

# Maryam Saeedifard

## List of Publications by Year in descending order

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102  
papers

8,742  
citations

147566

31  
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114278

63  
g-index

102  
all docs

102  
docs citations

102  
times ranked

5878  
citing authors

#	ARTICLE	IF	CITATIONS
1	Trends in Microgrid Control. IEEE Transactions on Smart Grid, 2014, 5, 1905-1919.	6.2	2,316
2	Operation, Control, and Applications of the Modular Multilevel Converter: A Review. IEEE Transactions on Power Electronics, 2015, 30, 37-53.	5.4	1,813
3	Dynamic Performance of a Modular Multilevel Back-to-Back HVDC System. IEEE Transactions on Power Delivery, 2010, 25, 2903-2912.	2.9	1,114
4	Real-Time Simulation Technologies for Power Systems Design, Testing, and Analysis. IEEE Power and Energy Technology Systems Journal, 2015, 2, 63-73.	3.5	359
5	Hybrid Design of Modular Multilevel Converters for HVDC Systems Based on Various Submodule Circuits. IEEE Transactions on Power Delivery, 2015, 30, 385-394.	2.9	311
6	Indirect Finite Control Set Model Predictive Control of Modular Multilevel Converters. IEEE Transactions on Smart Grid, 2015, 6, 1520-1529.	6.2	212
7	Reduced Switching-Frequency Voltage-Balancing Strategies for Modular Multilevel HVDC Converters. IEEE Transactions on Power Delivery, 2013, 28, 2403-2410.	2.9	176
8	Analysis and Control of DC-Capacitor-Voltage-Drift Phenomenon of a Passive Front-End Five-Level Converter. IEEE Transactions on Industrial Electronics, 2007, 54, 3255-3266.	5.2	175
9	Control and Stability Analysis of Modular Multilevel Converter Under Low-Frequency Operation. IEEE Transactions on Industrial Electronics, 2015, 62, 5329-5339.	5.2	144
10	A New Hybrid Modular Multilevel Converter for Grid Connection of Large Wind Turbines. IEEE Transactions on Sustainable Energy, 2013, 4, 1051-1064.	5.9	135
11	Capacitor Voltage Balancing of Flying Capacitor Multilevel Converters by Space Vector PWM. IEEE Transactions on Power Delivery, 2012, 27, 1154-1161.	2.9	113
12	Analysis, Detection, and Location of Open-Switch Submodule Failures in a Modular Multilevel Converter. IEEE Transactions on Power Delivery, 2016, 31, 155-164.	2.9	111
13	Circulating Current Suppression of the Modular Multilevel Converter in a Double-Frequency Rotating Reference Frame. IEEE Transactions on Power Electronics, 2016, 31, 783-792.	5.4	107
14	A Capacitor Voltage Balancing Strategy With Minimized AC Circulating Current for the DC-DC Modular Multilevel Converter. IEEE Transactions on Industrial Electronics, 2017, 64, 956-965.	5.2	81
15	A Space Vector Modulated STATCOM Based on a Three-Level Neutral Point Clamped Converter. IEEE Transactions on Power Delivery, 2007, 22, 1029-1039.	2.9	80
16	Improved Modulation Scheme for Loss Balancing of Three-Level Active NPC Converters. IEEE Transactions on Power Electronics, 2017, 32, 2521-2532.	5.4	76
17	A Field Enhancement Integration Design Featuring Misalignment Tolerance for Wireless EV Charging Using LCL Topology. IEEE Transactions on Power Electronics, 2021, 36, 3852-3867.	5.4	70
18	Sliding Mode Control of the Modular Multilevel Converter. IEEE Transactions on Industrial Electronics, 2019, 66, 887-897.	5.2	64

