

Hani Vahedi

List of Publications by Year in descending order

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80
papers

2,948
citations

236925

25
h-index

361022

35
g-index

80
all docs

80
docs citations

80
times ranked

1487
citing authors

#	ARTICLE	IF	CITATIONS
1	Sliding Mode Control of PMSG Wind Turbine Based on Enhanced Exponential Reaching Law. IEEE Transactions on Industrial Electronics, 2016, 63, 6148-6159.	7.9	204
2	Sensor-Less Five-Level Packed U-Cell (PUC5) Inverter Operating in Stand-Alone and Grid-Connected Modes. IEEE Transactions on Industrial Informatics, 2016, 12, 361-370.	11.3	144
3	Corrections to "Sensor-Less Five-Level Packed U-Cell (PUC5) Inverter Operating in Stand-Alone and Grid-Connected Modes" [Feb 16 361-370]. IEEE Transactions on Industrial Informatics, 2016, 12, 1298-1298.	11.3	137
4	Real-Time Implementation of a Seven-Level Packed U-Cell Inverter with a Low-Switching-Frequency Voltage Regulator. IEEE Transactions on Power Electronics, 2016, 31, 5967-5973.	7.9	133
5	Modified Seven-Level Pack U-Cell Inverter for Photovoltaic Applications. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 1508-1516.	5.4	133
6	Design and Implementation of Space Vector Modulation-Based Sliding Mode Control for Grid-Connected 3L-NPC Inverter. IEEE Transactions on Industrial Electronics, 2016, 63, 7854-7863.	7.9	122
7	Real-Time Implementation of Model-Predictive Control on Seven-Level Packed U-Cell Inverter. IEEE Transactions on Industrial Electronics, 2016, 63, 4180-4186.	7.9	119
8	Reduced DC-Link Voltage Active Power Filter Using Modified PUC5 Converter. IEEE Transactions on Power Electronics, 2018, 33, 943-947.	7.9	93
9	Hybrid SHM-SHE Modulation Technique for a Four-Leg NPC Inverter With DC Capacitor Self-Voltage Balancing. IEEE Transactions on Industrial Electronics, 2015, 62, 4890-4899.	7.9	90
10	A Novel Multilevel Multioutput Bidirectional Active Buck PFC Rectifier. IEEE Transactions on Industrial Electronics, 2016, 63, 5442-5450.	7.9	84
11	Sliding Mode Fixed Frequency Current Controller Design for Grid-Connected NPC Inverter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 1397-1405.	5.4	77
12	Review on Single-DC-Source Multilevel Inverters: Topologies, Challenges, Industrial Applications, and Recommendations. IEEE Open Journal of the Industrial Electronics Society, 2021, 2, 112-127.	6.8	74
13	Selective Harmonic Mitigation Based Self-Elimination of Triplen Harmonics for Single-Phase Five-Level Inverters. IEEE Transactions on Power Electronics, 2019, 34, 86-96.	7.9	72
14	Hybrid SHM-SHE Pulse-Amplitude Modulation for High-Power Four-Leg Inverter. IEEE Transactions on Industrial Electronics, 2016, 63, 7234-7242.	7.9	66
15	Crossover Switches Cell (CSC): A new multilevel inverter topology with maximum voltage levels and minimum DC sources. , 2013, , .		64
16	PUC converter review: Topology, control and applications. , 2015, , .		54
17	Fast Sensor-Less Voltage Balancing and Capacitor Size Reduction in PUC5 Converter Using Novel Modulation Method. IEEE Transactions on Industrial Informatics, 2019, 15, 4394-4406.	11.3	54
18	A new voltage balancing controller applied on 7-level PUC inverter. , 2014, , .		50

