Hossein Iman-Eini

List of Publications by Year in Descending Order

109 papers	1,955 citations	23 h-index	39 g-index
129 ext. papers	2,489 ext. citations	5 avg, IF	5.69 L-index

#	Paper	IF	Citations
109	Optimal Switching Sequence Based Model Predictive Control for a Hybrid Multilevel STATCOM. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	1
108	Passivity-based Control of Single Phase Cascaded H-Bridge Grid-Connected Photovoltaic Inverter. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	3
107	A Highly Reliable Low-Cost Single-Switch Resonant DC-DC Converter with High Gain and Low Component Count. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	1
106	A Simple Hardware-Based Fault-Tolerant method for Cascaded H-bridge Converters. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	
105	A High Voltage Capacitor Charger Based On a Novel LCCL Resonant Converter. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	0
104	Fault-Tolerant Method to Reduce Voltage Stress of Submodules in Postfault Condition for Regenerative MMC-Based Drive. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 4718-4726	8.9	6
103	Finite control set model predictive control for static synchronous compensator based on hybrid cascaded H-bridge and neutral point clamped multilevel inverter. *International Transactions on Electrical Energy Systems*, **2021**, 31, e12745	2.2	0
102	A Software-Based Fault-Tolerant Strategy for Modular Multilevel Converter Using DC Bus Voltage Control. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 3436-3445	5.6	3
101	Symmetric Cascaded H-bridge Multilevel Inverter with Enhanced Multi-Phase Fault Tolerant Capability. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	2
100	A Fault-Tolerant Method for Cascaded H-Bridge Based Photovoltaic Inverters with Improved Active and Reactive Power Injection Capability in Post-Fault Condition. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	2
99	Fast Artificial Neural Network based Method for Estimation of the Global Maximum Power Point in Photovoltaic Systems. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	6
98	Cascaded H-bridge Based STATCOM with Improved Ride Through Capability of Submodule Failures. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	6
97	Leakage Current Suppression in Multilevel Cascaded H-Bridge Based Photovoltaic Inverters. *IEEE Transactions on Power Electronics*, **2021**, 36, 13754-13762	7.2	3
96	Predictive Control of Grid-Connected Modified-CHB with Reserve Batteries in Photovoltaic Application under Asymmetric Operating Condition. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	0
95	Utilization of Soft-Switched Boost Converter for MPPT Application in Photovoltaic Single-Phase Grid-Connected Inverter **2020**,		4
94	Modeling and estimation of the maximum power of solar arrays under partial shading conditions **2020**,		1
93	A Novel Graph-Based Routing Algorithm in Residential Multimicrogrid Systems. *IEEE Transactions on Industrial Informatics*, **2020**, 1-1	11.9	2

92	Detection and Localization of Open-Circuit Fault in Modular Multilevel Converter **2020**,		3
91	Power management in multi-microgrid system based on energy routers **2020**,		1
90	Effects of Creep Failure Mechanisms on Thermomechanical Reliability of Solder Joints in Power Semiconductors. *IEEE Transactions on Power Electronics*, **2020**, 35, 8956-8964	7.2	15
89	A Novel Extended Impedance-Power Droop for Accurate Active and Reactive Power Sharing in a Multi-Bus Microgrid With Complex Impedances. *IEEE Transactions on Smart Grid*, **2020**, 11, 3795-3804	10.7	11
88	Design and control of a STATCOM based on hybrid cascaded H-bridge and full-bridge neutral point clamped multilevel inverter. *IET Power Electronics*, **2020**, 13, 4019-4030	2.2	2
87	Design and Implementation of Ozone Production Power Supply for the Application of Microbial Purification of Water. *IEEE Transactions on Power Electronics*, **2020**, 35, 8215-8223	7.2	4
86	Modular Hybrid DC Breaker-based Adaptive Auto-Reclosing Method for MMC-HVDC Systems **2020**,		3
85	Comparative and Quantitative analyze on Reliability of MMC-Based and CHB-Based Drive Systems Considering Various Redundancy Strategies **2020**,		3
84	Improved post-fault operation strategy for a cascaded H-bridge based STATCOM. *IET Power Electronics*, **2020**, 13, 2413-2423	2.2	7
83	Improving the Reactive Current Compensation Capability of Cascaded H-Bridge Based STATCOM Under Unbalanced Grid Voltage. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 8, 1466-1476	5.6	22
82	Reliability Assessment of Multistate Degraded Systems: An Application to Power Electronic Systems. *IEEE Transactions on Power Electronics*, **2020**, 35, 4024-4032	7.2	14
81	DC Fault Current Blocking With the Coordination of Half-Bridge MMC and the Hybrid DC Breaker. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 5503-5514	8.9	16
80	An Impedance-Power Droop Method for Accurate Power Sharing in Islanded Resistive Microgrids. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 8, 3763-3771	5.6	12
79	Reciprocal and Self-Aging Effects of Power Components on Reliability of DC–DC Boost Converter With Coupled and Decoupled Thermal Structures. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2019**, 9, 2506-2513	1.7	5
78	Dual-output DC/DC boost converter for bipolar DC microgrids. *IET Renewable Power Generation*, **2019**, 13, 1402-1410	2.9	15
77	Neural Network based Maximum Power Point Tracking Technique for PV Arrays in Mobile Applications **2019**,		3
76	A New Space Vector Modulation Technique for Reducing Switching Losses in Induction Motor DTC-SVM Scheme **2019**,		2
75	Efficient real-time estimation for DFIG performance and reliability enhancement of grid/micro-grid connected energy conversion systems. *Journal of Renewable and Sustainable Energy* , **2019**, 11, 025503	2.5	4

