Dr.S.Albert Alexander M.E.,Ph.D.,PDF (USA).,SMIEEE.,
Associate Professor
Department of Electrical and Electronics Engineering
Kongu Engineering College
Perundurai 638 060.
Phone :91 4294 226538
Email: ootyalex@gmail.com, albert@kongu.ac.in

PUBLICATIONS

BOOKS PUBLISHED

1. Ashok Kumar L and Albert Alexander S (2020), "*Power Converters for Electrical Vehicles*", CRC Press (Taylor andFrancis)
2. AshokKumarLandAlbertAlexanderS(2020),*"PowerElectronicConvertersforSolar Photovoltaic Systems*",Elsevier
3. PrakashKB,RamaniKannanandAlbertAlexanderS(2020),"*AdvancedDeepLearning for Engineers and Scientists*",Springer
4. Ashok Kumar L and Albert Alexander S (2018), *"Computational Paradigm Techniques forEnhancingElectricPowerQuality*",CRCPress(TaylorandFrancis),FirstEdition
5. Gnanvadivel J, Albert Alexander S, Senthil Kumar C and Yogalakshmi P (2017), "*Basic Electrical, Electronics and Measurement Engineering",* Anuradha Publishers, First Edition.
6. Gnanvadivel J, Karthikeyan J & Albert Alexander S, (2009), "*Special Electrical Machines*", Anuradha Publishers, ThirdEdition.

INTERNATIONAL JOURNALS
SCI/SCIE:

1. AshokKumarL,AlbertAlexanderSandUmaMaheswariY(2020),"PERFORMANCE ENHANCEMENTOFAPHOTOVOLTAICMODULEUSINGSOLARFUNCTIONAL COATINGS", Journal of Materials Science: Materials in Electronics (Springer), ACCEPTED.

2. Dishore S V and Albert Alexander S (2020), "Grid Integration of Modular Multilevel Inverter with Improved Performance Parameters", International Transactions on Electrical Energy Systems (Wiley),ACCEPTED.

3. BalrajRandAlbertAlexanderS(2020),"ANovelPVArrayInterconnectionSchemeto Extract Maximum Power Based on Global Shade Dispersion using Grey Wolf OptimizationAlgorithmunderPartialShadingConditions",CircuitWorld,ACCEPTED.

4. DishoreSV,AlbertAlexanderSandJohnyRenoaldA(2020),"DesignandControlofa Grid Integrated Modular Multilevel Inverter Using Harris Hawks Optimization",Circuit World,ACCEPTED.

5. JohnyRenoald A, Albert Alexander S, Dhanam Christina A, Jayakumar T, and SrinivasanM(2020),"ANovelApproachfortheDevelopmentofSingleSourceVoltage LiftInverterIntendedforWaterPumpIrrigationSystem",CircuitWorld,ACCEPTED.

6. Chandra ShekarPurohit, Saibal Manna, Geetha Mani and Albert Alexander S (2020), "Development of Buck Power Converter Circuit With ANN-RL Algorithm Intended for Power Industry", Circuit World,ACCEPTED.

7. Gnanavel C, Albert Alexander S, Ramani Kannan K and Geetha Mani (2020), "Investigation and Validation of Eleven Level Symmetric Modular Multilevel Inverter UsingGreyWolfOptimizationandDifferentEvolutionControlAlgorithmsforSolarPV Applications", *Circuit World*,ACCEPTED.

8. Albert Alexander S, Srinivasan M, Ravi S, SampathkumarV, Senthil Kumar S and Prakash A (2020), "Power Quality Improvement in Solar Fed Cascaded Multilevel Inverter with Output Voltage Regulation Techniques" *IEEE Access*, Vol.8, pp. 178360-178371, October 2020 (Impact factor:3.745).
9. Jaya Kumar T and Albert Alexander S (2020), "Implementation of Solar PV System Unified ZSI-Based Dynamic Voltage Restorer with U-SOGI Control Scheme for Power Quality Improvement", *Automatika - Journal for Control, Measurement, Electronics, ComputingandCommunications(TaylorandFrancis)*,Vol.61,Issue3,pp.371-387,May 2020, (Impact factor:0.764)

