## **JOURNALS**

- Saurabh Kumar, VijayakumarKrishnasamy, Rajvir Kaur "Unified controller for bimodal operation of Cuk converter assisted SEIG based DC nanogrid " IEEE Systems Journal(IEEE Xplore), 2020. DOI: 10.1109/JSYST.2020.2998472
- Saurabh Kumar, VijayakumarKrishnasamy, Mukkapati Ashok BhupathiKumar ,Rajvir Kaur, ChittiBabuB"An Improved Control Strategy for Cuk Converter Assisted Wind Driven SEIG for DC Nanogrid" IET Electric Power Application(IEEE Xplore), 2020. DOI: 10.1049/iet-epa.2020.0412
- 3. Saurabh Kumar, **VijayakumarKrishnasamy**, SatyanarayanaNeeli, Rajvir Kaur "Artificial Intelligence Power Controller of Fuel Cell Based DC Nanogrid " Renewable Energy Focus (Elsevier), 2020. https://doi.org/10.1016/j.ref.2020.05.004
- Saurabh Kumar and VijayakumarKrishnasamy, "Simulation and Experimental comparative analysis of the DC-DC converter topologies for wind driven SEIG fed DC nanogrid" Electric Power System Research (Elsevier), 2020. <a href="https://doi.org/10.1016/j.epsr.2020.106196">https://doi.org/10.1016/j.epsr.2020.106196</a>
- Mukkapati Ashok BhupathiKumar ,VijayakumarKrishnasamy, Rajvir Kaur, "Genetic algorithm assisted fixed frequency sliding mode controller for quadratic boost converter in fuel cell vehicle" IET Electrical Systems in Transportation(IEEE Xplore), Volume:10(1) / 389–395 / 2020. DOI: 10.1049/iet-est.2019.0015
- Rajvir Kaur, VijayakumarKrishnasamy, Nandha Kumar Kandasamy and Saurabh Kumar, "
  Discrete multi-objective grey wolf algorithm based optimal sizing and sensitivity analysis of
  PV-wind-battery system for rural telecom towers" IEEE Systems Journal(IEEE Xplore),
  2019. DOI: 10.1109/JSYST.2019.2912899
- 7. Kumar, S., **Vijayakumar, K**. &Neeli, S., "A SEIG-Based DC Nanogrid for Rural Electrification" J. Inst. Eng. India Ser. B (Springer), 2019. <a href="https://doi.org/10.1007/s40031-019-00401-3">https://doi.org/10.1007/s40031-019-00401-3</a>
- Saurabh Kumar, PeriasamyChinnamuthan and VijayakumarKrishnasamy, "Study on Renewable Distributed Generation, Power Controller and Islanding Management in Hybrid Microgrid System" Journal of Green Engineering, Volume :8 /37-70/ 2018
- 9. KandasamyNandha Kumar, **KrishnasamyVijayakumar**, and ChaudhariKalpesh. "Virtual energy storage capacity estimation using ANN-based kWh modelling of refrigerators." IET Smart Grid (IEEE Xplore) Volume :1 / -- / 2018.
- 10. Rajvir Kaur, Vijayakumar K, Nandha Kumar Kandasamy,"Optimal sizing of wind-PV based DC microgrid for telecom power supply in remote areas", IET Renewable Power Generation (IEEE Xplore) Volume: 12 / 859 866 / 2018
- 11. Arathy Varghese, C. Periasamy, Lava Bhargava and **K. Vijayakumar**, "Impact of AlN interlayers in epitaxial and passivation scheme on the DC and microwave performance of

