Dr.Kumaravel S
Associate Professor
Department of Electrical Engineering
National Institute of Technology, Calicut, Kerala-673 601

LIST OF PUBLICATIONS

1. Shanthi Seshadri, S. U. Prabha and **S. Kumaravel**, Non-isolated n-stage High Step-up DC-DC Converter for Low voltage DC Source Integration, **IEEE Transactions on Energy Conversion**, DOI: 10.1109/TEC.2021.3050421

2. G. G. Kumar, and **S. Kumaravel,** Dual-Input Non-isolated DC-DC Converter with Vehicle to Grid Feature, **IEEE Journal of Emerging and Selected Topics in Power Electronics,** DOI: 10.1109/JESTPE.2020.3042967

3. G. G. Kumar, M. V. S. Krishna, **S. Kumaravel** and E. Babaei, "Multi-stage DC-DC Converter using Active LC2D Network with Minimum Component," in **IEEE Transactions on Circuits and Systems II: Express Briefs**, doi: 10.1109/TCSII.2020.3021609.

4. G Gurukumar, MVS Krishna, **S. Kumaravel**, E Babaei, SiC-based high-gain DC–DC converters with fault ride-through capability **IET Power Electronics**, Volume 13, Issue 16, December 2020, p. 3744 – 3752

5. RA Narayanankutty, Ashok S, **S. Kumaravel**, Modeling and scheduling of residential electric loads for energy self-sufficiency, **International Journal of Numerical Modelling: Electronic Networks, Devices** 2020, e2782, doi.org/10.1002/jnm.2782

6. Haritha G, **Kumaravel S** and Ashok S, Xilinx System Generator-based Rapid Prototyping of Solid-State Transformer for On- Grid Renewable Energy Integration", **IEEE Journal of Emerging and Selected Topics in Power Electronics.** 10.1109/JESTPE.2019.2963277

7. Khushboo Gupta, Ravishankar A. N., **Kumaravel S.**, and Ashok S.Optimal Location Identification for Aggregated Charging of Electric Vehicles in Solar Photovoltaic Powered Microgrids with Reduced Distribution Losses, **Energy Sources, Part A: Recovery, Utilization, and Environmental Effects**, Taylor & Francis, Mar 2020, doi.org/10.1080/15567036.2020.1745335

8. HD. Prince Winston, Kumaravel S, B. Praveen Kumar,Devakirubakaran S. “Performance Improvement of Solar PV Array Topologies during Various Partial Shading Conditions”, **Solar Energy**, Elsevier, Volume 196, 15 January 2020, pp 228-242

9. Gangavarapu Guru Kumar, **Kumaravel Sundaramoorthy**, Venkitusamy Karthikeyan, Ebrahim Babaei, "Switched Capacitor-Inductor Network based Ultra-Gain DC-DC Converter using Single Switch", **IEEE Transactions on Industrial Electronics**, vol. 67, no. 12, pp. 10274-10283, Dec. 2020, doi: 10.1109/TIE.2019.2962406.

10. G. Guru kumar, **Kumaravel S**.,Sivaprasad A. and Karthikeyan, "A Novel Dual Input Super Boost DC-DC Converter for Solar Powered Electric Vehicle", **IET Power Electronics**,vol. 12, no. 9, pp. 2276-228

11. Kumaravel S., Ravishankar A. N., V. Seshagiri Rao, and Ashok S., "A Dual Input-Dual Output DC-DC Converter for Solar PV/Battery/Ultra-capacitor Powered Electric Vehicle Application", **IET Power Electronics**, vol. 12, no. 13, pp. 3351-3358.

12. Venkitusamy Karthikeyan, **Kumaravel Sundaramoorthy**, Gangavarapu Guru Kumar, Ebrahim Babaei, Regenerative switched-inductor/capacitor type DC–DC converter with large voltage gain for PV applications, **IET Power Electronics** doi: 10.1049/iet-pel.2019.0408

13. V. Karthikeyan, **Kumaravel S.**, G.Guru kumar "High Step-Up Gain DC-DC Converter with Switched Capacitor and Regenerative Boost Configuration for Solar PV Applications," **IEEE Transactions on Circuits and Systems--II: Express Briefs** (doi: 10.1109/TCSII.2019.2892144)