74	. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 2756-2765	8.9	52
73	Evaluation of loss effect on optimum operation of variable speed micro-hydropower energy conversion systems. *Renewable Energy*, **2019**, 131, 1022-1034	8.1	14
72	A Robust LESO-based DC-Link Voltage Controller for Variable Speed Hydro-Electric Plants **2019**,		4
71	**2019**,		2
70	Estimation and Interruption of Short Circuit Currents in HVDC Systems **2019**,		1
69	Investigation of a cascaded H-bridge photovoltaic inverter under non-uniform insolation conditions by hardware-in-the-loop test. *International Journal of Electrical Power and Energy Systems*, **2019**, 105, 330-340	5.1	13
68	Analysis, Design, and Implementation of DC–DC IBBC-DAHB Converter With Voltage Matching to Improve Efficiency. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 5209-5219	8.9	9
67	Improved Fault-Tolerant Method for Modular Multilevel Converters by Combined DC and Neutral-Shift Strategy. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 2454-2462	8.9	23
66	A Gate Driver Circuit for Series-Connected IGBTs Based on Quasi-Active Gate Control. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2018**, 6, 791-799	5.6	14
65	Reactive power sharing improvement of droop-controlled DFIG wind turbines in a microgrid. *IET Generation, Transmission and Distribution*, **2018**, 12, 842-849	2.5	15
64	. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 6436-6445	8.9	47
63	A New Interleaved Coupled-Inductor Nonisolated Soft-Switching Bidirectional DC–DC Converter With High Voltage Gain Ratio. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 5529-5538	8.9	61
62	**2018**,		1
61	A new strategy for load side harmonic reduction using grid-connected photovoltaic inverters **2018**,		2
60	Improved control algorithm for grid-connected cascaded H-bridge photovoltaic inverters under asymmetric operating conditions. *IET Power Electronics*, **2018**, 11, 407-415	2.2	23
59	Selective Harmonic Elimination Technique With Control of Capacitive DC-Link Voltages in an Asymmetric Cascaded H-Bridge Inverter for STATCOM Application. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 8788-8796	8.9	40
58	Adaptive Sensorless SM-DPC of DFIG-Based WECS Under Disturbed Grid: Study and Experimental Results. *IEEE Transactions on Sustainable Energy*, **2018**, 9, 570-581	8.2	5
57	MPPT Method for PV Systems Under Partially Shaded Conditions by Approximating I–V Curve. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 3966-3975	8.9	49

