Pooya Davari

List of Publications by Year in Descending Order

129 papers	1,680 citations	23 h-index	34 g-index
154 ext. papers	2,405 ext. citations	4.5 avg, IF	5.69 L-index

#	Paper	IF	Citations
129	Mathematical Model of Common-Mode Sources in Long-Cable-Fed Adjustable Speed Drives. *IEEE Transactions on Industry Applications*, **2022**, 58, 2013-2028	4.3	
128	Reliability Improvement of Voltage Regulator Modules by a Virtual Series Voltage Source. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	
127	Online DC-Link Capacitance Monitoring for Digital-Controlled Boost PFC Converters without Additional Sampling Devices. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	2
126	A Mixed Conduction Mode Controlled Bridgeless Boost PFC Converter and Its Mission Profile Based Reliability Analysis. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	2
125	Overview of Power Electronic Converter Topologies Enabling Large-Scale Hydrogen Production via Water Electrolysis. *Applied Sciences (Switzerland)*, **2022**, 12, 1906	2.6	4
124	Effect of Choke Placement on Common-Mode Noise in Three-Phase Variable Speed Drives. *IEEE Transactions on Industry Applications*, **2022**, 1-1	4.3	
123	Robustness of Model-Predictive and Passivity-Based Control in the Three-Phase DC/AC Converter Application. *Applied Sciences (Switzerland)*, **2022**, 12, 4329	2.6	0
122	High Power Factor Bridgeless Integrated Buck-Type PFC Converter with Wide Output Voltage Range. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	1
121	Differential Mode Noise Estimation and Filter Design for Interleaved Boost Power Factor Correction Converters. *Applied Sciences (Switzerland)*, **2021**, 11, 2716	2.6	1
120	A Practical Approach to Model a Cable with Nonlinear Material Characteristics **2021**,		1
119	Frequency security constrained control of power electronic-based generation systems. *IET Renewable Power Generation*, **2021**, 15, 2246-2256	2.9	1
118	Bridgeless PFC Topology Simplification and Design for Performance Benchmarking. *IEEE Transactions on Power Electronics*, **2021**, 36, 5398-5414	7.2	10
117	Fuzzy-based frequency security evaluation of wind-integrated power systems. *IET Energy Systems Integration*, **2021**, 3, 451	3.3	0
116	Review of Harmonic Mitigation Methods in Microgrid: From a Hierarchical Control Perspective. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 3044-3060	5.6	12
115	Nonlinear $C_{oss}-V_{DS}$ Profile Based ZVS Range Calculation for Dual Active Bridge Converters. *IEEE Transactions on Power Electronics*, **2021**, 36, 45-50	7.2	9
114	Reduced-Order and Aggregated Modeling of Large-Signal Synchronization Stability for Multiconverter Systems. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 3150-3165	5.6	12
113	A Multistructure Multimode Three-Phase Dual-Active-Bridge Converter Targeting Wide-Range High-Efficiency Performance. *IEEE Transactions on Power Electronics*, **2021**, 36, 3078-3098	7.2	2

112	Reliability of Power Electronic Systems for EV/HEV Applications. *Proceedings of the IEEE*, **2021**, 109, 1060-1076	14.9	13
111	An Overview of Condition Monitoring Techniques for Capacitors in DC-Link Applications. *IEEE Transactions on Power Electronics*, **2021**, 36, 3692-3716	7.2	39
110	Reliability Analysis of Capacitors in Voltage Regulator Modules With Consecutive Load Transients. *IEEE Transactions on Power Electronics*, **2021**, 36, 2481-2487	7.2	7
109	An Optimized Hybrid Modulation Scheme for Reducing Conduction Losses in Dual Active Bridge Converters. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 921-936	5.6	18
108	Differential mode noise prediction and analysis in single-phase boost PFC for the new frequency range of 9- 150 kHz. *IEEE Journal of Emerging and Selected Topics in Industrial Electronics*, **2021**, 1-1	2.6	2
107	An Adaptive Model Predictive Voltage Control for LC-Filtered Voltage Source Inverters. *Applied Sciences (Switzerland)*, **2021**, 11, 704	2.6	4
106	Online Capacitance Monitoring for DC/DC Boost Converters Based on Low-Sampling-Rate Approach. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 1-1	5.6	2
105	A Single-Phase Reduced Component Count Asymmetrical Multilevel Inverter Topology. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 1-1	5.6	5
104	Influence of phase-locked loop aggregation on the dynamic aggregation of wind farm strings with heterogeneous parameters. *IET Energy Systems Integration*, **2021**, 3, 99-108	3.3	0
103	An Online Parameters Monitoring Method for Output Capacitor of Buck Converter Based on Large-Signal Load Transient Trajectory Analysis. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 1-1	5.6	15
102	An Enhanced Generalized Average Modeling of Dual Active Bridge Converters **2020**,		3
101	Single-Phase Bridgeless PFC Topology Derivation and Performance Benchmarking. *IEEE Transactions on Power Electronics*, **2020**, 35, 9238-9250	7.2	16
100	Optimization Design and Control of Single-Stage Single-Phase PV Inverters for MPPT Improvement. *IEEE Transactions on Power Electronics*, **2020**, 35, 13000-13016	7.2	24
99	Improved harmonic injection pulse-width modulation variable frequency triangular carrier scheme for multilevel inverters. *IET Power Electronics*, **2020**, 13, 3146-3154	2.2	2
98	Performance enhancement of photovoltaic system under grid voltage distortion utilising total least-square control scheme. *IET Power Electronics*, **2020**, 13, 3044-3055	2.2	
97	Investigating the Effect of Different Parameters on Harmonics and EMI Emissions at the Frequency Range of 0 kHz **2020**,		1
96	Effect of Unipolar and Bipolar SPWM on the Lifetime of DC-link Capacitors in Single-Phase Voltage Source Inverters **2020**,		2
95	Assessment accuracy of power system frequency security with additional frequency controls in wind turbines. *IET Renewable Power Generation*, **2020**, 14, 3439-3447	2.9	