10. JohnyRenoald A and Albert Alexander S (2020), "Design and Development of SymmetricalSuper-LiftDC-ACConverterusingFireflyAlgorithmforSolar-Photovoltaic Applications",*IETCircuits,DevicesandSystems*,Vol.14,No.3,pp.261-269,May2020, (Impact factor:1.290)

11. Dishore S V and Albert Alexander S (2020), "A Novel PV Fed Asymmetric Multilevel Inverter with Reduced THD for a Grid-Connected System", *International Transactions on Electrical Energy Systems (Wiley)*, Vol.30, Issue 4, pp.1-25, April 2020, (Impact factor:1.692)

12. Albert Alexander S and Brad Lehman (2018), "An Intelligent Based Fault Tolerant System for Solar Fed Cascaded Multilevel Inverters", *IEEE Transactions on Energy Conversion,*Vol.33,No.3,pp.1047-1057,September2018,(Impactfactor:4.501).

13. GnanavelCandAlbertAlexanderS(2018),"ExperimentalValidationofanElevenLevel Symmetrical Inverter Using Genetic Algorithm and Queen Bee Assisted Genetic Algorithm for Solar Photovoltaic Applications", *Journal of Circuits, Systems and Computers,Vol.27.No.13,pp*.(185021)1-23,April2018(Impactfactor:1.363).

14. Albert Alexander S, (2017), "Development of High Performance Solar Photovoltaic InverterwithAdvancedModulationTechniquestoImprovePowerQuality",*International Journal of Electronics (Taylor and Francis), Vol.104, Issue 2, pp.174-189, January2017* (Impact factor:1.004).

15. Albert Alexander S, (2016), "Development of Solar Photovoltaic Inverter with Reduced Harmonic Distortions Suitable for Indian Sub-Continent", *International Journal of Renewable & Sustainable Energy Reviews (Elsevier), Vol.56,pp.694-704*, April 2016 (Impact factor:12.110).

16. Albert Alexander S &Manigandan T, (2015), "Modeling and Analysis of Modular MultilevelConverterforSolarPhotovoltaicApplicationstoImprovePowerQuality",IET *Transactions on Renewable Power Generation*, Vol.9, No.1, pp.78-88, January 2015, (Impactfactor:3.605),

BEST PAPER AWARD FOR CONSECUTIVE 2YEARS

17. Albert Alexander S &Manigandan T, (2015), "Optimal Harmonic Stepped Waveform TechniqueforSolarfedCascadedMultilevelInverter",*JournalofElectricalEngineering andTechnology,*Vol.10,No.1,pp.261-270,January2015,(Impactfactor:0.736).

18. Albert Alexander S &Manigandan T, (2014), "Design and Development of Digital Control Strategy for Solar Photovoltaic Inverter to Improve Power Quality", *Journal of Control Engineering and Applied Informatics,* Vol.16, No.4, pp.20-29, December 2014, (Impact factor:0.775).

19. Albert Alexander S &Manigandan T, (2014), "Power Quality Improvement in Solar Photovoltaic System to Reduce Harmonic Distortions using Intelligent Techniques", *Journal of Renewable and Sustainable Energy*, Vol.6, Issue.4, pp.043127 (1)-(19), June 2014, (Impact factor:1.51).

20. Albert Alexander S &Manigandan T, (2014), "Reduction of Voltage Harmonics inSolar Photovoltaic fed Inverter of Single phase Stand Alone Power System" *Journal of Solar Energy Engineering - Transactions of the ASME*, Vol.136, No.4, pp.044501 (1)-(4), November 2014, (Impactfactor:1.641).
21. Albert Alexander S &Manigandan T, (2014), "Digital Control Strategy for Solar Photovoltaic Fed Inverter to Improve Power Quality", *Journal of Renewable and Sustainable Energy*, Vol.6, Issue.1, pp.013128 (1)-(18), January 2014, (Impact factor: 1.575).

Scopus and other Referred Journals:

22. AlbertAlexanderS,ManojKumarK,BalajiM,ManojKumarSandUsharaniS,"AReal Time Implementation of Fault Detection Strategy in DC Microgrid Using Internet of Things",*InternationalJournalofScientificandTechnologyResearch,*Volume-9Issue-2, pp.4261-4267, February2020.

23. Albert Alexander S and Karthik.K, "An Analysis of Positive Output Cascade Boost Converter for Electric Vehicle Applications", *International Journal of Scientific and Technology Research,* Volume-9 Issue-2, pp.4722-4727, February2020.

