

Meng Huang

List of Publications by Year in descending order

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911
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#	ARTICLE	IF	CITATIONS
1	Large-Signal Stability of Grid-Forming and Grid-Following Controls in Voltage Source Converter: A Comparative Study. IEEE Transactions on Power Electronics, 2021, 36, 7832-7840.	5.4	117
2	Bifurcation and Large-Signal Stability Analysis of Three-Phase Voltage Source Converter Under Grid Voltage Dips. IEEE Transactions on Power Electronics, 2017, 32, 8868-8879.	5.4	108
3	Nonlinear and Transient Stability Analysis of Phase-Locked Loops in Grid-Connected Converters. IEEE Transactions on Power Electronics, 2021, 36, 1018-1029.	5.4	85
4	Effects of Interaction of Power Converters Coupled via Power Grid: A Design-Oriented Study. IEEE Transactions on Power Electronics, 2015, 30, 3589-3600.	5.4	75
5	Low-Frequency Hopf Bifurcation and Its Effects on Stability Margin in Three-Phase PFC Power Supplies Connected to Non-Ideal Power Grid. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 3328-3340.	3.5	49
6	Catastrophic Bifurcation in Three-Phase Voltage-Source Converters. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 1062-1071.	3.5	49
7	Nonlinear Behavior and Instability in a Three-Phase Boost Rectifier Connected to a Nonideal Power Grid With an Interacting Load. IEEE Transactions on Power Electronics, 2013, 28, 3255-3265.	5.4	45
8	Circuits and Systems Issues in Power Electronics Penetrated Power Grid. IEEE Open Journal of Circuits and Systems, 2020, 1, 140-156.	1.4	43
9	Power Decoupling Control for Capacitance Reduction in Cascaded-H-Bridge-Converter-Based Regenerative Motor Drive Systems. IEEE Transactions on Power Electronics, 2019, 34, 538-549.	5.4	42
10	Bifurcation-Based Stability Analysis of Photovoltaic-Battery Hybrid Power System. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 1055-1067.	3.7	40
11	Reliability-Oriented Optimization of the LC Filter in a Buck DC-DC Converter. IEEE Transactions on Power Electronics, 2017, 32, 6323-6337.	5.4	35
12	Dynamic Aggregation Modeling of Grid-Connected Inverters Using Hamilton's-Action-Based Coherent Equivalence. IEEE Transactions on Industrial Electronics, 2019, 66, 6437-6448.	5.2	35
13	Nonlinear Analysis of PLL Damping Characteristics in Weak-Grid-Tied Inverters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 2752-2756.	2.2	31
14	An Adaptive Carrier Frequency Optimization Method for Harmonic Energy Unbalance Minimization in a Cascaded H-Bridge-Based Active Power Filter. IEEE Transactions on Power Electronics, 2018, 33, 1024-1037.	5.4	29
15	Large-Signal Stability Criterion for Parallel-Connected DC-DC Converters With Current Source Equivalence. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 2037-2041.	2.2	26
16	An Improved Equal Area Criterion for Transient Stability Analysis of Converter-Based Microgrid Considering Nonlinear Damping Effect. IEEE Transactions on Power Electronics, 2022, 37, 11272-11284.	5.4	26
17	An Improved SSCB Combining Fault Interruption and Fault Location Functions for DC Line Short-Circuit Fault Protection. IEEE Transactions on Power Delivery, 2019, 34, 858-868.	2.9	24
18	Hamilton-Based Stability Criterion and Attraction Region Estimation for Grid-Tied Inverters Under Large-Signal Disturbances. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 413-423.	3.7	21

