

# Pooya Davari

## List of Publications by Year in descending order

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152  
papers

3,199  
citations

147801

31  
h-index

189892

50  
g-index

154  
all docs

154  
docs citations

154  
times ranked

2171  
citing authors

#	ARTICLE	IF	CITATIONS
1	Online DC-Link Capacitance Monitoring for Digital-Controlled Boost PFC Converters Without Additional Sampling Devices. IEEE Transactions on Industrial Electronics, 2023, 70, 907-920.	7.9	8
2	Common-Mode Current Prediction and Analysis in Motor Drive Systems for the New Frequency Range of 2â€“150 kHz. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 74-90.	5.4	18
3	Modeling of Converter Synchronization Stability Under Grid Faults: The General Case. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 2790-2804.	5.4	20
4	Differential Mode Noise Prediction and Analysis in Single-Phase Boost PFC for the New Frequency Range of 9â€“150 kHz. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2022, 3, 177-187.	3.9	5
5	Online Capacitance Monitoring for DC/DC Boost Converters Based on Low-Sampling-Rate Approach. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 5192-5204.	5.4	9
6	Mathematical Model of Common-Mode Sources in Long-Cable-Fed Adjustable Speed Drives. IEEE Transactions on Industry Applications, 2022, 58, 2013-2028.	4.9	3
7	Reliability Improvement of Voltage Regulator Modules by a Virtual Series Voltage Source. IEEE Transactions on Industrial Electronics, 2022, 69, 12641-12652.	7.9	2
8	A Mixed Conduction Mode-Controlled Bridgeless Boost PFC Converter and Its Mission Profile-Based Reliability Analysis. IEEE Transactions on Power Electronics, 2022, 37, 9674-9686.	7.9	7
9	Overview of Power Electronic Converter Topologies Enabling Large-Scale Hydrogen Production via Water Electrolysis. Applied Sciences (Switzerland), 2022, 12, 1906.	2.5	25
10	Effect of Choke Placement on Common-Mode Noise in Three-Phase Variable Speed Drives. IEEE Transactions on Industry Applications, 2022, 58, 6253-6265.	4.9	2
11	Robustness of Model-Predictive and Passivity-Based Control in the Three-Phase DC/AC Converter Application. Applied Sciences (Switzerland), 2022, 12, 4329.	2.5	4
12	High Power Factor Bridgeless Integrated Buck-Type PFC Converter With Wide Output Voltage Range. IEEE Transactions on Power Electronics, 2022, 37, 12577-12590.	7.9	14
13	Impedance Analysis of Single-Phase PFC Converter in the Frequency Range of 0â€“150 kHz. , 2022, , .		1
14	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, 2021, 9, 4004-4015.	5.4	33
15	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.	5.4	36
16	Nonlinear $C_{oss}$ - $V_{DS}$ Profile Based ZVS Range Calculation for Dual Active Bridge Converters. IEEE Transactions on Power Electronics, 2021, 36, 45-50.	7.9	18
17	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.	5.4	30
18	A Multistucture Multimode Three-Phase Dual-Active-Bridge Converter Targeting Wide-Range High-Efficiency Performance. IEEE Transactions on Power Electronics, 2021, 36, 3078-3098.	7.9	7