#	ARTICLE	IF	CITATIONS
19	Efficiency Evaluation of the Modular Multilevel Converter Based on Si and SiC Switching Devices for Medium/High-Voltage Applications. IEEE Transactions on Electron Devices, 2015, 62, 286-293.	1.6	57
20	Mission Profile-Based System-Level Reliability Prediction Method for Modular Multilevel Converters. IEEE Transactions on Power Electronics, 2020, 35, 6916-6930.	5.4	50
21	SiC-Based 5-kV Universal Modular Soft-Switching Solid-State Transformer (M-S4T) for Medium-Voltage DC Microgrids and Distribution Grids. IEEE Transactions on Power Electronics, 2021, 36, 11326-11343.	5.4	49
22	A Postfault Strategy to Control the Modular Multilevel Converter Under Submodule Failure. IEEE Transactions on Power Delivery, 2016, 31, 2453-2463.	2.9	48
23	E-Mobility "Advancements and Challenges. IEEE Access, 2019, 7, 165226-165240.	2.6	45
24	A Cost-Effective Segmented Dynamic Wireless Charging System With Stable Efficiency and Output Power. IEEE Transactions on Power Electronics, 2022, 37, 8682-8700.	5.4	43
25	Phasor Domain Steady-State Modeling and Design of the DC-DC Modular Multilevel Converter. IEEE Transactions on Power Delivery, 2016, 31, 2054-2063.	2.9	42
26	Optimized Control of the Modular Multilevel Converter Based on Space Vector Modulation. IEEE Transactions on Power Electronics, 2018, 33, 5697-5711.	5.4	40
27	Control of the Modular Multilevel Converter Based on a Discrete-Time Bilinear Model Using the Sum of Squares Decomposition Method. IEEE Transactions on Power Delivery, 2015, 30, 2179-2188.	2.9	39
28	A Space Vector Modulation Approach for a Multimodule HVDC Converter System. IEEE Transactions on Power Delivery, 2007, 22, 1643-1654.	2.9	37
29	A Generalized Precharging Strategy for Soft Startup Process of the Modular Multilevel Converter-Based HVDC Systems. IEEE Transactions on Industry Applications, 2017, 53, 5645-5657.	3.3	37
30	A Zero-Sequence Voltage Injection-Based Control Strategy for a Parallel Hybrid Modular Multilevel HVDC Converter System. IEEE Transactions on Power Delivery, 2015, 30, 728-736.	2.9	35
31	Modular Universal Converter for MVDC Applications. , 2018, , .		34
32	An Enhanced Closed-Loop Control Strategy With Capacitor Voltage Elevation for the DC-DC Modular Multilevel Converter. IEEE Transactions on Industrial Electronics, 2019, 66, 2366-2375.	5.2	34
33	A Misalignment Tolerant Design for a Dual-Coupled LCC-S-Compensated WPT System With Load-Independent CC Output. IEEE Transactions on Power Electronics, 2022, 37, 7480-7492.	5.4	33
34	A Voltage-Edge-Rate-Limiting Soft-Switching Inverter Based on Auxiliary Resonant Pole. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 736-744.	3.7	31
35	Backup Protection of Multi-Terminal HVDC Grids Based on Quickest Change Detection. IEEE Transactions on Power Delivery, 2019, 34, 177-187.	2.9	30
36	Zero-Current Switching Control of the Alternate Arm HVdc Converter Station With an Extended Overlap Period. IEEE Transactions on Industrial Electronics, 2019, 66, 2355-2365.	5.2	27