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19	Analysis and design of repetitive controller based on regeneration spectrum and sensitivity function in active power filter system. IET Power Electronics, 2014, 7, 2133-2140.	1.5	20
20	An Integrated Dual Voltage Loop Control for Capacitance Reduction in CHB-Based Regenerative Motor Drive Systems. IEEE Transactions on Industrial Electronics, 2019, 66, 3369-3379.	5.2	19
21	Robust Bad Data Detection Method for Microgrid Using Improved ELM and DBSCAN Algorithm. Journal of Energy Engineering - ASCE, 2018, 144, 04018026.	1.0	17
22	Short-Circuit Current Estimation of Modular Multilevel Converter Using Discrete-Time Modeling. IEEE Transactions on Power Electronics, 2019, 34, 40-45.	5.4	17
23	A Novel Node Flexibility Evaluation Method of Active Distribution Network for SNOP Integration. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2021, 11, 188-198.	2.7	17
24	Cascading Synchronization Instability in Multi-VSC Grid-Connected System. IEEE Transactions on Power Electronics, 2022, 37, 7572-7576.	5.4	17
25	An Improved Impedance Measurement Method for Grid-Connected Inverter Systems Considering the Background Harmonics and Frequency Deviation. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 4236-4247.	3.7	16
26	A Novel Dynamic Aggregation Modeling Method of Grid-Connected Inverters: Application in Small-Signal Analysis. IEEE Transactions on Sustainable Energy, 2019, 10, 1554-1564.	5.9	14
27	IGBT Remaining Useful Life Prediction Based on Particle Filter With Fusing Precursor. IEEE Access, 2020, 8, 154281-154289.	2.6	13
28	Stability of interacting grid-connected power converters. Journal of Modern Power Systems and Clean Energy, 2013, 1, 249-257.	3.3	12
29	Homoclinic Bifurcation of a Grid-Forming Voltage Source Converter. IEEE Transactions on Power Electronics, 2021, 36, 13176-13187.	5.4	12
30	Transient Stability Analysis of Grid-Connected VSIs via PLL Interaction. , 2018, , .		10
31	Multiple-Loop Control Design for a Single-Stage PV-Fed Grid-Tied Differential Boost Inverter. Applied Sciences (Switzerland), 2020, 10, 4808.	1.3	10
32	Asymmetrical carrier phase-shifted pulse-width modulation for partly regenerative converter. IET Power Electronics, 2017, 10, 442-450.	1.5	8
33	Direct Frequency Control Based MPPT Algorithm of LLC Resonant Converter for Photovoltaic System. , 2019, , .		7
34	Emulation of Multi-Inverter Integrated Weak Grid via Interaction-Preserved Aggregation. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 4153-4164.	3.7	7
35	Stability and Multiconstraint Operating Region of Grid-Connected Modular Multilevel Converter Under Grid Phase Disturbance. IEEE Transactions on Power Electronics, 2021, 36, 12551-12564.	5.4	7
36	Improving the Stability and Accuracy of Power Hardware-in-the-Loop Simulation Using Virtual Impedance Method. Energies, 2016, 9, 974.	1.6	6

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37	Modeling method of sequence admittance for three-phase voltage source converter under unbalanced grid condition. <i>Journal of Modern Power Systems and Clean Energy</i> , 2018, 6, 595-606.	3.3	6
38	Multi-objective Design of LC Filter for High-efficiency, High-power-density and High-performance Buck Converter. , 2019, , .		6
39	Speed-Sensorless and Motor Parameters-Free Starting Method for Large-Capacity Synchronous Machines Based on Virtual Synchronous Generator Technology. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 6607-6618.	5.2	6
40	Clustering-Based Modeling and Interaction Analysis of Multiple Differently Parameterized Grid-Side Inverters in PMSC Wind Turbines. <i>IEEE Transactions on Energy Conversion</i> , 2021, 36, 3031-3043.	3.7	6
41	Resilient Power Converter: A Grid-Connected Converter With Disturbance/Attack Resiliency via Multi-Timescale Current Limiting Scheme. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2021, 11, 59-68.	2.7	6
42	CDSC-Based Adaptive Impedance Measurement Method for Grid-Tied Inverter System Under Adverse Grid Voltage Conditions. <i>IEEE Transactions on Industrial Electronics</i> , 2022, 69, 11210-11220.	5.2	6
43	Robust Stability Assessment of Single-Phase Inverter With Multiparameter Distributions. <i>IEEE Transactions on Power Electronics</i> , 2022, 37, 6062-6073.	5.4	6
44	A composite compensation method of a grid-connected AC/DC converter to improve robustness under weak grid conditions. , 2015, , .		5
45	Reliability-oriented design of LC filter in buck DC-DC converter with multi-objective optimization. , 2016, , .		5
46	Adaptability of weighted average current control to the weak grid considering the effect of grid-voltage feedforward. , 2017, , .		5
47	Compensation method of phase-locked loop under unbalanced grid condition based on harmonic linearization. <i>International Journal of Circuit Theory and Applications</i> , 2018, 46, 1181-1203.	1.3	5
48	Reliability evaluation of MMC system considering working conditions. <i>Journal of Engineering</i> , 2019, 2019, 1877-1881.	0.6	5
49	Simplified Power Loss Model for Aluminum Electrolytic Capacitors in Single-Phase Inverters. <i>IEEE Transactions on Power Electronics</i> , 2020, 35, 4452-4456.	5.4	5
50	Transient Voltage and Current Stresses Estimation of MMC-MTDC System via Discrete-Time Analysis. <i>IEEE Transactions on Power Delivery</i> , 2020, 35, 2821-2830.	2.9	5
51	Overview of recent progress in condition monitoring for insulated gate bipolar transistor modules: Detection, estimation, and prediction. <i>High Voltage</i> , 2021, 6, 967-977.	2.7	5
52	Bifurcation analysis in dual-input buck converter in hybrid power system. , 2013, , .		4
53	Interacting bifurcation phenomenon in three-phase voltage source converter connected to non-ideal power grid. , 2013, , .		4
54	Transient response of three-phase voltage-source converters under grid-side faults. , 2015, , .		4

