

**Dr. K.Udhayakumar,**  
**Professor,**  
**Department of Electrical and Electronics Engineering,**  
**College of Engineering Guindy,**  
**Anna University, Chennai.**

**List of Publications (Last Five Years):**

1. Sreedhar, T & **Udhayakumar K**, "Supply Voltage Fluctuation Immune SHEPWM For Multilevel Inverters Working With Fluctuating Dc Sources", International Journal Of Advanced Engineering Technology, published by International Journal Of Advanced Engineering Tech. Vol. 7, Issue 1, pp. 622-631 (2015).
2. Sreedhar T & **Udhayakumar K**, " Negative Harmonics Injection Cuddled Equal Area Criteria Based Selective Harmonic Elimination Pulse Width Modulation Techniques For Multilevel Cascaded Inverters", Journal of Computational And Theoretical Nanoscience, published by Journal of Computational And Theoretical Nanoscience. pp. Ref number CTN 20-980-112 (2016).
3. Sreedhar T & **Udhayakumar K**, "Genetic Algorithm Based Selective Harmonic Elimination Technique For Multilevel Inverters With Unequal Voltage Sources", Association for advancement of Modeling and Simulation techniques in Enterprises, published by AMSE. pp. Paper number 13511 (2016).
4. T. Ramachandran T. Sreedhar, **K. Udhayakumar**, E. Aswini, "A Single Phase Modified H-Bridge Seven Level Inverter with Reduced Power Electronic Switches", International Journal of Control Theory and Applications, published by International Science Press, Gurgaon, India. Vol. 10, Issue 29, pp. 273 - 283 (2017).
5. Annamalai Thiruvengadam, **K Udhayakumar**, "An Enhanced H-Bridge Multilevel Inverter with Reduced THD, Conduction, and Switching Losses Using Sinusoidal Tracking Algorithm", Energies, published by MDPI, Open Access Journal. Vol. 12, Issue 1, pp. 1-22 (2018).
6. Annamalai Thiruvengadam, **K Udhayakumar**, "A new multi-level inverter with reduced number of switches based on modified H-bridge", International Journal of Power Electronics, published by Inderscience Publishers (IEL). Vol. 10, Issue 1, pp. 49-64 (2019).
7. Manikannan Palanivel & **Udhayakumar Kaithamalai**, "Fuzzy based MPPT Technique for Photovoltaic System with Boost and Super lift Boost Converters", Journal of Electrical Engineering, published by EP. Vol. 19, Issue 8, pp. 80- 87 (2019).
8. Shijin C S and **K. Udhayakumar**, "Path Tracking Controller Design of Differentially Driven Wheeled Mobile Robots using Cascaded Adaptive PID Controller", Interciencia Journal, published by Interciencia. Vol. 45, Issue 1, pp. 1-8 (2020).

9. Krishnamoorthy R , **Udhayakumar K**, Kannadasan Raju, Rajvikram Madurai Elavarasan, and Lucian Mihet-Popa, "An Assessment of Onshore and Offshore Wind Energy Potential in India Using Moth Flame Optimization", *Energies*, published by MDPI. Vol. 13, Issue 3063, pp. 1-41 (2020).
10. Manikannan Palanivel & **Udhayakumar Kaithamalai**, "A Comparative Analysis of Intelligent Controller Based MPPT for Photovoltaic System with Super Lift Boost Converter", *Technical Gazette*, published by Croatia. Vol. 27, Issue 2, pp. 589-596 (2020).

### **List of Presented in Programs:**

11. T Annamalai, **K Udhayakumar**, "Simulation and Analysis of Various H-Bridge Inverter Topologies Employed in Cascaded Multi-level Inverter" presented in a International level conference on International Conference on Emerging Trends and Innovations in Engineering and Technological Research (ICETIETR - 2018), organised by Toc H Institute of Technology, Kerala, India .
12. T Annamalai, **K Udhayakumar**, "A New 23 Level Cascaded Multi-Level Inverter with Optimum Structure" presented in a International level conference on 2018 4th International Conference on Electrical Energy Systems (ICEES), organised by 2018 4th International Conference on Electrical Energy Systems (ICEES), India .
13. T. Annamalai, **K. Udhayakumar**, S. Anitha, D. Pachaikani, P. Sasikumar, M. Mythily, "Energy Efficient Reference Tracking Modified Enhanced H-Bridge Multilevel Inverter" presented in a International level conference on IEEE International Conference on Energy, Systems and Information Processing (ICESIP), organised by IIITDM, Kancheepuram, India from 04-Jul-2019 to 06-Jul-2019.