56	Sliding mode control of DFIG powers in the case of unknown flux and rotor currents with reduced switching frequency. *International Journal of Electrical Power and Energy Systems*, **2018**, 96, 347-356	5.1	17
55	Reliable simple method for suppression of leakage current in grid-connected CHB inverters. *IET Power Electronics*, **2018**, 11, 2170-2177	2.2	8
54	An efficient online time-temperature-dependent creep-fatigue rainflow counting algorithm. *International Journal of Fatigue*, **2018**, 116, 284-292	5	23
53	A Reliable Three-Phase Transformerless Grid-Connected PV Inverter With Inductive DC Link. *IEEE Journal of Photovoltaics*, **2018**, 8, 1305-1312	3.7	7
52	ZCS-PWM interleaved boost converter using resonance-clamp auxiliary circuit. *IET Power Electronics* , **2017**, 10, 405-412	2.2	8
51	Reduction of capacitor voltage ripple in a modular multilevel converter employed in adjustable speed drive application **2017**,		2
50	A new control method for improving the performance of Modular multilevel converter **2017**,		2
49	A New High-Switching-Frequency Modulation Technique to Improve the DC-Link Voltage Utilization in Multilevel Converters. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 1807-1817	8.9	10
48	Fault-Tolerant Operation of Three-Phase Cascaded H-Bridge Converters Using an Auxiliary Module. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 1018-1027	8.9	69
47	Global Maximum Power Point Tracking Method for Photovoltaic Arrays Under Partial Shading Conditions. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 2855-2864	8.9	70
46	A Method to Control the Interphase Power Controller with Common DC Bus. *Electric Power Components and Systems*, **2017**, 45, 1996-2006	1	3
45	Non-equal DC link Voltages in a Cascaded H-Bridge with a Selective Harmonic Mitigation-PWM Technique Based on the Fundamental Switching Frequency. *Journal of Power Electronics*, **2017**, 17, 106-114	0.8	9
44	Dynamic voltage restorer employing multilevel cascaded H-bridge inverter. *IET Power Electronics*, **2016**, 9, 2196-2204	2.2	29
43	Hybrid Modulation Technique for Grid-Connected Cascaded Photovoltaic Systems. *IEEE Transactions on Industrial Electronics*, **2016**, 63, 7843-7853	8.9	43
42	Modulation technique for Four-Leg Voltage Source Inverter without a Look-Up Table. *IET Power Electronics*, **2016**, 9, 648-656	2.2	14
41	Improving the Performance of a Cascaded H-Bridge-Based Interline Dynamic Voltage Restorer. *IEEE Transactions on Power Delivery*, **2016**, 31, 1160-1167	4.3	39
40	A novel PSO (Particle Swarm Optimization)-based approach for optimal schedule of refrigerators using experimental models. *Energy*, **2016**, 107, 707-715	7.9	10
39	Selective harmonic elimination pulse width modulation in single-phase modular multilevel converter **2015**,		3

38	Modified step-up boost converter with coupled-inductor and super-lift techniques. *IET Power Electronics*, **2015**, 8, 898-905	2.2	14
37	Selective Harmonic Elimination in Asymmetric Cascaded Multilevel Inverters Using a New Low-frequency Strategy for Photovoltaic Applications. *Electric Power Components and Systems*, **2015**, 43, 964-969	1	17
36	Using auxiliary signals as a simple method for balancing DC bus voltages in cascaded H- bridge converters **2015**,		4
35	Increasing the number of voltage levels in single-phase multilevel converters **2015**,		3
34	DC link voltage balancing approach for cascaded H-bridge active rectifier based on selective harmonic elimination-pulse width modulation. *IET Power Electronics*, **2015**, 8, 583-590	2.2	38
33	State feedback control strategy and voltage balancing scheme for a transformer-less STATic synchronous COMpensator based on cascaded H-bridge converter. *IET Power Electronics*, **2015**, 8, 906-917	2.2	29
32	Improved Phasor Estimation Method for Dynamic Voltage Restorer Applications. *IEEE Transactions on Power Delivery*, **2015**, 30, 1467-1477	4.3	31
31	Open-circuit fault detection and localization in Modular Multilevel Converter **2015**,		4
30	A voltage balancing strategy with extended operating region for cascaded H-bridge converters. *IEEE Transactions on Power Electronics*, **2014**, 29, 5044-5053	7.2	80
29	Control scheme for cascaded H-bridge converter-based distribution network static compensator. *IET Power Electronics*, **2014**, 7, 2837-2845	2.2	25
28	A new switching strategy for transformer-less back-to-back cascaded H-bridge multilevel converter. *IET Power Electronics*, **2014**, 7, 1868-1877	2.2	21
27	Selective harmonic mitigation-pulse-width modulation technique with variable DC-link voltages in single and three-phase cascaded H-bridge inverters. *IET Power Electronics*, **2014**, 7, 924-932	2.2	56
26	Optimal selective harmonic elimination for cascaded H-bridge-based multilevel rectifiers. *IET Power Electronics*, **2014**, 7, 350-356	2.2	38
25	Modified space vector modulation for fault-tolerant operation of multilevel cascaded H-bridge inverters. *IET Power Electronics*, **2013**, 6, 742-751	2.2	77
24	An LCL-based interface connecting photovoltaic back-up inverter to load and grid **2013**,		7
23	An optimal selective harmonic mitigation technique for high power converters. *International Journal of Electrical Power and Energy Systems*, **2013**, 49, 34-39	5.1	53
22	A new maximum power point tracking strategy for PV arrays under uniform and non-uniform insolation conditions. *Solar Energy*, **2013**, 91, 221-232	6.8	81
21	Molecular analysis of typical and atypical enteropathogenic Escherichia coli (EPEC) isolated from children with diarrhoea. *Journal of Medical Microbiology*, **2013**, 62, 191-195	3.2	21