#	ARTICLE	IF	CITATIONS
19	Reliability of Power Electronic Systems for EV/HEV Applications. Proceedings of the IEEE, 2021, 109, 1060-1076.	21.3	80
20	An Overview of Condition Monitoring Techniques for Capacitors in DC-Link Applications. IEEE Transactions on Power Electronics, 2021, 36, 3692-3716.	7.9	111
21	Reliability Analysis of Capacitors in Voltage Regulator Modules With Consecutive Load Transients. IEEE Transactions on Power Electronics, 2021, 36, 2481-2487.	7.9	15
22	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.	5.4	38
23	An Adaptive Model Predictive Voltage Control for LC-Filtered Voltage Source Inverters. Applied Sciences (Switzerland), 2021, 11, 704.	2.5	14
24	A Single-Phase Reduced Component Count Asymmetrical Multilevel Inverter Topology. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 6780-6790.	5.4	20
25	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.	1.8	2
26	Differential Mode Noise Estimation and Filter Design for Interleaved Boost Power Factor Correction Converters. Applied Sciences (Switzerland), 2021, 11, 2716.	2.5	3
27	A Practical Approach to Model a Cable with Nonlinear Material Characteristics. , 2021, , .		1
28	Frequency security constrained control of power electronic-based generation systems. IET Renewable Power Generation, 2021, 15, 2246-2256.	3.1	6
29	Bridgeless PFC Topology Simplification and Design for Performance Benchmarking. IEEE Transactions on Power Electronics, 2021, 36, 5398-5414.	7.9	31
30	Mission Profile Based Reliability Analysis of A Bridgeless Boost PFC. , 2021, , .		1
31	Fuzzy-based frequency security evaluation of wind-integrated power systems. IET Energy Systems Integration, 2021, 3, 451-463.	1.8	1
32	Robust $H_{\infty}$ Current Control of Three-Phase Grid-Connected Voltage Source Converters Using Linear Matrix Inequalities. , 2021, , .		1
33	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.	5.4	171
34	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.	5.4	67
35	Control of Grid-Following Inverters Under Unbalanced Grid Conditions. IEEE Transactions on Energy Conversion, 2020, 35, 184-192.	5.2	56
36	Model Predictive Control of Grid Forming Converters with Enhanced Power Quality. Applied Sciences (Switzerland), 2020, 10, 6390.	2.5	12

#	ARTICLE	IF	CITATIONS
37	Analytical Modeling of 9-150 kHz EMI in Three-Phase Active Rectifiers. , 2020, , .		1
38	An Enhanced Generalized Average Modeling of Dual Active Bridge Converters. , 2020, , .		5
39	Enhanced Zero-Voltage-Switching Conditions of Dual Active Bridge Converter Under Light Load Situations. , 2020, , .		1
40	Single-Phase Bridgeless PFC Topology Derivation and Performance Benchmarking. IEEE Transactions on Power Electronics, 2020, 35, 9238-9250.	7.9	43
41	Optimization Design and Control of Single-Stage Single-Phase PV Inverters for MPPT Improvement. IEEE Transactions on Power Electronics, 2020, 35, 13000-13016.	7.9	47
42	Harmonics mitigation and non-ideal voltage compensation utilising active power filter based on predictive current control. IET Power Electronics, 2020, 13, 2782-2793.	2.1	14
43	Effect of Unipolar and Bipolar SPWM on the Lifetime of DC-link Capacitors in Single-Phase Voltage Source Inverters. , 2020, , .		6
44	Assessment accuracy of power system frequency security with additional frequency controls in wind turbines. IET Renewable Power Generation, 2020, 14, 3439-3447.	3.1	1
45	Improved harmonic injection pulse-width modulation variable frequency triangular carrier scheme for multilevel inverters. IET Power Electronics, 2020, 13, 3146-3154.	2.1	8
46	Performance enhancement of photovoltaic system under grid voltage distortion utilising total least-square control scheme. IET Power Electronics, 2020, 13, 3044-3055.	2.1	0
47	Investigating the Effect of Different Parameters on Harmonics and EMI Emissions at the Frequency Range of 0-9 kHz. , 2020, , .		3
48	Common-mode noise modelling and resonant estimation in a three-phase motor drive system: 9-150 kHz frequency range. , 2020, , .		1
49	Frequency-Freezing FLL for Enhanced Synchronization Stability of Grid-Following Converters during Grid Faults. , 2020, , .		1
50	An Online Monitoring Method for Output Capacitors of DC/DC Boost Converters. , 2020, , .		1
51	Lifetime Estimation of DC-Link Capacitors in Adjustable Speed Drives Under Grid Voltage Unbalances. IEEE Transactions on Power Electronics, 2019, 34, 4064-4078.	7.9	118
52	High-Voltage Gain Quasi-SEPIC DC-DC Converter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 1243-1257.	5.4	39
53	An Optimized Control Scheme to Reduce the Backflow Power and Peak Current in Dual Active Bridge Converters. , 2019, , .		9
54	System-Level Reliability-Oriented Power Sharing Strategy for DC Power Systems. IEEE Transactions on Industry Applications, 2019, 55, 4865-4875.	4.9	55

