Dao Zhou

List of Publications by Year
in descending order

114 papers	2,276 citations	218677 26 h-index	254184 43 g-index
114 all docs	114 docs citations	114 times ranked	1584 citing authors

#	Article	IF	Citations
1	Mission Profile Based System-Level Reliability Analysis of DC/DC Converters for a Backup Power Application. IEEE Transactions on Power Electronics, 2018, 33, 8030-8039.	7.9	144
2	Comparison of Wind Power Converter Reliability With Low-Speed and Medium-Speed Permanent-Magnet Synchronous Generators. IEEE Transactions on Industrial Electronics, 2015, 62, 6575-6584.	7.9	124
3	Modelling, Implementation, and Assessment of Virtual Synchronous Generator in Power Systems. Journal of Modern Power Systems and Clean Energy, 2020, 8, 399-411.	5.4	104
4	On the Impacts of PV Array Sizing on the Inverter Reliability and Lifetime. IEEE Transactions on Industry Applications, 2018, 54, 3656-3667.	4.9	95
5	Optimized Reactive Power Flow of DFIG Power Converters for Better Reliability Performance Considering Grid Codes. IEEE Transactions on Industrial Electronics, 2015, 62, 1552-1562.	7.9	89
6	Thermal Cycling Overview of Multi-Megawatt Two-Level Wind Power Converter at Full Grid Code Operation. IEEJ Journal of Industry Applications, 2013, 2, 173-182.	1.1	83
7	Reduced Cost of Reactive Power in Doubly Fed Induction Generator Wind Turbine System With Optimized Grid Filter. IEEE Transactions on Power Electronics, 2015, 30, 5581-5590.	7.9	82
8	Dynamics and Control of Lateral Tower Vibrations in Offshore Wind Turbines by Means of Active Generator Torque. Energies, 2014, 7, 7746-7772.	3.1	75
9	Enhanced Transient Angle Stability Control of Grid-Forming Converter Based on Virtual Synchronous Generator. IEEE Transactions on Industrial Electronics, 2022, 69, 9133-9144.	7.9	63
10	Bandwidth oriented proportionalâ€integral controller design for backâ€toâ€back power converters in DFIG wind turbine system. IET Renewable Power Generation, 2017, 11, 941-951.	3.1	60
11	Mission Profile Based Reliability Evaluation of Capacitor Banks in Wind Power Converters. IEEE Transactions on Power Electronics, 2019, 34, 4665-4677.	7.9	59
12	Optimal Selection of Power Converter in DFIG Wind Turbine With Enhanced System-Level Reliability. IEEE Transactions on Industry Applications, 2018, 54, 3637-3644.	4.9	58
13	Active Power Oscillation Damping Based on Acceleration Control in Paralleled Virtual Synchronous Generators System. IEEE Transactions on Power Electronics, 2021, 36, 9501-9510.	7.9	51
14	Optimal reactive power dispatch of permanent magnet synchronous generator-based wind farm considering levelised production cost minimisation. Renewable Energy, 2020, 145, 1-12.	8.9	50
15	Thermal Behavior Optimization in Multi-MW Wind Power Converter by Reactive Power Circulation. IEEE Transactions on Industry Applications, 2014, 50, 433-440.	4.9	45
16	Optimized Demagnetizing Control of DFIG Power Converter for Reduced Thermal Stress During Symmetrical Grid Fault. IEEE Transactions on Power Electronics, 2018, 33, 10326-10340.	7.9	43
17	An Improved Direct Power Control for Doubly Fed Induction Generator. IEEE Transactions on Power Electronics, 2021, 36, 4672-4685.	7.9	42
18	A Double-PLLs-Based Impedance Reshaping Method for Extending Stability Range of Grid-Following Inverter Under Weak Grid. IEEE Transactions on Power Electronics, 2022, 37, 4091-4104.	7.9	38