24. Sarin C R, Geetha Mani and Albert Alexander S (2019) "Demand Response Model for DuckCurveonPVDominatedSystemusingSupportVectorMachinesBasedMultistage Modeling", *International Journal of Engineering and Advanced Technology*, Volume-9 Issue-1, pp.5272-5283, October2019.

25. Ramani Kannan, Hesham Khalid, Indragandhi V and Albert Alexander S (2018), "Threshold Voltage and Drain Current Investigation of Power MOSFET ZVN3320FTA by2DSimulations",*InternationalJournalofSimulationSystems,Science&Technology*, Vol.19, No.6, pp.39 (1-6), December2018.

26. Jaya Kumar T and Albert Alexander S (2018), "A Novel Hybrid Algorithm Controlled Modified Sepic Converter for Photovoltaic Fed Seventeen Level Multilevel Inverter", *JournalofElectricalEngineering,Vol.19.1.112,pp.1-10,*(Impactfactor:0.5).

27. Albert Alexander S &Haritha K P, (2014), "Output Voltage Regulation Techniques for Solar Fed Cascaded Multilevel Inverter", *International Journal of Advanced Information ScienceandTechnology*,Vol.23,No.23,pp.67-73,March2014,(Impactfactor:3.564).

28. Albert Alexander S &Manigandan T, (2013), "Modeling and Simulation of Artificial Neural Network based Harmonic Elimination Technique for Solar - Fed Cascaded Multilevel Inverter", *International Review on Modeling and Simulations*, Vol.6, No.4, pp.1048-1055, August 2013, (ICV5.94).

29. AlbertAlexanderS&KarthikeyanJ,(2008),"MultipleFeedbackloopcontrolstrategyfor UPS Inverters using Artificial Neural Networks", *International Journal of Applied Engineering Research*, Vol.3, No.5, pp.649-658, May2008.

30. AlbertAlexanderS&KarthikeyanJ,(2008),"ApplicationsofArtificialNeuralNetworks in Power Electronics", *KASC Journal of Computer Science*, Vol.2, Issue 3, pp. 603- 618.

INTERNATIONAL CONFERENCES

1. Albert Alexander S (2019), "Design and Fabrication of Solar Powered Cooking System with Improved Performance Parameters", Proceedings of the International Conference on RecentInnovationsinEngineering,TechnologyandManagement,22nd March2019.

2. Albert Alexander S (2019), "Design and Development of Canny Travel Kit", Proceedings of the International Conference on Recent Innovations in Engineering, Technology and Management, 22nd March2019.

3. AlbertAlexanderS&GayathriS(2016),"DesignandDevelopmentofMultilevelInverter withLevelDoublingNetwork",ProceedingsoftheInternationalConferenceonElectrical, Electronics and Computer Engineering, pp.61-65, 21-23 March2016.

4. Albert Alexander S &Tharanya R (2016), "Integer Wavelet Transform Based Approach for High Robustness of Audio Signal Transmission", Proceedings of the International Conference on Electrical, Electronics and Computer Engineering, pp.260-265, 21-23 March2016.

5. Albert Alexander S &Suganya P (2016), "Design of Multifunctional Dynamic Voltage RestorerwithImprovedPowerQuality",ProceedingsoftheIEEEsponsoredInternational Conference on Innovations in Information, Embedded and Communication Systems, pp.785-790, 17-18 March2016.

6. Albert Alexander S &ShanmugaAravind P (2013), "Harmonic Minimization of a Solar fed Cascaded H Bridge Inverter using Artificial Neural Network", Proceedings of the InternationalConferenceonEnergyEfficientTechnologiesforSustainability,pp.163-167, March2013.

7. Albert Alexander S, Manigandan T, ShanmugaAravind P & Deepak Kumar M, (2013), "Modeling and Simulation of Solar Photovoltaic's using MATLAB", Proceedings of the InternationalSimulationConferenceofIndia,IndianInstituteofTechnology,Madras,21- 23 February2013.