14. R K. Mathew, Ashok S. and **Kumaravel S**., "An Improved Algorithm for Power Distribution System Restoration using Microgrids for Enhancing Grid Resiliency", **Electric Power Components and Systems**, Taylor & Francis (doi.org/10.1080/15325008.2018.1527868)

15. Sivaprasad A, G. G. Kumar, **Kumaravel S**, Ashok S.:"Performance Analysis of a Positive Output Voltage Dual Input DC-DC Converter for Hybrid Energy Application, **Journal of Circuits, Systems, and Computers** (doi.org/10.1142/S0218126618501591)

16. Sivaprasad A, **Kumaravel S**, and Ashok S.:"Development and Performance Analysis of Dual Input DC-DC Converters for DC Microgrid Application", **IEEJ Transactions on Electrical and Electronic Engineering** (doi.org/10.1002/tee.22661)

17. Sivaprasad A., G. G. Kumar, **Kumaravel S**. and Ashok S., "Performance Analysis of Novel Bridge Type Dual Input DC-DC Converters", in **IEEE Access**, 2017, Vol. 5, pp. 15340-15353.

18. Sivaprasad A, **Kumaravel S**, Ashok S.:Design, Fabrication and Performance Analysis of a Two Input—Single Output DC-DC Converter, **Energies**, 2017, Vol. 10, pp. 1-18.

19. Kumaravel S. and Ashok S: Optimal Power Management Controller for a Stand-alone Solar PV/Wind/Battery Hybrid Energy System, **Energy Sources, Part A: Recovery, Utilization, and Environmental Effects**, Taylor & Francis, 37(2015), 407–415

20. Kumaravel S. and Ashok S: Performance Evaluation of a Control Strategy Developed for a Hybrid Energy System Integrated, **Electric Power Components and Systems**, Taylor & Francis, 42 (2014), 1762–1770

21. P.Balamurugan and **S.Kumaravel**: The Development of a Generalized Optimal Operating Strategy for a Hybrid Energy System, **International Journal of Green Energy,** Taylor & Francis, 11 (2014), 417–430

22. P. Karthic, Shiny Joseph, Naveenji Arun, and **S. Kumaravel**: Optimization of biohydrogen production by Enterobacter species using artificial neural network and response surface methodology, **Journal of Renewable and Sustainable Energy**, 5-3 (2013), 1-13

23. Kumaravel S. and Ashok S, An Optimal Stand-alone Biomass/Solar-PV/Pico-Hydel Hybrid Energy System for Remote Rural Area Electrification of Isolated Village in Western-Ghats Region of India, **International Journal of Green Energy**, Taylor & Francis, Aug 2012, Vol 9: 398–408

SCOPUS Journal Publications:

1. Kumaravel S., Vinu Thomas, Terence O'Donnell and Ashok S., "Transient Frequency Response Improvement of Microgrid using Virtual Synchronous Machine", Journal of The Institution of Engineers (India): Series B (IEIB) (Accepted)

2. Vinu Thomas, **Kumaravel S**, Sivaprasad A, Ashok S.:"Testing of a Solar-PV/Wind operated AC-DC Microgrid with LabVIEW Controller, International Journal of Power Electronics and Drive Systems (doi.org/10.11591/ijpeds.v9.i1.pp406-413)

3. Sivaprasad A, **Kumaravel S**, Ashok S.: A Modified Dual Input DC-DC Converter for Hybrid Energy Application, International Journal of Power Electronics and Drive System (IJPEDS), March 2017, Vol., 8, pp. 81-92 .

4. Sivaprasad A., **Kumaravel S**., and Ashok S: "Comparison of Two Dual Input DC-DC Converter Topologies for Renewable Energy Integration", International Journal of Applied Engineering Research, 2015, Vol. 10, No. 18, pp. 38923-38930.

5. Kumaravel S: Development of the hard and soft constraints based optimisation model for unit sizing of the hybrid renewable energy system designed for microgrid applications, International Journal of Sustainable Energy, Taylor & Francis, 2015, 1-17.

6. Kumaravel S. and Ashok S, Modeling and simulation of Back Propagation Artificial Neural Network Based Smart Controller for Stand-alone Renewable Hybrid Energy System, International Review on Modelling and Simulations, Oct 2011, Vol 4. No.5 Part B, pp. 2456-2461.