

Vijayakumar K

List of Publications by Year in descending order

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papers

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docs citations

129
times ranked

742
citing authors

#	ARTICLE	IF	CITATIONS
1	Compact Switched Capacitor Multilevel Inverter (CSCMLI) With Self-Voltage Balancing and Boosting Ability. IEEE Transactions on Power Electronics, 2019, 34, 4009-4013.	5.4	131
2	A Self-Balancing Five-Level Boosting Inverter With Reduced Components. IEEE Transactions on Power Electronics, 2019, 34, 6020-6024.	5.4	100
3	Switched-Capacitor-Based Quadruple-Boost Nine-Level Inverter. IEEE Transactions on Power Electronics, 2019, 34, 7147-7150.	5.4	96
4	Internet of Things based real-time electric vehicle load forecasting and charging station recommendation. ISA Transactions, 2020, 97, 431-447.	3.1	79
5	A New Generalized Multilevel Converter Topology Based on Cascaded Connection of Basic Units. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 2498-2512.	3.7	64
6	Common-Ground-Type Five-Level Transformerless Inverter Topology With Full DC-Bus Utilization. IEEE Transactions on Industry Applications, 2020, , 1-1.	3.3	37
7	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, 2019, 7, 1094-1106.	3.7	35
8	Multi-input DC-DC converter topologies-a review. , 2016, , .		27
9	Non-isolated high gain DC-DC converter by quadratic boost converter and voltage multiplier cell. Ain Shams Engineering Journal, 2018, 9, 1397-1406.	3.5	26
10	A novel cross-connected multilevel inverter topology for higher number of voltage levels with reduced switch count. International Transactions on Electrical Energy Systems, 2020, 30, e12381.	1.2	26
11	Optimal Charging Scheduling of Electric Vehicles in Micro Grids Using Priority Algorithms and Particle Swarm Optimization. Mobile Networks and Applications, 2019, 24, 1835-1847.	2.2	23
12	SVPWM control strategy for a three phase five level dual inverter fed open-end winding induction motor. ISA Transactions, 2020, 102, 105-116.	3.1	17
13	Optimal Dynamic Scheduling of Electric Vehicles in a Parking Lot Using Particle Swarm Optimization and Shuffled Frog Leaping Algorithm. Energies, 2020, 13, 6384.	1.6	16
14	Multiobjective Optimization Methods for Congestion Management in Deregulated Power Systems. Journal of Electrical and Computer Engineering, 2012, 2012, 1-8.	0.6	15
15	An Adaptive Resistance Perturbation Based MPPT Algorithm for Photovoltaic Applications. IEEE Access, 2020, 8, 196890-196901.	2.6	13
16	Generalized Cascaded Symmetric and Level Doubling Multilevel Converter Topology with Reduced THD for Photovoltaic Applications. Electronics (Switzerland), 2019, 8, 161.	1.8	13
17	Optimal Location and Sizing of DG for Congestion Management in Deregulated Power Systems. Lecture Notes in Computer Science, 2012, , 679-686.	1.0	12
18	Demand Response Unit Commitment Problem Solution for Maximizing Generating Companies' Profit. Energies, 2017, 10, 1465.	1.6	12