- doping less GaN HEMT" Journal of Nanoelectronics and Optoelectronics, Volume :2 / 8 / 2018
- 12. Prerak Bhardwaj and **Vijayakumar K**, "Analysis and modelling of standalone wind driven doubly fed induction generator" International Journal of Engineering & Technology, vol. 7 (6) pp. 112-116, March 2018.
- 13. LintuRajan, C.Periasamy, Vijayakumar.K, and VineetSahula, "An Investigation on Electrical and Hydrogen Sensing Characteristics of RF Sputtered ZnO Thin-Film With Palladium Schottky Contacts", IEEE Sensors Journal (IEEE Xplore) Volume: 17 / 14-21 / 2016
- 14. Rajvir Kaur, VijayakumarKrishnasamy, KaleeswariMuthusamy, PeriasamyChinnamuthan ,"A novel proton exchange membrane fuel cell based power conversion system for telecom supply with genetic algorithm assisted intelligent interfacing converter", Energy Conversion and Management (Elsevier) Volume: 136 / 173-183 / 2017
- 15. **K. Vijayakumar.**, and Kumaresan, N., "Experimental Investigation and Controller Development for Variable Speed Wind-Driven DFIG." International Journal of Advanced Research in Engineering 2.1 (2016): 24-29.
- TA Binshad, K Vijayakumar ,"PV based water pumping system for agricultural irrigation" ,
   Frontiers in Energy (Springer) Volume :10 / 319–328 / 2016
- 17. **K.Vijayakumar**, N.Kumaresan, and N.AmmasaiGounden ,"Speed Sensor-Less Maximum Power Point Tracking and Constant Output Power Operation of Wind-Driven Wound Rotor Induction Generators", IET Power Electronics (IEEE Xplore) Volume :8 / 33 46 / 2015
- 18. Rajvir Kaur, **VijayakumarKrishnasamy**, Nandhakumar K, "Optimal sizing and technoeconomic analysis of wind-PV based DC microgrid for telecom power supply in remote areas" IET Renewable Power Generation, 2018
- Rajvir Kaur, VijayakumarKrishnasamy, Periasamy C, "Performance enhancement of intelligent hybrid power conversion controller for fuel cell powered standalone telecom loads" IET Power Electronics (Communicated), 2017
- Saurabh Kumar, Vijayakumar K, Rajvir Kaur, Natarajan Kumaresan, "Operation of Cukconverter assisted wind driven SEIG in DC nanogrid" IET Electric Power Application (Communicated), 2017
- 21. Khushboo Shah, Vijayakumar K, Rajvir Kaur, SatyanarayanaNeeli and Kaleeswari M, "A novel Cuk converter assisted PV fed DC water pumping system with modified sliding mode controller for enhanced power conversion" IET Generation, Transmission & Distribution (Communicated), 2017
- 22. Ashish Laddha, **Vijayakumar K**, SatyanarayanaNeeli, "Brief Study on Multiple Port Converters with Sliding Mode Control" IEEE International Conference on Current Trends towards Converging Technologies (IEEE ICCTCT 2018) (accepted)

- 23. Prereak Bhardwaj, Vijayakumar K, "Analysis and modeling of standalone wind driven doubly fed induction generator" IEEE Conference On Emerging Devices And Smart Systems ICEDSS 2018, 2018(accepted)
- 24. Kaleeswari M, Madheswaran M., and **Vijayakumar K.,** "Comparative study on steady state performance of wind-driven DFIG system," IEEE Conference On Emerging Devices And Smart Systems ICEDSS 2018, 2018(accepted)
- 25. Prereak Bhardwaj, **Vijayakumar K**, "Modelling, operation and speed estimation of standalone wind driven doubly fed induction generator" IEEE 2nd International Conference on Inventive Systems and Control (ICISC 2018), 2018 (accepted)

