss.P.Yogalakshmi published "Comparative Study of PI, Fuzzy and Fuzzy tuned PI Controllers for Single-Phase AC-DC Three-Level Converter" Journal of Electrical Engineering & Technology, Vol.12, Issue.1, pp.78-90, January-2017
12. Dr.J.Gnanavadivel, Dr.N.Senthil Kumar, Miss. C. N. NAGA PRIYA, Dr.S.T.Jaya Christa, Ms.K.S.Krishna Veni published "Single phase positive output super-lift Luo converter fed high power LED lamp with unity power factor and reduced source current harmonics" JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS , Vol.18, Issue.11-12, pp.1007-1017, November-2016
13. Dr.J.Gnanavadivel, Dr.N.Senthil Kumar, Miss.Yogalakshmi P published "Implementation of FPGA based three-level converter for LED drive applications" JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS , Vol.18, Issue.3-4, pp.459-467, March-2016
14. Dr.J.Gnanavadivel, Miss.Devapriya.R, Dr.N.Senthil Kumar, Dr.S.T.Jaya Christa published "Performance Investigation of Fuzzy Controller, PI Controller and Hysteresis Current Controller Based Three - Phase AC-DC Boost Converter" International Journal of Applied Engineering Research, Vol.10, Issue.66, pp.276-283, December-2015
15. Dr.J.Gnanavadivel, Dr.N.Senthil Kumar, Dr.S.T.Jaya Christa published "Implementation of FPGA based fuzzy and hysteresis controllers for power quality improvement in single phase three-level rectifier" Optoelectronics And Advanced Materials-Rapid Communications, Vol.9, Issue.9-10, pp.1264-1272, September-2015
16. Dr.J.Gnanavadivel, Dr.N.Senthil Kumar, Dr.S.T.Jaya Christa, Miss.K.Aishwarya published "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, Vol.10, Issue.9, pp.7430-7434, July-2015

### **International Conference Publications: (Last 5 Years)**

1. Dr.J.Gnanavadivel, Mr.Siddharth T., Dr.S.T.Jaya Christa published "Enhancement of Power Quality using AC-Dc Non Isolated Converter Fed BLDC Motor Drive For Medical Applications" 7th IEEE International Virtual Conference on Smart Structures and Systems, July-2020
2. Mr.Siddharthan T, Dr.J.Gnanavadivel, Dr.S.T.Jaya Christa published "Design and analysis of Interleaved Buck-Boost Converter for Household Appliances" 4th International Conference on Trends in Electronics and Informatics (IEEE), SCAD College of Engineering and Technology, Tirunelveli , , June-2020
3. Dr.S.Joe magellah, Dr.Muralidharan, Dr.J.Gnanavadivel published "A NEW SINGLE STAGE BRIDGELESS BUCK-BOOST CONVERTER WITH POSITIVE OUTPUT VOLTAGE FOR PFC APPLICATIONS" International Conference on Recent Advancements in Electrical, Electronics, Computer and Communication Engineering (IConRAEECC'19), , December-2019
4. Miss.M.Periyanayagi, Dr.N.Rathina Prabha, Dr.J.Gnanavadivel published "Design and analysis of single switch dual output DC-DC SEPIC converter for PV applications" 2019 IEEE International Conference on

- Innovations in Communications, Computing and Automation (ICCI-19), Eswari Engineering College, Chennai. 23/03/2019, , March-2019
5. Mr.S.T.Siddharthan , Dr.S.T.Jaya Christa, Dr.J.Gnanavadivel published "Design and Simulation of Single Switch Dual Output Buck-Boost AC-DC Converter for Power Factor Correction" International Conference on Innovations in Engineering, Science and Technology –ICIEST’2019 , Kalasalingam Institute of Technology, Krishnankoil-15/02/2019-16/02/2019., , February-2019
  6. Mr.J.Siva Alagesan, Mr.K.Karthik Kumar, Dr.J.Gnanavadivel, Dr.I.Kathir published "Design and Simulation of DC-DC Interleaved Zeta Converter for Renewable Energy Applications" International Conference on Recent Advancements in Electrical, Electronics and Control Engineering (IConRAEeCE’18), , May-2018
  7. Mr.B.Karthikeyan, Mr.O.R.Saiyyappa, Dr.S.T.Jaya Christa, Dr.J.Gnanavadivel published "Design and Analysis of Interleaved SEPIC converter" International Conference on Recent Advancements in Electrical, Electronics and Control Engineering (IConRAEeCE’18), , May-2018
  8. Mr.J.Siva Alagesan, Dr.J.Gnanavadivel, Dr.N.Senthil Kumar, Ms.K.S.Krishna Veni published "Design and Simulation of Fuzzybased DC-DC Interleaved Zeta Converter for Photovoltaic Applications" IEEE Sponsored 2nd International Conference on Trends in Electronics and Informatics (ICOEI 2018), pp.727-732, May-2018
  9. Mr.S.T.Siddharthan, Mr.R.Thangasankaran, Dr.J.Gnanavadivel, Dr.S.T.Jaya Christa published "Design and Analysis of DC – DC Cuk Converter with Interleaved Topology" International Conference on Recent Advancements in Electrical, Electronics and Control Engineering (IConRAEeCE’18), , May-2018
  10. Dr.J.Gnanavadivel, Mr.R.Thangasankaran, Dr.N.Senthil Kumar, Ms.K.S.Krishna Veni published "Performance analysis of PI and PR controller based three phase AC-DC Boost converter with Space Vector PWM" International Conference on Power Electronics and renewable energy systems, , April-2018
  11. Mr.R.Thangasankaran, Dr.J.Gnanavadivel, Dr.S.T.Jaya Christa, Dr.N.Senthil Kumar published "Design and Analysis of Negative Output Luo Converter for Power Quality Enhancement" IEEE International Conference on Current Trends toward Converging Technologies, pp.95-100, March-2018
  12. Mr.B.Karthikeyan, Dr.S.T.Jaya Christa, Dr.J.Gnanavadivel published "Modeling and Evaluation of Modified SEPIC Converter Fed BLDC Motor Drive" IEEE Second international conference on Electronics, Communication and Aerospace Technology ICECA 2018, , March-2018
  13. Mrs.M.Bharanilakshmi, Mr.R.Thangasankaran, Dr.J.Gnanavadivel, Dr.S.T.Jaya Christa published "Performance Evaluation of Fuzzy controlled single phase PWM Rectifier" IEEE Second International Conference on Electronics, Communication and Aerospace Technology ICECA 2018, , March-2018
  14. Mr.Mr.B.Karthikeyan, Dr.S.T.Jaya Christa, Dr.J.Gnanavadivel published "Design and Analysis of Modified SEPIC Converter" International Conference on Emerging Electrical System and Control (ICEESC-2017), , December-2017
  15. Ms.K.S.Krishna Veni, Dr.N.Senthil Kumar, Dr.J.Gnanavadivel published "Low Cost Fuzzy logic based Speed Control of BLDC Motor Drives" IEEE International Conference on Advances in Electrical Technology in Green Energy, , September-2017