#	ARTICLE	IF	CITATIONS
19	A 3D-Space Vector Modulation Algorithm for Three Phase Four Wire Neutral Point Clamped Inverter Systems as Power Quality Compensator. <i>Energies</i> , 2017, 10, 1792.	1.6	11
20	Optimal placement of capacitor in radial distribution system using PSO. , 2011, , .		10
21	Common Mode Voltage Reduction Using 3D-SVPWM for 3-level CI-NPC Inverter with Hybrid Energy System. <i>Electric Power Components and Systems</i> , 2018, 46, 391-405.	1.0	10
22	Modified SEPIC converter with high boosting capability. <i>Electronics Letters</i> , 2019, 55, 759-761.	0.5	10
23	A SVPWM Control Strategy for Capacitor Voltage Balancing of Flying Capacitor Based 4-Level NPC Inverter. <i>Journal of Electrical Engineering and Technology</i> , 2020, 15, 2639-2649.	1.2	10
24	Intelligent coordinated control for improved voltage and frequency regulation with smooth switchover operation in LV microgrid. <i>Sustainable Energy, Grids and Networks</i> , 2020, 22, 100356.	2.3	10
25	High Step-up DC-DC Converter by Switched Inductor and Voltage Multiplier Cell for Automotive Applications. <i>Journal of Electrical Engineering and Technology</i> , 2017, 12, 189-197.	1.2	10
26	A New 5-Level ANPC Switched Capacitor Inverter Topology for Photovoltaic Applications. , 2019, , .		9
27	Investigation of Adaptive Droop Control Applied to Low-Voltage DC Microgrid. <i>Energies</i> , 2021, 14, 5356.	1.6	9
28	Optimal Placement of DG in Distribution System Using Genetic Algorithm. <i>Lecture Notes in Computer Science</i> , 2013, , 639-647.	1.0	9
29	Efficiency comparison of quadratic boost DC-DC converter in CCM and DCM. , 2015, , .		8
30	CSO Based Solution for Load Kickback Effect in Deregulated Power Systems. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 1127.	1.3	8
31	Minimization of Common-Mode Voltage for Five-Phase Three-Level NPC Inverter Using SVPWM Strategy. <i>Iranian Journal of Science and Technology - Transactions of Electrical Engineering</i> , 2020, 44, 1221-1232.	1.5	8
32	Design of Novel Dual Input DC-DC Converter for Energy Harvesting System in IoT Sensor Nodes. <i>Wireless Personal Communications</i> , 2021, 117, 2793-2808.	1.8	8
33	Study on High Step-up DC-DC Converter with High Gain Cell for PV Applications. <i>Procedia Computer Science</i> , 2017, 115, 731-739.	1.2	7
34	Development of Control Techniques Using Modified Fuzzy Based SAPF for Power Quality Enhancement. <i>IEEE Access</i> , 2021, 9, 68396-68413.	2.6	7
35	SVPWM for 3-phase 3-level Neutral Point Clamped Inverter Fed Induction Motor Control. <i>Indonesian Journal of Electrical Engineering and Computer Science</i> , 2018, 9, 703.	0.7	7
36	GPS & GSM Based Accident Detection And Auto Intimation. <i>Indonesian Journal of Electrical Engineering and Computer Science</i> , 2018, 11, 356.	0.7	7

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37	Unmanned and autonomous ground vehicle. International Journal of Electrical and Computer Engineering, 2019, 9, 4466.	0.5	7
38	Application of Sinusoidal Pulse Width Modulation Based Matrix Converter as Revolutionized Power Electronic Converter. Lecture Notes in Electrical Engineering, 2015, , 9-17.	0.3	6
39	Analysis of modified quadratic DC-DC boost converter. , 2017, , .		6
40	A new symmetric multilevel converter topology with reduced voltage on switches and DC source. , 2018, , .		6
41	Optimal Placement of DG Based On Voltage Stability Index and Voltage Deviation Index. Indian Journal of Science and Technology, 2016, 9, .	0.5	5
42	Implementation of four dimensional space vector modulation for five phase voltage source inverter. Ain Shams Engineering Journal, 2021, 12, 2891-2898.	3.5	5
43	A survey on power management strategies of hybrid energy systems in microgrid. International Journal of Electrical and Computer Engineering, 2020, 10, 1667.	0.5	5
44	An integrated four port bidirectional dc-dc converter for photovoltaic energy harvesting systems. IEICE Electronics Express, 2019, 16, 20190495-20190495.	0.3	5
45	Common Ground Nine-Level Boost Inverter for Grid-Connected PV Applications. Frontiers in Energy Research, 0, 10, .	1.2	5
46	Multiple Textured Objects Segmentation Using DWT Based Texture Features in Geodesic Active Contour. , 2007, , .		4
47	Power Loss Minimization by the Placement of DG in Distribution System Using GA. Lecture Notes in Computer Science, 2012, , 259-266.	1.0	4
48	Power Loss Minimization by the Placement of DG in Distribution System Using PSO. Advances in Intelligent Systems and Computing, 2013, , 497-504.	0.5	4
49	Realization of Matrix converter as revolutionized power electronic converter employing sinusoidal pulse width modulation. , 2013, , .		4
50	Optimal location of multiple TCSCs for congestion management. , 2013, , .		4
51	Comparison of high gain topologies of non-isolated dc-dc converters for fuel cell application. , 2013, , .		4
52	Modelling and Analysis of Voltage Mode Controlled Luo Converter. American Journal of Applied Sciences, 2015, 12, 766-774.	0.1	4
53	Three-Dimensional Space Vector Modulation Strategy for Capacitor Balancing in Split Inductor Neutral-Point Clamped Multilevel Inverters. Journal of Circuits, Systems and Computers, 2018, 27, 1850232.	1.0	4
54	Evolutionary algorithm based control strategy for enhanced operation of multifunction grid connected converters. Journal of Intelligent and Fuzzy Systems, 2019, 36, 4461-4478.	0.8	4