#	ARTICLE	IF	CITATIONS
37	Adjustable Wind Farm Frequency Support Through Multi-Terminal HVDC Grids. IEEE Transactions on Sustainable Energy, 2021, 12, 1461-1472.	5.9	27
38	Reducing the Fault-Transient Magnitudes in Multiterminal HVdc Grids by Sequential Tripping of Hybrid Circuit Breaker Modules. IEEE Transactions on Industrial Electronics, 2019, 66, 7290-7299.	5.2	24
39	7.2 kV Three-Port Single-Phase Single-Stage Modular Soft-Switching Solid-State Transformer with Active Power Decoupling and Reduced DC-Link. , 2020, , .		24
40	Optimal control of modular multilevel converters for low-speed operation of motor drives. , 2014, , .		23
41	Analysis and Control of the Modular Multilevel Matrix Converter Under Unbalanced Grid Conditions. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 1979-1989.	3.7	23
42	Impedance Analysis and Stabilization of Point-to-Point HVDC Systems Based on a Hybrid AC-DC Impedance Model. IEEE Transactions on Industrial Electronics, 2021, 68, 3224-3238.	5.2	23
43	An improved nearest-level modulation method for the modular multilevel converter. , 2015, , .		22
44	An Online Modulation Strategy to Control the Matrix Converter Under Unbalanced Input Conditions. IEEE Transactions on Power Electronics, 2015, 30, 4423-4436.	5.4	22
45	Renewable Integration in Hybrid AC/DC Systems Using a Multi-Port Autonomous Reconfigurable Solar Power Plant (MARS). IEEE Transactions on Power Systems, 2021, 36, 603-612.	4.6	21
46	Characterization of 3.3-kV Reverse-Blocking SiC Modules for Use in Current-Source Zero-Voltage-Switching Converters. IEEE Transactions on Power Electronics, 2021, 36, 876-887.	5.4	19
47	A Fault-Tolerant Strategy to Control the Matrix Converter Under an Open-Switch Failure. IEEE Transactions on Industrial Electronics, 2015, 62, 680-691.	5.2	18
48	A Simplified SVM-Based Fault-Tolerant Strategy for Cascaded H-Bridge Multilevel Converters. IEEE Transactions on Power Electronics, 2020, 35, 11310-11315.	5.4	18
49	Simulation-Based Gradient-Descent Optimization of Modular Multilevel Converter Controller Parameters. IEEE Transactions on Industrial Electronics, 2016, 63, 102-112.	5.2	16
50	Optimum Selection of Circuit Breaker Parameters Based on Analytical Calculation of Overcurrent and Overvoltage in Multiterminal HVDC Grids. IEEE Transactions on Industrial Electronics, 2020, 67, 4133-4143.	5.2	16
51	7.2 kV Three-Port SiC Single-Stage Current-Source Solid-State Transformer With 90 kV Lightning Protection. IEEE Transactions on Power Electronics, 2022, 37, 12080-12094.	5.4	16
52	Evaluation Tests of Metal Oxide Varistors for DC Circuit Breakers. IEEE Open Access Journal of Power and Energy, 2022, 9, 254-264.	2.5	16
53	A Simple Behavioral Electro-Thermal Model of GaN FETs for SPICE Circuit Simulation. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 730-737.	3.7	15
54	Model Predictive Control Based AC Line Overload Alleviation by Using Multi-Terminal DC Grids. IEEE Transactions on Power Systems, 2020, 35, 177-187.	4.6	14

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55	Real-Time Electromagnetic Transient Simulation of Multi-Terminal HVDC-AC Grids Based on GPU. IEEE Transactions on Industrial Electronics, 2021, 68, 7002-7011.	5.2	14
56	Neuro-Computing Vector Classification SVM Schemes to Integrate the Overmodulation Region in Neutral Point Clamped (NPC) Converters. IEEE Transactions on Power Electronics, 2007, 22, 995-1004.	5.4	12
57	Harmonic Stability Assessment of Multi-terminal DC (MTDC) Systems Based on the Hybrid AC/DC Admittance Model and Determinant-based GNC. IEEE Transactions on Power Electronics, 2021, , 1-1.	5.4	10
58	Stability Analysis of a Grid-Tied Interlinking Converter System With the Hybrid AC/DC Admittance Model and Determinant-Based GNC. IEEE Transactions on Power Delivery, 2022, 37, 798-812.	2.9	10
59	Lifetime-Based Selection Procedures for DC Circuit Breaker Varistors. IEEE Transactions on Power Electronics, 2022, 37, 13525-13537.	5.4	10
60	Precharging strategy for soft startup process of modular multilevel converters based on various SM circuits. , 2016, , .		9
61	Insulation Coordination Design for Grid-Connected Solid-State Transformers. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 3746-3758.	3.7	9
62	Analysis of thermal cycling stress on semiconductor devices of the Modular Multilevel Converter for drive applications. , 2016, , .		8
63	Active thermal loading control of the modular multilevel converter by a multi-objective optimization method. , 2017, , .		8
64	Junction temperature estimation of SiC MOSFETs based on Extended Kalman Filtering. , 2018, , .		8
65	Dynamic Modeling and Simulation of Propulsion and Levitation Systems for Hyperloop. , 2021, , .		8
66	An optimized control strategy for the modular multilevel converter based on space vector modulation. , 2015, , .		7
67	Recent Advances in Multilevel Inverters and Their Applications-Part II. IEEE Transactions on Industrial Electronics, 2016, 63, 7777-7779.	5.2	7
68	Lightning Impulse Protection for Grid-connected Solid-state Transformers. , 2020, , .		7
69	High-Fidelity Models and Fast EMT Simulation Algorithms for Isolated Multi-port Autonomous Reconfigurable Solar power plant (MARS). , 2021, , .		7
70	A Hybrid DC Fault Primary Protection Algorithm for Multi-Terminal HVdc Systems. IEEE Transactions on Power Delivery, 2022, 37, 1285-1294.	2.9	7
71	A Flexible Space Vector Modulation Scheme for Cascaded H-Bridge Multilevel Inverters Under Failure Conditions. IEEE Transactions on Industrial Electronics, 2022, 69, 11856-11867.	5.2	7
72	A Current Reallocation Strategy to Attenuate the Peak Arm Current of the Modular Multilevel Matrix Converter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 2292-2302.	3.7	6

