

**Selected Publications:**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

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**

**Papers Published in national/international journals**

International Journals: 153

International Conferences: 31

**Projects guiding:**

No Scholars completed PhD : 06

No of Scholars Submitted synopsis/thesis: 03

No PhD Scholars guiding currently : 07

M.Tech Guided: 65+

**Other Professional Experiences**

- Board of Studies member for RMK Engineering College ( autonomous) 2020
- Board of studies member for Jerusalem college of Engineering ( autonomous) 2020
- Result passing board member in Rajalakshmi Engineering College( autonomous) 2019-2020
- Serving in the board of examiners in various universities (Pondicherry University, Anna University, Annamalai University, Karunya University, etc).
- IEI Kattankulathur Local Center Committee member 2019-2020 & 2020-2021
- Technical committee head," International Conference on Future Internet Systems and Applications EDC Hotel, KL, Malaysia during 10 & 11 Dec, 2018.
- Serving as result passing board member in Rajalakshmi Engineering College 2018-19  
Vice Chairman IET Chennai Local network 2018-19
- IEEE Branch counselor for SRM Student chapter 2016-2018
- TCP Member/ Reviewer of the "5th International Conference on Advanced Computing and Communication Systems (ICACCS 2019)" at Sri Eshwar College of Engineering, Coimbatore.
- National Advisory committee member Joint International conference on Artificial intelligence on Evolutionary computation in engineering systems", 27-28 April 2017, Madanapalle Institute of Technology and Science, Ananthapuramu, AP.

**Patent Applied**

- A Novel Portable solar peltier cooler system
- A Novel small scale power generating wind mill system
- Vegetable sea food and meat cleaner and slicer
- Helmet with lock
- A device for preventing extreme climatic conditions

**Reviewer in the Journals**

IEEE Transactions on Power Electronics  
IEEE Transactions on Industry Applications  
IEEE Access  
International journal of Electrical and Computer Engineering  
International journal of Electrical power components and system.  
International journal of Ambient Energy  
International Journal of Electronics.

**Books/ Book Chapters published**

"Basic Electrical Engineering", First Edition, Vijay Nicole Imprints Pvt. Ltd, 2013  
"Electrical Engineering Practice Lab Manual", Vijay Nicole Imprints Private Ltd., First Edition, 2013.  
Proceedings of ICAIECES 2016," Artificial Intelligence and Evolutionary Computations in Engineering Systems", Springer, 2016  
"Advances in Intelligent Systems and Computing" ,Springer , 2017  
" Modern Power system Analysis with MATLAB Applications " Pearson India Education Services Ltd, 2020