20	Developed MPPT Algorithm for Photovoltaic Systems without a Voltage Sensor. *Journal of Power Electronics*, **2013**, 13, 1042-1050	0.9	5
19	Stable operation of grid connected Cascaded H-Bridge inverter under unbalanced insolation conditions **2013**,		20
18	A Redundancy-based scheme for balancing DC-link voltages in cascaded H-bridge rectifiers. *IET Power Electronics*, **2013**, 6, 235-243	2.2	13
17	Stationary super-capacitor energy storage system to save regenerative braking energy in a metro line. *Energy Conversion and Management*, **2012**, 56, 206-214	10.6	91
16	Characterization of Alloiococcus otitidis strains isolated from children with otitis media with effusion by Pulsed-Field Gel Electrophoresis. *International Journal of Pediatric Otorhinolaryngology*, **2012**, 76, 1658-60	1.7	2
15	A minimum loss switching method using space vector modulation for cascaded H-bridge multilevel inverter **2012**,		17
14	Grid-Connected Photovoltaic System Based on a Cascaded H-Bridge Inverter. *Journal of Power Electronics*, **2012**, 12, 578-586	0.9	22
13	Fault-tolerant operation of a medium voltage drive based on the Cascaded H-bridge inverter **2011**,		2
12	Optimal stationary super-capacitor energy storage system in a metro line **2011**,		10
11	Phenotypic and genotypic evaluation of fluoroquinolone resistance in clinical isolates of Staphylococcus aureus in Tehran. *Medical Science Monitor*, **2011**, 17, PH71-4	3.2	5
10	Molecular analysis and antimicrobial susceptibility of methicillin resistant Staphylococcus aureus in one of the hospitals of Tehran University of Medical Sciences: high prevalence of sequence type 239 (ST239) clone. *Acta Microbiologica Et Immunologica Hungarica*, **2011**, 58, 31-9	1.8	17
9	A new strategy for control of cascaded H-bridge rectifiers with uneqaul loads **2011**,		5
8	Enhancing the reliability of single-phase CHB-based grid-connected photovoltaic energy systems **2011**,		14
7	Multiple-Locus Variable Number of Tandem Repeats Fingerprinting (MLVF) and Virulence Factor Analysis of Methicillin Resistant Staphylococcus aureus SCCmec type III. *Polish Journal of Microbiology*, **2011**, 60, 303-307	1.8	10
6	Multiple-locus variable number of tandem repeats fingerprinting (MLVF) and virulence factor analysis of methicillin resistant Staphylococcus aureus SCCmec type III. *Polish Journal of Microbiology*, **2011**, 60, 303-7	1.8	4
5	Maximum power point tracking for photovoltaic arrays with minimum sensors **2010**,		2
4	Extending the operating range of cascaded H-bridge based multilevel rectifier under unbalanced load conditions **2010**,		10
3	A Fault-Tolerant Control Strategy for Cascaded H-Bridge Multilevel Rectifiers. *Journal of Power Electronics*, **2010**, 10, 34-42	0.9	23

2	A modular power electronic transformer based on a cascaded H-bridge multilevel converter. *Electric Power Systems Research*, **2009**, 79, 1625-1637	3.5	36
1	. *IEEE Transactions on Power Electronics*, **2008**, 23, 2428-2442	7.2	123