94	Harmonics mitigation and non-ideal voltage compensation utilising active power filter based on predictive current control. *IET Power Electronics*, **2020**, 13, 2782-2793	2.2	7
93	Control of Grid-Following Inverters Under Unbalanced Grid Conditions. *IEEE Transactions on Energy Conversion*, **2020**, 35, 184-192	5.4	21
92	Common-Mode Current Prediction and Analysis in Motor Drive Systems for the New Frequency Range of 2150 kHz. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 1-1	5.6	10
91	Modeling of Converter Synchronization Stability under Grid Faults: The General Case. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 1-1	5.6	10
90	Model Predictive Control of Grid Forming Converters with Enhanced Power Quality. *Applied Sciences (Switzerland)*, **2020**, 10, 6390	2.6	2
89	Current Limiting Control With Enhanced Dynamics of Grid-Forming Converters During Fault Conditions. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 8, 1062-1073	5.6	71
88	Current Reference Generation Based on Next-Generation Grid Code Requirements of Grid-Tied Converters During Asymmetrical Faults. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 8, 3784-3797	5.6	30
87	An Efficient Reduced-Order Model for Studying Synchronization Stability of Grid-Following Converters during Grid Faults **2019**,		19
86	IEEE Access Special Section Editorial: Power Quality and Harmonics Issues of Future and Smart Grids. *IEEE Access*, **2019**, 7, 132803-132805	3.5	2
85	Performance Assessment of Grid Forming Converters Using Different Finite Control Set Model Predictive Control (FCS-MPC) Algorithms. *Applied Sciences (Switzerland)*, **2019**, 9, 3513	2.6	7
84	Robust Fault Ride Through of Converter-Based Generation During Severe Faults With Phase Jumps. *IEEE Transactions on Industry Applications*, **2019**, 1-1	4.3	2
83	An Overview of Assessment Methods for Synchronization Stability of Grid-Connected Converters Under Severe Symmetrical Grid Faults. *IEEE Transactions on Power Electronics*, **2019**, 34, 9655-9670	7.2	109
82	. *IEEE Transactions on Industry Applications*, **2019**, 55, 5055-5067	4.3	21
81	Decentralized Droop Control in DC Microgrids Based on a Frequency Injection Approach. *IEEE Transactions on Smart Grid*, **2019**, 10, 6782-6791	10.7	23
80	. *IEEE Transactions on Power Electronics*, **2019**, 34, 4064-4078	7.2	64
79	. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2019**, 7, 1243-1257	5.6	18
78	An Optimized Control Scheme to Reduce the Backflow Power and Peak Current in Dual Active Bridge Converters **2019**,		7
77	System-Level Reliability-Oriented Power Sharing Strategy for DC Power Systems. *IEEE Transactions on Industry Applications*, **2019**, 55, 4865-4875	4.3	29