#	Article	IF	Citations
19	Generalized Multivariable Grid-Forming Control Design for Power Converters. IEEE Transactions on Smart Grid, 2022, 13, 2873-2885.	9.0	37
20	Analysis and Mitigation of SSCI in DFIG Systems With Experimental Validation. IEEE Transactions on Energy Conversion, 2020, 35, 714-723.	5.2	36
21	Reactive Power Dispatch Method in Wind Farms to Improve the Lifetime of Power Converter Considering Wake Effect. IEEE Transactions on Sustainable Energy, 2017, 8, 477-487.	8.8	33
22	A System Engineering Approach Using FMEA and Bayesian Network for Risk Analysisâ€"A Case Study. Sustainability, 2020, 12, 77.	3.2	31
23	Aliasing Suppression of Multisampled Current-Controlled LCL-Filtered Inverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 2411-2423.	5.4	30
24	Evaluation and Design Tools for the Reliability of Wind Power Converter System. Journal of Power Electronics, 2015, 15, 1149-1157.	1.5	30
25	A reliability-oriented design method for power electronic converters. , 2013, , .		28
26	A Novel Type-2 Fuzzy Logic for Improved Risk Analysis of Proton Exchange Membrane Fuel Cells in Marine Power Systems Application. Energies, 2018, 11, 721.	3.1	28
27	Lifetime-Oriented Droop Control Strategy for AC Islanded Microgrids. IEEE Transactions on Industry Applications, 2019, 55, 3252-3263.	4.9	28
28	Multitimescale Reliability Evaluation of DC-Link Capacitor Banks in Metro Traction Drive System. IEEE Transactions on Transportation Electrification, 2020, 6, 213-227.	7.8	28
29	Characteristics of Parallel Inverters Applying Virtual Synchronous Generator Control. IEEE Transactions on Smart Grid, 2021, 12, 4690-4701.	9.0	25
30	Wind Turbine Power Curve Design for Optimal Power Generation in Wind Farms Considering Wake Effect. Energies, 2017, 10, 395.	3.1	24
31	A Novel Direct Power Control for DFIG With Parallel Compensator Under Unbalanced Grid Condition. IEEE Transactions on Industrial Electronics, 2021, 68, 9607-9618.	7.9	24
32	Impact of Grid Strength and Impedance Characteristics on the Maximum Power Transfer Capability of Grid-Connected Inverters. Applied Sciences (Switzerland), 2021, 11, 4288.	2.5	23
33	Converter-Level Reliability of Wind Turbine With Low Sample Rate Mission Profile. IEEE Transactions on Industry Applications, 2020, 56, 2938-2944.	4.9	22
34	A Review of Multisampling Techniques in Power Electronics Applications. IEEE Transactions on Power Electronics, 2022, 37, 10514-10533.	7.9	22
35	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
36	Line Voltage Sensorless Control of Grid-Connected Inverters Using Multisampling. IEEE Transactions on Power Electronics, 2022, 37, 4792-4803.	7.9	21

#	Article	IF	Citations
37	Optimal Control to Increase Energy Production of Wind Farm Considering Wake Effect and Lifetime Estimation. Applied Sciences (Switzerland), 2017, 7, 65.	2.5	19
38	Symmetrical Bipolar Output Isolated Four-Port Converters Based on Center-Tapped Winding for Bipolar DC Bus Applications. IEEE Transactions on Power Electronics, 2021, , 1-1.	7.9	19
39	Component-Level Reliability Assessment of a Direct-Drive PMSG Wind Power Converter Considering Two Terms of Thermal Cycles and the Parameter Sensitivity Analysis. IEEE Transactions on Power Electronics, 2021, 36, 10037-10050.	7.9	19
40	Thermal analysis of multi-MW two-level wind power converter. , 2012, , .		16
41	Modified Instantaneous Power Control With Phase Compensation and Current-Limited Function Under Unbalanced Grid Faults. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 2896-2906.	5.4	16
42	System-level reliability assessment of power stage in fuel cell application. , 2016, , .		15
43	Reliability Analysis of Capacitors in Voltage Regulator Modules With Consecutive Load Transients. IEEE Transactions on Power Electronics, 2021, 36, 2481-2487.	7.9	15
44	Stability Analysis of Grid-Following and Grid-Forming Converters Based on State-Space Model. , 2022, , .		15
45	Thermal profile analysis of Doubly-Fed induction generator based wind power converter with air and liquid cooling methods. , 2013, , .		14
46	Lifetime estimation of electrolytic capacitors in a fuel cell power converter at various confidence levels. , 2016, , .		14
47	Fundamental-frequency and load-varying thermal cycles effects on lifetime estimation of DFIG power converter. Microelectronics Reliability, 2017, 76-77, 549-555.	1.7	14
48	Reactive Power Impacts on LCL Filter Capacitor Lifetime in Grid-Connected Inverter. IEEE Open Journal of Power Electronics, 2020, 1, 139-148.	5.7	14
49	Degradation effect on reliability evaluation of aluminum electrolytic capacitor in backup power converter. , 2017, , .		13
50	Reliability assessment of power conditioner considering maintenance in a PEM fuel cell system. Microelectronics Reliability, 2018, 88-90, 1177-1182.	1.7	13
51	Overview of Multisampling Techniques in Power Electronics Converters. , 2019, , .		12
52	Torque Ripple Minimization of a Five-Phase Induction Motor Under Open-Phase Faults Using Symmetrical Components. IEEE Access, 2020, 8, 114675-114691.	4.2	12
53	Resonating Power Decoupling Using Multifunctional Bidirectional DC/DC Converter in Hybrid Railway Traction Application. IEEE Transactions on Power Electronics, 2022, 37, 404-415.	7.9	12
54	Optimal active and reactive power cooperative dispatch strategy of wind farm considering levelised production cost minimisation. Renewable Energy, 2020, 148, 113-123.	8.9	11