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55	Minimization of Common-Mode Voltage of Three-Phase Five-Level NPC Inverter Using 3D Space Vector Modulation. <i>Journal of Circuits, Systems and Computers</i> , 2020, 29, 2050229.	1.0	4
56	Solar Charging Infrastructure for E-vehicles - A Review. , 2021, , .		4
57	A new method for locating TCSC for congestion management in deregulated electricity markets. <i>International Journal of Power and Energy Conversion</i> , 2009, 1, 313.	0.2	3
58	Hybrid Multilevel Inverter Topology With Reduced Part Count. , 2018, , .		3
59	Switched-Capacitor-Based Three-Phase Five-Level Inverter Topology With Reduced Components. , 2018, , .		3
60	Optimal Scheduling and Economic Analysis of Hybrid Electric Vehicles in a Microgrid. <i>International Journal of Emerging Electric Power Systems</i> , 2018, 19, .	0.6	3
61	Performance analysis of triple port DC-DC converter for energy harvesting systems. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	3
62	Reliability and performance analysis of a high step-up DCâ€“DC converter with a coupled inductor for standalone PV application. <i>International Journal of Ambient Energy</i> , 2020, 41, 1327-1335.	1.4	3
63	Experimental and numerical analysis on SVPWM based grid connected photovoltaic system. <i>Materials Today: Proceedings</i> , 2021, 45, 1583-1590.	0.9	3
64	Unified power quality conditioner with reduced switch topology for distributed networks. <i>Wireless Networks</i> , 2021, 27, 909-923.	2.0	3
65	Hybrid Energy Source Fed Fuzzy-Based SVPWM for 5-Level NPC Inverter with Grid Connected System. <i>Journal of Circuits, Systems and Computers</i> , 2021, 30, 2150180.	1.0	3
66	Expandable transformer-less high-gain dcâ€“dc converter based on quasi-Z source and multiplier cells. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2021, 46, 1.	0.8	3
67	A hysteresis space vector modulation for interleaved Vienna rectifier fed 3â€“level neutral point clamped inverter system. <i>International Transactions on Electrical Energy Systems</i> , 2021, 31, e12983.	1.2	3
68	A Comparative Analysis of Hysteresis Current Control SVM and 3D-SVM for 3-Level NPC Inverter. <i>Journal of Circuits, Systems and Computers</i> , 2022, 31, .	1.0	3
69	Voltage Profile Improvement using DG in Reconfigured Distribution System. <i>International Journal of Control and Automation</i> , 2015, 8, 393-410.	0.3	3
70	Maximum Boost Control for 7-level Z-source Cascaded H-Bridge Inverter. <i>International Journal of Power Electronics and Drive Systems</i> , 2017, 8, 739.	0.5	3
71	Smart soil monitoring and water conservation using irrigation on technology. <i>Indonesian Journal of Electrical Engineering and Computer Science</i> , 2020, 19, 99.	0.7	3
72	A Hybrid Genetic Algorithm for Optimal Power Flow Incorporating FACTS Devices. , 2007, , .		2