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19	A Review on Multilevel Converter Topologies for Electric Transportation Applications. , 2015, , .		50
20	Model predictive control design for DC-DC converters applied to a photovoltaic system. International Journal of Electrical Power and Energy Systems, 2018, 103, 537-544.	5.5	49
21	PUC5 inverter - a promising topology for single-phase and three-phase applications. , 2016, , .		46
22	Review and Simulation of Fixed and Adaptive Hysteresis Current Control Considering Switching Losses and High-Frequency Harmonics. Advances in Power Electronics, 2011, 2011, 1-6.	0.8	43
23	Novel Current Controller Based on MPC With Fixed Switching Frequency Operation for a Grid-Tied Inverter. IEEE Transactions on Industrial Electronics, 2018, 65, 6198-6205.	7.9	42
24	Balancing threeâ€level neutral point clamped inverter DC bus using closedâ€loop space vector modulation: realâ€time implementation and investigation. IET Power Electronics, 2016, 9, 2076-2084.	2.1	40
25	Pinned mid-points multilevel inverter (PMP): Three-phase topology with high voltage levels and one bidirectional switch. , 2013, , .		39
26	Experimental Design of Fixed Switching Frequency Model Predictive Control for Sensorless Five-Level Packed U-Cell Inverter. IEEE Transactions on Industrial Electronics, 2019, 66, 3427-3434.	7.9	39
27	Cascaded multilevel inverter with multicarrier PWM technique and voltage balancing feature. , 2014, , .		37
28	New Constraint in SHE-PWM for Single-Phase Inverter Applications. IEEE Transactions on Industry Applications, 2018, 54, 4554-4562.	4.9	37
29	LQR Control of Single-Phase Grid-Tied PUC5 Inverter With <i>LCL</i> Filter. IEEE Transactions on Industrial Electronics, 2020, 67, 297-307.	7.9	37
30	Five-Level Reduced-Switch-Count Boost PFC Rectifier With Multicarrier PWM. IEEE Transactions on Industry Applications, 2016, 52, 4201-4207.	4.9	36
31	New constraint in SHE-PWM for single phase inverter applications. , 2017, , .		33
32	Single-Phase Single-Switch Vienna Rectifier as Electric Vehicle PFC Battery Charger. , 2015, , .		32
33	Meta-Heuristic Optimization Techniques Used for Maximum Power Point Tracking in Solar PV System. Electronics (Switzerland), 2021, 10, 2419.	3.1	31
34	Optimised harmonic elimination modulation extended to fourâ€leg neutralâ€pointâ€clamped inverter. IET Power Electronics, 2016, 9, 441-448.	2.1	29
35	Phase-shift modulation technique for 5-level packed U-cell (PUC5) inverter. , 2018, , .		29
36	Selective harmonic elimination modulation technique applied on four-leg NPC. , 2014, , .		28

#	ARTICLE	IF	CITATIONS
37	A new five-level buck-boost active rectifier. , 2015, , .		27
38	Half-bridge based multilevel inverter generating higher voltage and power. , 2013, , .		25
39	Single-DC-source 7-level CHB inverter with multicarrier level-shifted PWM. , 2015, , .		25
40	A novel hysteresis bandwidth (NHB) calculation to fix the switching frequency employed in active power filter. , 2011, , .		22
41	A generalized formulation of SHM-PAM for cascaded H-bridge inverters with non-equal DC sources. , 2017, , .		22
42	Modified selective harmonic elimination employed in four-leg NPC inverters. , 2014, , .		19
43	Topology and control analysis of single-DC-source five-level packed U-cell inverter (PUC5). , 2017, , .		19
44	Nine-Level Packed U-Cell (PUC9) Inverter Topology with Single-DC-Source and Effective Voltage Balancing of Auxiliary Capacitors. , 2019, , .		18
45	Space Vector Modulation Technique on Single Phase Sensor-Less PUC5 Inverter and Voltage Balancing at Flying Capacitor. , 2018, , .		16
46	Artificial Jellyfish Search Algorithm-Based Selective Harmonic Elimination in a Cascaded H-Bridge Multilevel Inverter. Electronics (Switzerland), 2021, 10, 2402.	3.1	16
47	Finite control set model predictive controller for grid connected inverter design. , 2016, , .		15
48	Model predictive controller with fixed switching frequency for a 3L-NPC inverter. , 2016, , .		15
49	Improved hybrid SHM-SHE modulation technique for four-leg three-level NPC inverters. , 2015, , .		14
50	Low Complexity Model Predictive Control of PUC5 Based Dynamic Voltage Restorer. , 2018, , .		14
51	Static VAr compensator using packed U-cell based multilevel converter. , 2018, , .		14
52	Applications of artificial intelligence in power electronics. , 2019, , .		14
53	Solar energy processor based on Packed U-Cells 7-level inverter for grid applications. , 2016, , .		13
54	Model predictive control for the packed U-Cells 7-level grid connected inverter. , 2016, , .		13