76	Passivity-Based Control Design Methodology for UPS Systems. *Energies*, **2019**, 12, 4301	3.1	11
75	Analytical Modeling of 9-150 kHz EMI in Single-Phase PFC Converter **2019**,		2
74	Standard Test Systems for Modern Power System Analysis: An Overview. *IEEE Industrial Electronics Magazine*, **2019**, 13, 86-105	6.2	28
73	Systematic Approach for Transient Stability Evaluation of Grid-Tied Converters during Power System Faults **2019**,		18
72	Enhanced Frequency Droop Method for load sharing in LVDC power systems **2018**,		3
71	Load-independent harmonic mitigation in SCR-fed three-phase multiple adjustable speed drive systems with deliberately dispatched firing angles. *IET Power Electronics*, **2018**, 11, 727-734	2.2	7
70	System-level lifetime-oriented power sharing control of paralleled DC/DC converters **2018**,		1
69	Lifetime benchmarking of two DC-link passive filtering configurations in adjustable speed drives **2018**,		7
68	Distributed Primary and Secondary Power Sharing in a Droop-Controlled LVDC Microgrid With Merged AC and DC Characteristics. *IEEE Transactions on Smart Grid*, **2018**, 9, 2284-2294	10.7	51
67	Performance Evaluation of the Single-Phase Split-Source Inverter Using an Alternative DC□AC Configuration. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 363-373	8.9	43
66	Effects of Modulation Techniques on the Input Current Interharmonics of Adjustable Speed Drives. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 167-178	8.9	25
65	. *IEEE Transactions on Power Electronics*, **2018**, 33, 4045-4060	7.2	43
64	A Flexible Control Scheme for Single-Stage DAB AC/DC Converters **2018**,		3
63	Improving Performance of Three-Phase Slim DC-Link Drives Utilizing Virtual Positive Impedance-Based Active Damping Control. *Electronics (Switzerland)*, **2018**, 7, 234	2.6	1
62	Efficiency Enhancement of Bridgeless Buck-Boost PFC Converter with Unity PF and DC Split to Reduce Voltage Stresses **2018**,		5
61	Mission Profile Based Power Converter Reliability Analysis in a DC Power Electronic Based Power System **2018**,		5
60	An Optimized Control Scheme for Reducing Conduction and Switching Losses in Dual Active Bridge Converters **2018**,		4
59	Single-stage Bridgeless Buck-boost PFC Converter with DC Split for Low Power LED applications **2018**,		2

58	A Review on Fault Current Limiting Devices to Enhance the Fault Ride-Through Capability of the Doubly-Fed Induction Generator Based Wind Turbine. *Applied Sciences (Switzerland)*, **2018**, 8, 2059	2.6	14
57	Grid Synchronization of Wind Turbines during Severe Symmetrical Faults with Phase Jumps **2018**,		7
56	Analysis and Design of the Quasi-Z-Source Inverter for Wide Range of Operation **2018**,		7
55	System-level reliability enhancement of DC/DC stage in a single-phase PV inverter. *Microelectronics Reliability*, **2018**, 88-90, 1030-1035	1.2	10
54	Characterization of Proportional-Integral-Resonant Compensator for DC Link Voltage Control **2018** ,		2
53	The Impact of Topology and Mission Profile on the Reliability of Boost-type Converters in PV Applications **2018**,		14
52	Active Rectifiers and Their Control **2018**, 3-52		1
51	Characterization of Input Current Interharmonics in Adjustable Speed Drives. *IEEE Transactions on Power Electronics*, **2017**, 32, 8632-8643	7.2	12
50	Harmonic Emissions of Three-Phase Diode Rectifiers in Distribution Networks. *IEEE Access*, **2017**, 5, 2819-2833	3.5	49
49	Energy Saving and Efficient Energy Use By Power Electronic Systems. *Lecture Notes in Energy*, **2017**, 1-14	0.4	5
48	Analysis of three-phase rectifier systems with controlled DC-link current under unbalanced grids **2017**,		11
47	. *IEEE Transactions on Industry Applications*, **2017**, 53, 4855-4862	4.3	27
46	Performance evaluation of electronic inductor based adjustable speed drives with respect to line current interharmonics **2017**,		2
45	. *IEEE Transactions on Industry Applications*, **2017**, 53, 5440-5450	4.3	11
44	Enhanced Phase-Shifted Current Control for Harmonic Cancellation in Three-Phase Multiple Adjustable Speed Drive Systems. *IEEE Transactions on Power Delivery*, **2017**, 32, 996-1004	4.3	16
43	Dissimilar trend of nonlinearity in ultrasound transducers and systems at resonance and non-resonance frequencies. *Ultrasonics*, **2017**, 74, 21-29	3.5	5
42	Synchronverter-Enabled DC Power Sharing Approach for LVDC Microgrids. *IEEE Transactions on Power Electronics*, **2017**, 32, 8089-8099	7.2	50
41	A novel passive islanding detection scheme for distributed generations based on rate of change of positive sequence component of voltage and current **2017**,		5