8. Albert Alexander S, Manigandan T, Deepak Kumar M & Vishnu Vardhan R (2012), "A Comparison of Simulation Tools for Power Electronics", Proceedings of the First InternationalSimulationConferenceofIndia,IndianInstituteofTechnology,Bombay,02- 04 February2012.
9. Albert Alexander S &Manigandan T, (2011), "Analog Control Scheme for Cascaded Multilevel Inverters using Multiple carrier PWM Technique", Proceedings of the International Conference on Recent Advancements in Electrical, Electronics and Control Engineering,MepcoSchlenkEngineeringCollege**,**Sivakasi,15-17December2011.

10. Albert Alexander S, Manigandan T &Saranya E, (2011), "Fault Detection and Diagnosition of Cascaded Multilevel Inverter using ANN", Proceedings of the Second International Conference on Science and Technology,VITUniversity**,** 21-22 April 2011.
11. Albert Alexander S &Manigandan T, (2009), "Digital Switching Scheme for Cascaded Multilevel inverters", Proceedings of the Third International Conference on Power Systems,IndianInstituteofTechnology,Kharagpur,27-29December2009.

12. Albert Alexander S, Karthikeyan J &Sivavasath A, (2007), "Applications of Artificial Neural Networks in Power Electronics", Proceedings of the International Conference on Computational Intelligence and Multimedia Applications, MepcoSchlenk Engineering College, Sivakasi, 13–15 December2007.-

13. Albert Alexander S &Sivavasath A, (2007), "Design, Simulation and Implementation of UPS inverters using Artificial Neural Network Controller", Proceedings of the InternationalConferenceonTrendsinIndustrialMeasurementsandAutomation,National Institute of Technology, Trichy, 4-6 January2007.

NATIONAL CONFERENCES

1. Gnanavel J and Albert Alexander (March 2017), "Design and Development of Modular Multilevel DC-AC Inverter for Solar PV Application Based on Multiple Carrier PWM Technique", Proceedings of the "Future Technologies for Combat Vehicles", Combat VehiclesResearch&DevelopmentEstablishment(DRDO),MinistryofDefence,Avadi, 24-25 March2017.

2. GnanavelJandAlbertAlexander(February2016),"SinglePhaseSymmetricalMultilevel Inverter for Solar PV Applications Based on Modified Multiple Carrier PWM Techniques",ProceedingsoftheSecondNationalPowerEngineeringResearchScholar's Conference (NPERSC- 2018), IIT Madras, 24-25 February2016.

3. Albert Alexander S &Suganya P (March 2016), "Design of Multifunctional Dynamic Voltage Restorer", Proceedings of the National Conference on Energy, Environment and Ethics, PeriyarUniversity.

4. AlbertAlexanderS&VivekanandhanM,(March2012),"VariousSwitchingTechniques for Solar fed Cascaded Multilevel Inverter", Proceedings of the Samanway National Student Conference, Indian Institute of Science,Bangalore.

5. Albert Alexander S &Karthikeyan J, (May 2009), "Implementation of Cascaded Multilevel Inverters", Proceedings of the National Conference on Recent Trends in ElectricalandCommunicationTechnologies,METSSchoolofEngineering,Thrissur.

6. Albert Alexander S, (February 2008), "Zero Voltage Switching of Half bridge DC-DC Converter with Modified PWM control", Proceedings of the Fourth National Conference on Cutting Edge Technologies in Power Conversion and Industrial Drives, Bannari Amman Institute of Technology,Sathyamangalam.

7. Albert Alexander S &Sivavasath A, (February 2007), "UPS inverter using Neural NetworkController",ProceedingsoftheFirstNationalConferenceonEmergingTrendsin PowerSystems,K.L.N.CollegeofEngineering,Pottapalyam,Sivagangai.

8. AlbertAlexanderS&SivavasathA,(March2007),"ArtificialNeuralNetworkController for UPS Inverter Applications", Proceedings of the National Conference on Innovative StrategiesonPowerSystemsandPowerElectronicsDrives,SonaCollegeofTechnology, Salem.

9. Albert Alexander S, (September 2006), "Artificial Neural Networks", Proceedings of the NationalLevelConventionVIBRANZ'06organizedbyISTEStaff&StudentsChapterof MepcoSchlenk Engineering College, Sivakasi. Secured FIRSTplace.

10. Albert Alexander S & Suresh S, (February 2006), "Multilevel Inverter Based on MultistageConnectionofThreeLevelConvertersScaledinPowerofThree",Proceedings of National Conference on Power Electronics and Power Systems, MepcoSchlenk Engineering College,Sivakasi.