#	ARTICLE	IF	CITATIONS
55	Generalized Phase-Shift Pulse Width Modulation for Multi-Level Converters. , 2018, , .		13
56	SHM-PWM applied on single DC source CHB with self-regulation of capacitors voltages. , 2018, , .		13
57	Single-DC-Source Multilevel Inverters. Springer Briefs in Electrical and Computer Engineering, 2019, , .	0.5	12
58	Five-level reduced-switch-count boost PFC rectifier with multicarrier PWM. , 2015, , .		11
59	Real-Time Implementation of an Optimized Model Predictive Control for a 9-Level CSC Inverter in Grid-Connected Mode. Sustainability, 2021, 13, 8119.	3.2	11
60	Single-DC-source five-level CHB inverter with sensor-less voltage balancing. , 2015, , .		10
61	Carrier based PWM for even power distribution in cascaded H-bridge multilevel inverters within single power cycle. , 2016, , .		10
62	Real-time simulation of 7-level Packed U-Cell shunt active power filter. , 2015, , .		9
63	A New Asymmetrical Cascaded Multilevel Inverter with Reduced Number of Components. , 2018, , .		8
64	Design and implementation of a new three source topology of multilevel inverters with reduced number of switches. , 2016, , .		7
65	A new SVM-based voltage balancing method for five-level NPC inverter. , 2016, , .		7
66	Comparative study of multi-objective finite set predictive control methods with new max-min strategy applied on a seven-level packed U-cell inverter. IET Power Electronics, 2019, 12, 2170-2178.	2.1	7
67	A general space-vector modulation technique for multilevel NPC inverter. , 2016, , .		6
68	The Original DSP Technique Implemented on a Five-Phase Indirect Matrix Converter 5P-IMC. , 2019, , .		6
69	Standalone Operation of Modified Seven-Level Packed U-Cell (MPUC) Single-Phase Inverter. Electronics (Switzerland), 2019, 8, 268.	3.1	6
70	Single-DC-Source Multilevel Inverters. Springer Briefs in Electrical and Computer Engineering, 2019, , 11-18.	0.5	6
71	Weighting Method to Identify Interharmonics based on Calculating the Bandwidth in Group-Harmonics. Journal of Power Electronics, 2013, 13, 170-176.	1.5	6
72	ANN based Auto-Tuned Optimized FCS-MPC for Grid-Connected CSC Inverter. , 2022, , .		6

#	ARTICLE	IF	CITATIONS
73	Conservative Power Theory Used in NPC-Based Shunt Active Power Filter to Eliminate Electric Metro System Harmonics. , 2015, , .		5
74	Fault-Tolerant Asymmetrical Multilevel Inverter With Preserved Output Power Under Post-Fault Operation. IEEE Transactions on Industrial Electronics, 2022, 69, 6764-6773.	7.9	5
75	Multi DC Source Inverters, Pros and Cons. Springer Briefs in Electrical and Computer Engineering, 2019, , 7-9.	0.5	4
76	A V2G Enabled Bidirectional Single/Three-Phase EV Charging Interface Using Modular Multilevel Buck PFC Rectifier. Electronics (Switzerland), 2022, 11, 1891.	3.1	4
77	New multilevel inverter with three extendable units. , 2017, , .		3
78	Sensor-Less Logic-Equation-Based Modulation Method for Grid-Connected PUC5 Converter. , 2018, , .		3
79	Explicit double-exponential modeling methods for photovoltaic cells. , 2017, , .		2
80	Packed U-Cell Topology. Springer Briefs in Electrical and Computer Engineering, 2019, , 19-37.	0.5	0