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73	A versatile control scheme for UPQC for Power Quality Improvement. , 2011, , .		2
74	Shuffled Frog Leaping Algorithm (SFLA) for Short Term Optimal Scheduling of Thermal Units with Emission Limitation and Prohibited Operational Zone (POZ) Constraints. Indian Journal of Science and Technology, 2016, 9, .	0.5	2
75	Implementation of 5 Phase 3 Level NPC Inverter using Space Vector Modulation. Indian Journal of Science and Technology, 2016, 9, .	0.5	2
76	Market Clearing Price Calculation for a Deregulated Power Market. Indian Journal of Science and Technology, 2016, 9, .	0.5	2
77	Performance analysis of coupled inductor based Quadratic boost converter. , 2016, , .		2
78	Power electronic interface (PEI) based power flow control for micro grid environment - a review. , 2016, , .		2
79	Non-isolated high gain DC-DC converter for smart grid- A review. Journal of Physics: Conference Series, 2018, 1000, 012061.	0.3	2
80	Reliability study of high gain DC-DC converters based on RRPP I-IIA configuration for shipboard power system. Sadhana - Academy Proceedings in Engineering Sciences, 2018, 43, 1.	0.8	2
81	Transformerless three-phase Z-source four-wire voltage source inverter-fed grid-connected PV system. International Journal of Ambient Energy, 2020, , 1-9.	1.4	2
82	Three-phase 3-level Z-source NPC inverter using modified 3D-space vector modulation. International Journal of Ambient Energy, 2022, 43, 1907-1914.	1.4	2
83	Reliability and component analysis of voltage-lift quadratic boost converter for xenon lamps. Materials Today: Proceedings, 2021, 34, 437-441.	0.9	2
84	A new space vector pulse width modulated transformer less single-phase unified power quality conditioner. Materials Today: Proceedings, 2021, 45, 1750-1756.	0.9	2
85	Reduction of transients in switches using embedded machine learning. International Journal of Power Electronics and Drive Systems, 2020, 11, 235.	0.5	2
86	Simulation and Modelling of 5-Level Single Phase Z-Source based Cascaded Inverter. Indian Journal of Science and Technology, 2016, 9, .	0.5	2
87	A new multilevel DC-AC converter topology with reduced switch using multicarrier sinusoidal pulse width modulation. International Journal of Power Electronics and Drive Systems, 2020, 11, 752.	0.5	2
88	Switching pulse generation for DC-DC boost converter using Xilinx-ISE with FPGA processor. International Journal of Electrical and Computer Engineering, 2020, 10, 1722.	0.5	2
89	Performance evaluation of Inverter topology employing Controlled-Capacitor-Charging technique. , 2011, , .		1
90	Implementation of Sinusoidal Pulse Width Modulation for Matrix Converter using FPGA. , 2014, , .		1