#	ARTICLE	IF	CITATIONS
55	An Efficient Reduced-Order Model for Studying Synchronization Stability of Grid-Following Converters during Grid Faults. , 2019, , .		32
56	IEEE Access Special Section Editorial: Power Quality and Harmonics Issues of Future and Smart Grids. IEEE Access, 2019, 7, 132803-132805.	4.2	4
57	Performance Assessment of Grid Forming Converters Using Different Finite Control Set Model Predictive Control (FCS-MPC) Algorithms. Applied Sciences (Switzerland), 2019, 9, 3513.	2.5	13
58	Robust Fault Ride-Through of Converter-based Generation during Severe Faults with Phase Jumps. IEEE Transactions on Industry Applications, 2019, , 1-1.	4.9	7
59	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.	7.9	226
60	Mission-Profile-Based System-Level Reliability Analysis in DC Microgrids. IEEE Transactions on Industry Applications, 2019, 55, 5055-5067.	4.9	51
61	Applications of Power Electronics. Electronics (Switzerland), 2019, 8, 465.	3.1	11
62	Decentralized Droop Control in DC Microgrids Based on a Frequency Injection Approach. IEEE Transactions on Smart Grid, 2019, 10, 6782-6791.	9.0	42
63	Passivity-Based Control Design Methodology for UPS Systems. Energies, 2019, 12, 4301.	3.1	15
64	Analytical Modeling of 9-150 kHz EMI in Single-Phase PFC Converter. , 2019, , .		7
65	Failure Mode, Effects and Criticality Analysis (FMECA) in Power Electronic based Power Systems. , 2019, , .		3
66	Power Electronics Topology Comparison and Improvement for Low Voltage - High Current DC/AC Applications. , 2019, , .		0
67	Standard Test Systems for Modern Power System Analysis: An Overview. IEEE Industrial Electronics Magazine, 2019, 13, 86-105.	2.6	55
68	Systematic Approach for Transient Stability Evaluation of Grid-Tied Converters during Power System Faults. , 2019, , .		22
69	Wear-Out Failure of a Power Electronic Converter Under Inversion and Rectification Modes. , 2019, , .		4
70	Reliability Assessment of Single-Phase PV Inverters. , 2019, , .		4
71	A Bridgeless Buck-flyback PFC Converter with High PF and Dead Angles Eliminated. , 2019, , .		3
72	Enhanced Frequency Droop Method for load sharing in LVDC power systems. , 2018, , .		5

#	ARTICLE	IF	CITATIONS
73	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.	2.1	7
74	System-level lifetime-oriented power sharing control of paralleled DC/DC converters. , 2018, , .		8
75	Lifetime benchmarking of two DC-link passive filtering configurations in adjustable speed drives. , 2018, , .		11
76	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.	9.0	84
77	Performance Evaluation of the Single-Phase Split-Source Inverter Using an Alternative DC-AC Configuration. IEEE Transactions on Industrial Electronics, 2018, 65, 363-373.	7.9	67
78	Effects of Modulation Techniques on the Input Current Interharmonics of Adjustable Speed Drives. IEEE Transactions on Industrial Electronics, 2018, 65, 167-178.	7.9	35
79	Switching Loss Reduction in the Three-Phase Quasi-Z-Source Inverters Utilizing Modified Space Vector Modulation Strategies. IEEE Transactions on Power Electronics, 2018, 33, 4045-4060.	7.9	67
80	A Flexible Control Scheme for Single-Stage DAB AC/DC Converters. , 2018, , .		5
81	Improving Performance of Three-Phase Slim DC-Link Drives Utilizing Virtual Positive Impedance-Based Active Damping Control. Electronics (Switzerland), 2018, 7, 234.	3.1	2
82	Efficiency Enhancement of Bridgeless Buck-Boost PFC Converter with Unity PF and DC Split to Reduce Voltage Stresses. , 2018, , .		12
83	Mission Profile Based Power Converter Reliability Analysis in a DC Power Electronic Based Power System. , 2018, , .		14
84	An Optimized Control Scheme for Reducing Conduction and Switching Losses in Dual Active Bridge Converters. , 2018, , .		7
85	Centralized Control of Modular Multi Rectifier for Motor Drive Applications under Unbalanced Grid. , 2018, , .		0
86	Single-stage Bridgeless Buck-boost PFC Converter with DC Split for Low Power LED applications. , 2018, , .		4
87	Evaluation of Flicker Measurement in Grid-connected Wind Turbine. , 2018, , .		1
88	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.	2.5	21
89	Study on Application of New Approach of Fault Current Limiters in Fault Ride through Capability Improvement of DFIG Based Wind Turbine. , 2018, , .		0
90	Grid Synchronization of Wind Turbines during Severe Symmetrical Faults with Phase Jumps. , 2018, , .		12

