

Dr. K. Vijayakumar

Professor & Head of the Department,
Department of Electrical and Electronics Engineering,
Kattankulathur Campus,
SRM Institute of Science and Technology (formerly known as SRM University)
Mail: hod.eee.ktr@srmist.edu.in
Mobile: 9941540915

Publications:

1. Ramasamy, P., Krishnasamy, V., “Minimization of Common-Mode Voltage for Five-Phase Three-Level NPC Inverter Using SVPWM Strategy”, Iranian Journal of Science and Technology - Transactions of Electrical Engineering, 2020, **Impact Factor: 0.6**
2. Lavanya, A., Jegatheesan, R., Vijayakumar, K., “Design of Novel Dual Input DC–DC Converter for Energy Harvesting System in IoT Sensor Nodes”, Wireless Personal Communications, 2020. **Impact Factor: 0.929**
3. Ranipriya, G., Jegatheesan, R., Vijayakumar, K., , “An integrated four port bidirectional dc-dc converter for photovoltaic energy harvesting systems”, IEICE Electronics Express, 2019, 16(23), **Impact Factor: 0.586**
4. Savari, G.F., Krishnasamy, V., Sugavanam, V., Vakesan, K.,” Optimal Charging Scheduling of Electric Vehicles in Micro Grids Using Priority Algorithms and Particle Swarm Optimization” Mobile networks and applications, 24(6), pp. 1835-1847,2019. **Impact Factor:2.39**
5. Navamani, D., Vijayakumar, K., Manoraj, J.” Reliability Analysis of High Gain Integrated DC-DC Topologies for Xenon Lamp Applications” Journal of Circuits, Systems and Computers,28(10),1950168,2019. **Impact Factor:0.9**
6. Rajarajeswari, R., Suchitra, D., Vijayakumar, K., Jegatheesan, R.” Analyzing Customer Outage Cost in a Microgrid” Mobile networks and applications, 24(6), pp. 1821-1834,2019. **Impact Factor:2.39**
7. Sandeep, N., Ali, J.S.M., Yaragatti, U.R., Vijayakumar, K.” Switched-Capacitor-Based Quadruple-Boost Nine-Level Inverter” IEEE Transactions on Power Electronics, 34(8),8637753, pp. 7147-7150,2019. **Impact Factor: 7.224**
8. Navamani, J.D., Lavanya, A., Vijayakumar, K.” Modified SEPIC converter with high boosting capability”
9. Electronics Letters, 55(13), pp. 759-761, 2019. **Impact Factor: 1.343**

10. Jagabar Sathik Mohamed Ali ; Vijayakumar K, “Compact Switched Capacitor Multilevel Inverter (CSCMLI) With Self Voltage Balancing and Boosting Ability”, IEEE Transactions on Power Electronics, 2018, **Impact Factor: 6.812**
11. N Sandeep ; Jagabar Sathik ; Udaykumar Yaragatti ; Vijayakumar Krishnasamy, “,A Self-Balancing Five-Level Boosting Inverter With Reduced Components”, IEEE Transactions on Power Electronics, 2018 , **Impact Factor: 6.812**
12. Navamani, D., Vijayakumar, K., Manoraj, J.” Reliability Analysis of High Gain Integrated DC-DC Topologies for Xenon Lamp Applications” Journal of Circuits, Systems and Computers,28(10),1950168,2019. **Impact Factor:0.9**
13. Rajarajeswari, R., Suchitra, D., Vijayakumar, K., Jegatheesan, R.” Analyzing Customer Outage Cost in a Microgrid” Mobile networks and applications, 24(6), pp. 1821-1834,2019. **Impact Factor:2.39**
14. Sandeep, N., Ali, J.S.M., Yaragatti, U.R., Vijayakumar, K.” Switched-Capacitor-Based Quadruple-Boost Nine-Level Inverter” IEEE Transactions on Power Electronics, 34(8),8637753, pp. 7147-7150,2019. **Impact Factor: 7.224**
15. Navamani, D., Vijayakumar, K., Manoraj, J. “Reliability Analysis of High Gain Integrated DC-DC Topologies for Xenon Lamp Applications” Journal of Circuits, Systems and Computers,28(10),1950168,2019. **Impact Factor:0.9**
16. Rajarajeswari, R., Suchitra, D., Vijayakumar, K., Jegatheesan, R.” Analyzing Customer Outage Cost in a Microgrid” Mobile networks and applications, 24(6), pp. 1821-1834,2019. **Impact Factor:2.39**
17. Sandeep, N., Ali, J.S.M., Yaragatti, U.R., Vijayakumar, K.” Switched-Capacitor-Based Quadruple-Boost Nine-Level Inverter” IEEE Transactions on Power Electronics, 34(8),8637753, pp. 7147-7150,2019. **Impact Factor: 7.224**
18. Navamani, J.D., Lavanya, A., Vijayakumar, K. “Modified SEPIC converter with high boosting capability” Electronics Letters, 55(13), pp. 759-761, 2019. **Impact Factor: 1.343**
19. Jagabar Sathik Mohamed Ali ; Vijayakumar K, “Compact Switched Capacitor Multilevel Inverter (CSCMLI) With Self Voltage Balancing and Boosting Ability”, IEEE Transactions on Power Electronics, 2018, **Impact Factor: 6.812**
20. N Sandeep ; Jagabar Sathik ; Udaykumar Yaragatti ; Vijayakumar Krishnasamy, “,A Self-Balancing Five-Level Boosting Inverter With Reduced Components”, IEEE Transactions on Power Electronics, 2018 , **Impact Factor: 6.812**