#	Article	IF	Citations
55	A Simplified SISO Small-Signal Model for Analyzing Instability Mechanism of Grid-Forming Inverter under Stronger Grid. , 2021, , .		11
56	Direct Power Magnitude Control of DFIG-DC System Without Orientation Control. IEEE Transactions on Industrial Electronics, 2021, 68, 1365-1373.	7.9	10
57	Maximum energy yield oriented turbine control in PMSGâ€based wind farm. Journal of Engineering, 2017, 2017, 2455-2460.	1.1	9
58	A Novel Power-Angle Control Method of DFIG-DC System Based on Regulating Air Gap Flux Vector. IEEE Transactions on Power Electronics, 2021, 36, 513-521.	7.9	9
59	The Closed-Loop Sideband Harmonic Suppression for CHB Inverter With Unbalanced Operation. IEEE Transactions on Power Electronics, 2022, 37, 5333-5341.	7.9	9
60	Grid-Following and Grid-Forming Control in Power Electronic Based Power Systems: A Comparative Study. , 2021, , .		9
61	Passivity-Based Multisampled Converter-Side Current Control of LCL-Filtered VSCs. IEEE Transactions on Power Electronics, 2022, 37, 13848-13860.	7.9	9
62	Thermal behavior of doubly-fed induction generator wind turbine system during balanced grid fault. , 2014, , .		7
63	Real mission profile based lifetime estimation of fuel-cell power converter. , 2016, , .		7
64	Comparative evaluation of reliability assessment methods of power modules in motor drive inverter. Microelectronics Reliability, 2020, 114, 113730.	1.7	7
65	Thermal Mapping of Power Semiconductors in H-Bridge Circuit. Applied Sciences (Switzerland), 2020, 10, 4340.	2.5	7
66	Mission profile resolution effects on lifetime estimation of doubly-fed induction generator power converter. , 2017, , .		6
67	Comparison of Three Small-Signal Stability Analysis Methods for Grid-Following Inverter. , 2021, , .		6
68	Separation and Validation of Bond-Wire and Solder Layer Failure Modes in IGBT Modules. IEEE Transactions on Industry Applications, 2022, 58, 2324-2331.	4.9	6
69	Thermal analysis of two-level wind power converter under symmetrical grid fault. , 2013, , .		5
70	Control of Wind Turbine System. , 2018, , 269-298.		5
71	Benchmarking of capacitor power loss calculation methods for wear-out failure prediction in PV inverters. Microelectronics Reliability, 2019, 100-101, 113491.	1.7	5
72	Thermal Stress Mapping of Power Semiconductors in H-bridge Test Bench. , 2019, , .		5