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91	Analysis and Design of the Quasi-Z-Source Inverter for Wide Range of Operation. , 2018, , .		10
92	System-level reliability enhancement of DC/DC stage in a single-phase PV inverter. Microelectronics Reliability, 2018, 88-90, 1030-1035.	1.7	18
93	Characterization of Proportional-Integral-Resonant Compensator for DC Link Voltage Control. , 2018, , .		5
94	The Impact of Topology and Mission Profile on the Reliability of Boost-type Converters in PV Applications. , 2018, , .		29
95	Active Rectifiers and Their Control. , 2018, , 3-52.		3
96	Characterization of Input Current Interharmonics in Adjustable Speed Drives. IEEE Transactions on Power Electronics, 2017, 32, 8632-8643.	7.9	22
97	Harmonic Emissions of Three-Phase Diode Rectifiers in Distribution Networks. IEEE Access, 2017, 5, 2819-2833.	4.2	73
98	Energy Saving and Efficient Energy Use By Power Electronic Systems. Lecture Notes in Energy, 2017, , 1-14.	0.3	5
99	Analysis of three-phase rectifier systems with controlled DC-link current under unbalanced grids. , 2017, , .		14
100	On Secondary Control Approaches for Voltage Regulation in DC Microgrids. IEEE Transactions on Industry Applications, 2017, 53, 4855-4862.	4.9	48
101	Performance evaluation of electronic inductor based adjustable speed drives with respect to line current interharmonics. , 2017, , .		3
102	A Modular Active Front-End Rectifier With Electronic Phase Shifting for Harmonic Mitigation in Motor Drive Applications. IEEE Transactions on Industry Applications, 2017, 53, 5440-5450.	4.9	21
103	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	23
104	Dissimilar trend of nonlinearity in ultrasound transducers and systems at resonance and non-resonance frequencies. Ultrasonics, 2017, 74, 21-29.	3.9	6
105	Synchronverter-Enabled DC Power Sharing Approach for LVDC Microgrids. IEEE Transactions on Power Electronics, 2017, 32, 8089-8099.	7.9	75
106	A novel passive islanding detection scheme for distributed generations based on rate of change of positive sequence component of voltage and current. , 2017, , .		8
107	Effects of DC-link filter on harmonic and interharmonic generation in three-phase adjustable speed drive systems. , 2017, , .		13
108	Active DaMPing control methods for three-phase slim DC-link drive system. , 2017, , .		5