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73	A distributed PWM strategy for modular multilevel converter. , 2014, , .		5
74	Analysis of the Modular Multilevel Converter under Single Open-Circuit Fault in the Upper Active Switch of a Submodule. , 2019, , .		5
75	A New Zone Aggregation Method for Impedance-Based Stability Assessment of the Expanded DC-Distribution Networks. IEEE Transactions on Power Delivery, 2021, 36, 1281-1292.	2.9	5
76	An AC-AC Modular Multilevel Converter-Based Partially Rated Solid-State Transformer. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 2271-2280.	3.7	4
77	System-Level Power Loss Evaluation of Modular Multilevel Converters. , 2019, , .		4
78	System Harmonic Stability Analysis of Grid-Tied Interlinking Converters Operating Under AC Voltage Control Mode. IEEE Transactions on Power Systems, 2022, 37, 4106-4109.	4.6	4
79	DC-line current ripple reduction of a parallel hybrid modular multilevel HVDC converter. , 2014, , .		3
80	Loss comparison of Si- and SiC-based modular multilevel converter for medium/high-voltage applications. , 2015, , .		3
81	SubModule failure detection methods for the modular multilevel converter. , 2015, , .		3
82	Influence of Si/SiC device selection on losses and magnetics design in an isolated DC-DC converter. , 2015, , .		3
83	Modeling of Converter Losses with High Fidelity in a Physically Based Object-Oriented Way. , 2018, , .		3
84	Real-Time Modeling and HIL Simulation of Stacked Low-Inertia Converters with Soft-Switching and Fast Dynamic Control. , 2019, , .		3
85	A Modular Integration Design of LCL Circuit Featuring Field Enhancement and Misalignment Tolerance for Wireless EV Charging. , 2020, , .		3
86	A simple behavioral electro-thermal model of GaN FETs for SPICE circuit simulation. , 2016, , .		2
87	Sliding mode control of the modular multilevel converter. , 2018, , .		2
88	Closed-loop voltage control of a GaN-based modular multilevel clamped capacitor converter. , 2018, , .		2
89	Design of Control Architecture for Stacked Low-Inertia Converters with Fast Dynamic Control. , 2020, , .		2
90	A post-fault modulation strategy to control the matrix converter under an open-switch failure. , 2014, , .		1

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91	A modulation strategy to control the Matrix Converter under unbalanced input voltage conditions. , 2015, , .		1
92	Control of the AC-AC modular multilevel converter under submodule failure. , 2016, , .		1
93	Hybrid Modular Multilevel Converter Configurations for Low-Frequency Operation. , 2018, , .		1
94	Haiti RELAY: A Cost-Effective and Portable Solar Home System for Rural Haitian Regions. , 2018, , .		1
95	Coordinated Wind Farm Inertia Support Through Multi - Terminal DC Grids. , 2020, , .		1
96	Analysis and Experimental Verification of Overvoltage Suppression in a Hybrid DC Circuit Breaker. , 2022, , .		1
97	A Neuro-Based Classification Algorithm for Implementation of Space Vector Modulation for Multi-Level Converters. EPE Journal (European Power Electronics and Drives Journal), 2008, 18, 41-49.	0.7	0
98	A post-fault strategy to control the AC-AC modular multilevel converter under input-side line-to-ground fault. , 2017, , .		0
99	State-Space Modeling and Control of the Modular Multilevel Clamped Capacitor Converter. , 2018, , .		0
100	An AC-AC Modular Multilevel Converter-Based Partially-Rated Solid-State Transformer for Power Flow Control. , 2018, , .		0
101	Distributed Control of Aggregated Smart Buildings for Frequency Regulation. , 2021, , .		0
102	A Two-Step Stability Assessment Method for Interconnection of DC Distribution Networks. IEEE Transactions on Power Delivery, 2023, 38, 68-79.	2.9	0