#	Article	IF	Citations
73	Characteristics of Virtual Synchronous Generator Based Voltage Source Converter. , 2020, , .		5
74	Analysis of the Capacitor-Less D-STATCOM for Voltage Profile Improvement in Distribution Network With High PV Penetration. IEEE Open Journal of Power Electronics, 2022, 3, 255-270.	5.7	5
75	Mission profile-oriented reliability design in wind turbine and photovoltaic systems. , 2015, , 355-390.		5
76	Lifetime Prediction of Boost, Z-source and Y-source Converters in a Fuel Cell Hybrid Electric Vehicle Application. Electric Power Components and Systems, 2018, 46, 1979-1991.	1.8	4
77	Reliability evaluation of power capacitors in a wind turbine system. , 2018, , .		4
78	Wear-Out Failure of a Power Electronic Converter Under Inversion and Rectification Modes. , 2019, , .		4
79	Multisampling Control of Two-Cell Interleaved Three-phase Grid-connected Converters. , 2021, , .		4
80	Comparison of DC-link Voltage Control Schemes on Grid-side and Machine-side for Type-4 Wind Generation System Under Weak Grid. , 2021, , .		4
81	Dynamic thermal analysis of DFIG rotor-side converter during balanced grid fault. , 2014, , .		3
82	Modeling and stress analysis of Doubly-Fed Induction Generator during grid voltage swell. , 2016, , .		3
83	Common-mode voltage reduction of three-to-five phase indirect matrix converters with zero-current vector modulation. , 2017, , .		3
84	Reactive Power Impacts on LCL Filter Capacitor Lifetime and Reliability in DFIG Grid-Connected Inverter. , 2018, , .		3
85	Switching Harmonics Suppression of Single-loop Multi-sampling Control of Grid-connected Inverter. , 2020, , .		3
86	Separation of Bond-Wire and Solder Layer Failure Modes in IGBT Power Modules. , 2020, , .		3
87	Enhanced Power Quality Control for a Grid-Connected Converter under Unbalanced and Distorted Grid Voltage. , 2020, , .		3
88	Thermal behavior optimization in multi-MW wind power converter by reactive power circulation. , 2013, , .		2
89	Reduced cost of reactive power in doubly fed induction generator wind turbine system with optimized grid filter. , 2014, , .		2
90	Cost on Reliability and Production Loss for Power Converters in the Doubly Fed Induction Generator to Support Modern Grid Codes. Electric Power Components and Systems, 2016, 44, 152-164.	1.8	2

#	Article	IF	Citations
91	Lifetime-Oriented Droop Control Strategy for AC Islanded Microgrids. , 2018, , .		2
92	Zero Torque Ripple Operation of Seven-phase Concentrated-full-pitch Winding Induction Motor Under Open Circuit faults. , 2020, , .		2
93	A Decentralized Adaptive SOC Balancing Strategy in VSG-based Islanded Power System. , 2021, , .		2
94	Multisampling based Grid Impedance Estimation for Two-Cell Interleaved Three-phase Inverters. , 2021, , .		2
95	Reliability Improvement of Voltage Regulator Modules by a Virtual Series Voltage Source. IEEE Transactions on Industrial Electronics, 2022, 69, 12641-12652.	7.9	2
96	Augmentation of Generalized Multivariable Grid-Forming Control for Power Converters with Cascaded Controllers. , 2022, , .		2
97	Reliability and energy loss in full-scale wind power converter considering grid codes and wind classes. , 2014, , .		1
98	Minimum junction temperature swing for DFIG to ride through symmetrical voltage dips. , 2015, , .		1
99	Improved DFIG capability during asymmetrical grid faults. , 2015, , .		1
100	Reliablity assessment of fuel cell system - A framework for quantitative approach. , 2016, , .		1
101	Impedance based analysis of DFIG stator current unbalance and distortion suppression strategies. , 2016, , .		1
102	Design of power converter in DFIG wind turbine with enhanced system-level reliability. , 2017, , .		1
103	System-level reliability assessment for a direct-drive PMSG based wind turbine with multiple converters. Microelectronics Reliability, 2020, 114, 113801.	1.7	1
104	Optimized Design of Grid-Side Converter in PMSG with Improved Turbine-Level Reliability. , 2021, , .		1
105	Multisampling Control of LCL-type Grid-connected Inverter with an Improved Repetitive Filter. , 2020, , .		1
106	Recurrent neural networks model based reliability assessment of power semiconductors in PMSG converter. Microelectronics Reliability, 2021, 126, 114314.	1.7	1
107	Design and Control of Single-Phase Controlled VSCs with Saturable Inductor-Based LCL Filters. , 2022, , .		1
108	Improved DFIG Control Strategy Under Three-Phase Asymmetrical Grid Faults. , 2018, , .		0

#	Article	IF	Citations
109	Study on Application of New Approach of Fault Current Limiters in Fault Ride through Capability Improvement of DFIG Based Wind Turbine. , 2018, , .		0
110	Impact of Background Harmonic on Filter Capacitor Reliability in Wind Turbine. , 2019, , .		0
111	Component-level Reliability Assessment of a Direct-drive PMSG Wind Power Converter Considering Long-term and short-term thermal cycles. , 2020, , .		0
112	Abnormal operation of wind turbine systems. , 2021, , 561-607.		0
113	Beatâ€less algorithm based on dualâ€frequency compensation in railway traction applications. IET Power Electronics, 2021, 14, 1985-1994.	2.1	0
114	Converter-Level Reliability of Wind Turbine with Low Sample Rate Mission Profile. , 2019, , .		0