40	**2017**,		9
39	Active DaMPing control methods for three-phase slim DC-link drive system **2017**,		3
38	The impact of grid unbalances on the reliability of DC-link capacitors in a motor drive **2017**,		10
37	Harmonic distortion performance of multi three-phase SCR-fed drive systems with controlled DC-link current under unbalanced grid **2017**,		1
36	Capacitance estimation algorithm based on DC-link voltage harmonics using artificial neural network in three-phase motor drive systems **2017**,		9
35	Dynamic and control analysis of modular multi-parallel rectifiers (MMR) **2017**,		1
34	Investigation on capacitor switching transient limiter with a three phase variable resistance **2017**,		1
33	An improved modulation strategy for the three-phase Z-source inverters (ZSIs) **2017**,		7
32	A Multipulse Pattern Modulation Scheme for Harmonic Mitigation in Three-Phase Multimotor Drives. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2016**, 4, 174-185	5.6	32
31	A DC-Link Modulation Scheme With Phase-Shifted Current Control for Harmonic Cancellations in Multidrive Applications. *IEEE Transactions on Power Electronics*, **2016**, 31, 1837-1840	7.2	18
30	Family of step-up DC/DC converters with fast dynamic response for low power applications. *IET Power Electronics*, **2016**, 9, 2665-2673	2.2	19
29	Smart power management of DC microgrids in future milligrids **2016**,		5
28	. *IEEE Transactions on Industry Applications*, **2016**, 52, 3182-3192	4.3	27
27	A review of electronic inductor technique for power factor correction in three-phase adjustable speed drives **2016**,		6
26	Analysis of harmonics suppression by active damping control on multi slim dc-link drives **2016**,		5
25	Addressing the unbalance loading issue in multi-drive systems with a DC-link modulation scheme for harmonic reduction **2016**,		2
24	Predictive Pulse-Pattern Current Modulation Scheme for Harmonic Reduction in Three-Phase Multidrive Systems. *IEEE Transactions on Industrial Electronics*, **2016**, 63, 5932-5942	8.9	16
23	A robust adaptive load frequency control for micro-grids. *ISA Transactions*, **2016**, 65, 220-229	5.5	97

22	Investigating Pulsed Discharge Polarity Employing Solid-state Pulsed Power Electronics. *Electric Power Components and Systems*, **2015**, 43, 2214-2222	1	
21	A smart current modulation scheme for harmonic reduction in three-phase motor drive applications **2015**,		2
20	Performance evaluation of non-thermal plasma on particulate matter, ozone and CO2 correlation for diesel exhaust emission reduction. *Chemical Engineering Journal*, **2015**, 276, 240-248	14.7	38
19	A novel harmonic elimination approach in three-phase multi-motor drives **2015**,		4
18	Pulse pattern modulated strategy for harmonic current components reduction in three-phase AC-DC converters **2015**,		3
17	Controlling current and voltage type interfaces in power-hardware-in-the-loop simulations. *IET Power Electronics*, **2014**, 7, 2618-2627	2.2	14
16	Power converters design and analysis for high power piezoelectric ultrasonic transducers **2014**,		4
15	Sterilizing tissue-materials using pulsed power plasma. *Journal of Materials Science: Materials in Medicine*, **2014**, 25, 953-64	4.5	4
14	Effect of Pulsed Power on Particle Matter in Diesel Engine Exhaust Using a DBD Plasma Reactor. *IEEE Transactions on Plasma Science*, **2013**, 41, 2349-2358	1.3	34
13	Analysing DBD plasma lamp intensity versus power consumption using a push-pull pulsed power supply **2013**,		6
12	Power electronic converters for high power ultrasound transducers **2012**,		2
11	Improving the efficiency of high power piezoelectric transducers for industrial applications. *IET Science, Measurement and Technology*, **2012**, 6, 213	1.5	9
10	A flexible solid-state pulsed power topology **2012**,		3
9	Parallel and series configurations of flyback converter for pulsed power applications **2012**,		3
8	High-Voltage Modular Power Supply Using Parallel and Series Configurations of Flyback Converter for Pulsed Power Applications. *IEEE Transactions on Plasma Science*, **2012**, 40, 2578-2587	1.3	28
7	Designing a new robust on-line secondary path modeling technique for feedforward active noise control systems. *Signal Processing*, **2009**, 89, 1195-1204	4.4	29
6	An efficient online secondary path estimation for feedback active noise control systems **2009**, 19, 241-249		19
5	A self-tuning feedforward active noise control system. *IEICE Electronics Express*, **2009**, 6, 230-236	0.5	5

4	A variable step-size FxLMS algorithm for feedforward active noise control systems based on a new online secondary path modelling technique **2008**,		10
3	A new online secondary path modelling method for feedforward active noise control systems **2008**,		5
2	Benefiting White Noise in Developing Feedforward Active Noise Control Systems. *Communications in Computer and Information Science*, **2008**, 332-339	0.3	1
1	A New Feedback ANC System Approach. *Communications in Computer and Information Science*, **2008** , 324-331	0.3	2