## **INTERNATIONAL CONFERENCES:**

- Saurabh Kumar, Vijayakumar K, "A SEIG based DC Nanogrid Supplying Isolated Residential Loads "33rd IEI National Convention of Electrical Engineers to be held at NIT Tiruchirappalli during November 24-25, 2017
- Khushboo shah, Vijayakumar K, SatyanarayanaNeeli, "Sliding Mode Assisted MPPT
  Technique Using Quadratic Boost Converter for Solar PV based DC Water Pumping
  System" IEEE International Conference on Intelligent Computing and Control (I2C2), 2017
  (presented)
- Prereak Bhardwaj, Vijayakumar K, "Recent Trends in Configuration and Application of Multilevel Inverters in Electrical Energy Conversion System" IEEE International Conference on Intelligent Computing and Control (I2C2), 2017 (presented)
- 4. Kaleeswari M, Madheswaran M., and **Vijayakumar K**., "Investigation on PV fed hybrid electric vehicles with various power electronic circuits," IEEE 2017 International Conference on Advances in Electrical Technology for Green Energy (ICAETGT), 2017(presented)
- 5. Ashok bhupathikumarMukkapati, VijayakumarKrishnasamy, SatyanarayanaNeeli, "Observer-based state estimation for sensor-less control of quadratic boost converter in renewable system" accepted and presented in International Conference on Renewable and Sustainable Energy (ICRSE) 2017, Coimbatore.
- Khushboo Shah, Rajvir Kaur, VijayakumarKrishnasamy, SatyanarayanaNeeli, "Fuzzy logic based mppt technique using cuk converter for solar pv powered electric vehicle" accepted and presented in International Conference on Renewable and Sustainable Energy (ICRSE) 2017, Coimbatore.
- Rajvir Kaur, Saurabh Kumar, VijayakumarKrishnasamy, "Artificial intelligence based controller for PV-based telecom power supply" accepted and presented in International Conference on Renewable and Sustainable Energy (ICRSE) 2017, Coimbatore.
- 8. KhushbooKeshari, SatyanarayanaNeeli and **Vijayakumar K**, "Design of a sliding-modecontrolled dc-dc converter for MPPT in grid-connected PV System" accepted and

- presented in IEEE International conference on electrical, instrumentation and communication engineering (ICEICE 2017), 27-28 April 2017
- Ashok bhupathikumarMukkapati, Rajvir Kaur, VijayakumarKrishnasamy,
   SatyanarayanaNeeli, "Voltage regulation of quadratic boost converter with fixed frequency
   sliding mode controller" accepted and presented in IEEE International conference on
   electrical, instrumentation and communication engineering (ICEICE 2017), 27-28 April
   2017.
- Kaleeswari M, Madheswaran M., Binshad T and Vijayakumar K., "A modified power electronic converter topology for stand-alone photovoltaic power generation system," 6th IEEE International Electric Drives Production Conference (EDPC), Nuremberg, 2016, pp. 158-163
- 11. K. Vijayakumar and N. Kumaresan, "Experimental Investigation and Controller Development for Variable Speed Wind-driven DFIG" Proceedings of the Third International Conference on Engineering, Science, Business and Management 2016 (ICESBM 2016), 9th & 10th March 2016, Dubai, UAE.
- 12. Kaleeswari M, **K.Vijayakumar**, "A detailed steady state performance analysis of variable speed wind turbine operated DFIG" Proceedings of the National Conference in POWER & ENERGY (NCPE'16) 2016, 23 March 2016, Tirunelveli, India.

## **NATIONAL CONFERENCES:**

- Kaleeswari M, K.Vijayakumar, "Prototype development of automatic fuse failure management system for distribution network" Proceedings of the National Conference in POWER & ENERGY (NCPE'16) 2016, 23 March 2016, Tirunelveli, India.
- 2. Rajvir Kaur, **K.Vijayakumar**, "Genetic Algorthim Tuned PI Controller for Performance Improvement of Boost Converter" Proceedings of the National Conference in POWER & ENERGY (NCPE'16) 2016, 23 March 2016, Tirunelveli, India.
- 3. C. Peng Huat, S. Chen, M. Wang, **K.Vijayakumar**, "Land-based energy management system (LEMS) incorporating renewable energy resources and shore power applications", Research Project Report in Department of Electrical and Electronics Engineering, Nanyang Technological University, Singapore.
- 4. **K.Vijayakumar**, "Control Strategy for WRIG System With Certain Power Electronic Converter Topologies for Effective Utilization of Wind Energy", Report submitted in Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli, India.
- 5. **K.Vijayakumar**, "Analysis of three-phase grid connected Induction Generators under unbalanced operation", Report submitted in Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli, India.

- 6. **K.Vijayakumar**, "Analysis of three-phase induction motor operating from single-phase supply", Report submitted in Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli, India.
- 7. **K.Vijayakumar**, M.Dineshkumar, Udhayasuriyan and S.Valanarasu "Automatic fuse failure management in distribution of electricity", Report submitted in Department of Electrical and Electronics Engineering, Coimbatore Institute of Technology (Anna University-Chennai), Coimbatore, India.