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91	Matrix converter based solar photo voltaic system for reactive power compensation using sinusoidal pulse width modulation. , 2014, , .		1
92	Sharing and control of MPPT based solar power with utility for minimized utility power consumption. , 2014, , .		1
93	Comparison of relift Luo converters for LED lighting purpose. AIP Conference Proceedings, 2019, , .	0.3	1
94	Analyzing Customer Outage Cost in a Microgrid. Mobile Networks and Applications, 2019, 24, 1821-1834.	2.2	1
95	Evolutionary Algorithm based Controller Design for Grid tie Inverter to improve the Quality of Power System. , 2019, , .		1
96	Reliability Analysis of High Gain Integrated DC-DC Topologies for Xenon Lamp Applications. Journal of Circuits, Systems and Computers, 2019, 28, 1950168.	1.0	1
97	Digitized droop control of a high gain primitive converter- General performance analysis for smart city lighting application. Computational Intelligence, 2021, 37, 1405-1414.	2.1	1
98	Performance comparison of hybrid active power filter for p-q theory and SVPWM technique. International Journal of Electrical and Computer Engineering, 2021, 11, 84.	0.5	1
99	Enhanced space vector modulated scalar control of induction motor. Indonesian Journal of Electrical Engineering and Computer Science, 2021, 21, 707.	0.7	1
100	Reactive Power Control and Neutral Current Elimination of Four Wire Five Level NPC Inverter based STATCOM using 3D-SVPWM Technique. Journal of Electrical Engineering and Technology, 2021, 16, 2083-2097.	1.2	1
101	Maximum Power Point Tracking for Wind Power Generation System at Variable Wind Speed using a Hybrid Technique. International Journal of Control and Automation, 2015, 8, 357-372.	0.3	1
102	SFLA to Solve Short Term Thermal Unit Commitment Problem with Startup and Shutdown Ramp Limits. International Review on Modelling and Simulations, 2015, 8, 661.	0.2	1
103	Parallel Connected VSI Inverter using Multi-carrier based Sinusoidal PWM Technique. Telkomnika (Telecommunication Computing Electronics and Control), 2017, 15, 1625.	0.6	1
104	Transformer based NPC multilevel inverter using reduced number of components. International Journal of Electrical and Computer Engineering, 2019, 9, 5150.	0.5	1
105	Wireless charging scheme for medium power range application systems. International Journal of Power Electronics and Drive Systems, 2020, 11, 1979.	0.5	1
106	Comparison of efficiencies of interleaved boost converter for reenergy storage system. , 2013, , .		0
107	Enhancement of power quality using shunt active power filter for microgrid application. , 2015, , .		0
108	Efficiency Modeling of High Gain DC-DC Converter for Renewable Energy Application. Lecture Notes in Electrical Engineering, 2015, , 67-81.	0.3	0

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109	Effect of pole zero location on system dynamics of boost converter for micro grid. Journal of Physics: Conference Series, 2018, 1000, 012058.	0.3	0
110	Analysis of compact high efficiency hybrid isolated forward flyback converter. AIP Conference Proceedings, 2019, , .	0.3	0
111	A Review of Energy Management Control Schemes for Energy Harvesting Systems. Lecture Notes in Electrical Engineering, 2021, , 1315-1322.	0.3	0
112	A novel collective health monitoring of a wind park. Indonesian Journal of Electrical Engineering and Computer Science, 2021, 21, 625.	0.7	0
113	Partially isolated four port converter with combined PWM and secondary phase shift control. International Journal of Electrical and Computer Engineering, 2021, 11, 1086.	0.5	0
114	Energy conservation at high power consuming holding furnace with modified coil design and electrical circuits. International Journal of Power Electronics and Drive Systems, 2021, 12, 803.	0.5	0
115	Implementation of voltage controlled Multi Device Interleaved Boost Converter using FPGA. International Review on Modelling and Simulations, 2014, 7, 422.	0.2	0
116	A Closed Loop Current Control of PV-Wind Hybrid Source Fed Grid Connected Transformerless Diode Clamped-Multi Level Inverter. International Review on Modelling and Simulations, 2015, 8, 386.	0.2	0
117	An Overview Of Single Phase Matrix Converter Applications. , 2019, , .		0
118	A two stage battery charger for EV charging applications. Indonesian Journal of Electrical Engineering and Computer Science, 2020, 19, 593.	0.7	0
119	Mathematical analysis of cost function and reliability condition for new proposed multilevel inverter topology. Indonesian Journal of Electrical Engineering and Computer Science, 2020, 20, 654.	0.7	0