#	ARTICLE	IF	CITATIONS
109	The impact of grid unbalances on the reliability of DC-link capacitors in a motor drive. , 2017, , .		24
110	Harmonic distortion performance of multi three-phase SCR-fed drive systems with controlled DC-link current under unbalanced grid. , 2017, , .		3
111	Capacitance estimation algorithm based on DC-link voltage harmonics using artificial neural network in three-phase motor drive systems. , 2017, , .		32
112	Dynamic and control analysis of modular multi-parallel rectifiers (MMR). , 2017, , .		5
113	Investigation on capacitor switching transient limiter with a three phase variable resistance. , 2017, , .		1
114	An improved modulation strategy for the three-phase Z-source inverters (ZSIs). , 2017, , .		14
115	A new secondary control approach for voltage regulation in DC microgrids. , 2016, , .		2
116	A review of electronic inductor technique for power factor correction in three-phase adjustable speed drives. , 2016, , .		16
117	Power-quality-oriented optimization in multiple three-phase adjustable speed drives. , 2016, , .		2
118	A multi-pulse front-end rectifier system with electronic phase-shifting for harmonic mitigation in motor drive applications. , 2016, , .		4
119	Analysis of harmonics suppression by active damping control on multi slim dc-link drives. , 2016, , .		6
120	Addressing the unbalance loading issue in multi-drive systems with a DC-link modulation scheme for harmonic reduction. , 2016, , .		4
121	Predictive Pulse-Pattern Current Modulation Scheme for Harmonic Reduction in Three-Phase Multidrive Systems. IEEE Transactions on Industrial Electronics, 2016, 63, 5932-5942.	7.9	25
122	A robust adaptive load frequency control for micro-grids. ISA Transactions, 2016, 65, 220-229.	5.7	141
123	Family of step-up DC/DC converters with fast dynamic response for low power applications. IET Power Electronics, 2016, 9, 2665-2673.	2.1	27
124	Adjustable Speed Drives and power quality: Challenges and cost-effective opportunities. , 2016, , .		1
125	Smart power management of DC microgrids in future milligrids. , 2016, , .		5
126	Energy saving in three-phase diode rectifiers using EI technique with adjustable switching frequency scheme. , 2016, , .		2



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127	Input current interharmonics in adjustable speed drives caused by fixed-frequency modulation techniques. , 2016, , .		3
128	Pulse Pattern-Modulated Strategy for Harmonic Current Components Reduction in Three-Phase AC-DC Converters. IEEE Transactions on Industry Applications, 2016, 52, 3182-3192.	4.9	36
129	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.	5.4	50
130	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.	7.9	29
131	A smart current modulation scheme for harmonic reduction in three-phase motor drive applications. , 2015, , .		4
132	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.	12.7	51
133	A novel harmonic elimination approach in three-phase multi-motor drives. , 2015, , .		6
134	Pulse pattern modulated strategy for harmonic current components reduction in three-phase AC-DC converters. , 2015, , .		3
135	Investigating Pulsed Discharge Polarity Employing Solid-state Pulsed Power Electronics. Electric Power Components and Systems, 2015, 43, 2214-2222.	1.8	0
136	Controlling current and voltage type interfaces in power hardware-in-the-loop simulations. IET Power Electronics, 2014, 7, 2618-2627.	2.1	21
137	Power converters design and analysis for high power piezoelectric ultrasonic transducers. , 2014, , .		6
138	Sterilizing tissue-materials using pulsed power plasma. Journal of Materials Science: Materials in Medicine, 2014, 25, 953-964.	3.6	4
139	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	44
140	Analysing DBD plasma lamp intensity versus power consumption using a push-pull pulsed power supply. , 2013, , .		7
141	Power electronic converters for high power ultrasound transducers. , 2012, , .		9
142	Improving the efficiency of high power piezoelectric transducers for industrial applications. IET Science, Measurement and Technology, 2012, 6, 213.	1.6	12
143	A flexible solid-state pulsed power topology. , 2012, , .		3
144	Parallel and series configurations of flyback converter for pulsed power applications. , 2012, , .		3

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145	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	35
146	Designing a new robust on-line secondary path modeling technique for feedforward active noise control systems. Signal Processing, 2009, 89, 1195-1204.	3.7	35
147	An efficient online secondary path estimation for feedback active noise control systems. , 2009, 19, 241-249.		23
148	A self-tuning feedforward active noise control system. IEICE Electronics Express, 2009, 6, 230-236.	0.8	5
149	A variable step-size FxLMS algorithm for feedforward active noise control systems based on a new online secondary path modelling technique. , 2008, , .		15
150	A new online secondary path modelling method for feedforward active noise control systems. , 2008, , .		5
151	Benefiting White Noise in Developing Feedforward Active Noise Control Systems. Communications in Computer and Information Science, 2008, , 332-339.	0.5	1
152	A New Feedback ANC System Approach. Communications in Computer and Information Science, 2008, , 324-331.	0.5	2