21. Jagabar Sathik Mohamed Ali ; Rasoul Shalchi Alishah ; Krishnasamy Vijayakumar, “ A New Generalized Multilevel Converter Topology with Reduced Voltage on Switches, Power losses and Components”, IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018 , **Impact Factor: 5.177**
22. Jagabar Sathik Mohamed Ali ; Rasoul Shalchi Alishah ; N. Sandeep ; Seyed Hossein Hosseini ; Ebrahim Babaei ; Krishnasamy Vijayakumar ; Udaykumar R. Yaragatti, “ A New Generalized Multilevel Converter Topology Based on Cascaded Connection of Basic Units,IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, **Impact Factor: 5.177**
23. Ramasamy, P., Krishnasamy, V., Sathik, M.A.J., Ali, Z.M., Aleem, S.H.E.A., “ Three-Dimensional Space Vector Modulation Strategy for Capacitor Balancing in Split Inductor Neutral-Point Clamped Multilevel Inverters”,Journal of Circuits, Systems and Computers,27(14),1850232, 2018. **Impact Factor: 0.595**
24. Ramasamy, P., Krishnasamy, V , “ Common Mode Voltage Reduction Using 3D-SVPWM for 3-level CI-NPC Inverter with Hybrid Energy System”, Electric Power Components and Systems,46(4), pp. 391-405, 2018. **Impact Factor: 1.144**
25. Mohd.Ali, J.S., Krishnaswamy, V., “An assessment of recent multilevel inverter topologies with reduced power electronics components for renewable applications” (2018) Renewable and Sustainable Energy Reviews, 82, pp. 3379-3399. **Impact Factor: 9.184**
26. Palanisamy, R., Vijayakumar, K.,” A hysteresis current controller for PV-wind hybrid source fed STATCOM system using cascaded multilevel inverters” (2018) Journal of Electrical Engineering and Technology, 13 (1), pp. 270-279. **Impact Factor: 0.597**
27. Selvakumar, K., Vijayakumar, K., Boopathi, C.S.,”CSO based solution for load kickback effect in deregulated power systems,”Applied Sciences (Switzerland), 7 (11),2017. **Impact Factor: 1.484**
28. Ramasamy, P., Krishnasamy, V,“A 3D-space vector modulation algorithm for three phase four wire neutral point clamped inverter systems as power quality compensator,”(2017) Energies,10 (11),**Impact Factor: 2.676**
29. Selvakumar, K., Vijayakumar, K., Boopathi, C.S.,”Demand response unit commitment problem solution for maximizing generating companies' profit,”(2017) Energies, 10 (10), art. no. 1465 . **Impact Factor: 2.676**
30. Divya Navamani, J., Vijayakumar, K., Jegatheesan, R., Lavanya, A.,” High step-up DC-DC converter by switched inductor and voltage multiplier cell for automotive

applications,” (2016) Journal of Electrical Engineering and Technology, 12 (1), pp. 189-197. **Impact Factor: 0.597**