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55	Optimized damping for LCL filters in three-phase voltage source inverters coupled by power grid. Journal of Modern Power Systems and Clean Energy, 2017, 5, 642-651.	3.3	4
56	Reliability model of bond wire fatigue for IGBT in MMC with system redundancy consideration. Microelectronics Reliability, 2018, 88-90, 1164-1167.	0.9	4
57	Transient junction temperature estimation of IGBT using improved thermal model. Microelectronics Reliability, 2018, 88-90, 1146-1150.	0.9	4
58	Frequency-Dependent Network Analysis and Stability Enhanced Design for Voltage-Source Converters Under Weak Grid Conditions. IEEE Transactions on Power Delivery, 2022, 37, 4593-4602.	2.9	4
59	Synchronization Stability of Grid-Following Converters Governed by Saturation Nonlinearities. IEEE Transactions on Power Systems, 2022, 37, 4102-4105.	4.6	4
60	An Online Monitoring Method for Single Aluminum Electrolytic Capacitor in the DC Bank of Single-Phase Inverter Based on the Rogowski Coil. IEEE Transactions on Power Electronics, 2022, 37, 12647-12658.	5.4	4
61	Realization and improvement of repetitive control in rotating frame for active power filter system. , 2010, , .		3
62	Catastrophic bifurcation in three-phase boost rectifiers. , 2011, , .		3
63	Reliability-oriented design of LC filter in buck DC-DC converter. , 2015, , .		3
64	Bifurcation analysis of photovoltaic-battery hybrid power system with constant power load. , 2016, , .		3
65	A nonlinear large-signal model for DC-DC converters. , 2016, , .		3
66	Modular Multilevel Converter DC Bipolar Short-Circuit Current Calculation on Discrete-Time Model. , 2018, , .		3
67	Investigation of artificial neural network algorithm based IGBT online condition monitoring. Microelectronics Reliability, 2018, 88-90, 103-106.	0.9	3
68	Back-to-back Starting of Large-capacity Condenser with Virtual Synchronous Generator. , 2019, , .		3
69	An Integrated Design of the Solid-State Circuit Breaker and the DC-DC Converter. , 2020, , .		3
70	Analysis of Subharmonic Oscillation and Slope Compensation for a Differential Boost Inverter. Applied Sciences (Switzerland), 2020, 10, 5626.	1.3	3
71	Transient Modeling of Phase-Locked Loop and its Applications in a Multi-VSCs Grid-connected System. , 2021, , .		3
72	Optimal Virtual Inertia Design for VSG-based Motor Starting Systems to Improve Motor Loading Capacity. IEEE Transactions on Energy Conversion, 2022, , 1-1.	3.7	3

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73	Bifurcations of Grid-Following Rectifiers and Routes to Voltage Instability in Weak AC Grids. IEEE Transactions on Power Systems, 2023, 38, 1702-1713.	4.6	3
74	Catastrophic Bifurcation in Three-Phase Voltage-Source Converters. , 2011, , .		2
75	Irreversible instability in three-phase voltage-source converter connected to non-ideal power grid with interacting load. , 2012, , .		2
76	Coordinate control system for photovoltaic-based DC microgrid. , 2013, , .		2
77	Active power decoupling method for isolated micro-inverters. , 2014, , .		2
78	Individual DC voltage balancing method at zero current mode for cascaded H-bridge based static synchronous compensator. , 2017, , .		2
79	Reliability-oriented optimization of DC bank in single phase inverter. , 2017, , .		2
80	A Stable and Fast-Transient Performance Switched-Mode Power Amplifier for a Power Hardware in the Loop (PHIL) System. Energies, 2017, 10, 1569.	1.6	2
81	A Closed-Loop Power Decoupling Control for Capacitance Reduction in CHB-based Regenerative Motor Drive Systems. , 2018, , .		2
82	Two-thermal-states model predictive control for IGBT in three-phase inverter. Microelectronics Reliability, 2018, 88-90, 1098-1102.	0.9	2
83	Impedance Measurement of Grid-Tied Inverter With Deviate-Frequency Harmonic Current Injection. , 2019, , .		2
84	Impact Analysis of Fast Dynamics on Stability of Grid-Tied Inverter Based on Oscillator Model and Damping Torque Analysis. IEEE Transactions on Power Systems, 2022, 37, 1881-1892.	4.6	2
85	Research on testing platform for new energy grid-connected devices. , 2013, , .		1
86	Design consideration of LCL-filter for three-phase voltage source inverter in distributed power grid. , 2014, , .		1
87	Stability of interacting grid-connected power converters. , 2014, , .		1
88	A source-type harmonic energy unbalance suppression method based on carrier frequency optimization for cascaded multilevel APF. , 2016, , .		1
89	Explore the Operating Limit of Cascaded H-Bridge Converters with Uneven Power Distribution. , 2018, , .		1
90	Influence of DC Link Capacitance on Power Efficiency of Single-Phase Inverter. , 2018, , .		1

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91	Multiple Time-scales Node Flexibility Evaluation and Partitioning Method of the Distribution Network Oriented to SNOP Integration. , 2020, , .		1
92	Parallel operation of active power filters based on Boost Converter Control. , 2010, , .		0
93	A Boost Converter Control Based Three-phase Four-leg Active Power Filter. , 2010, , .		0
94	Hopf-type Bifurcation in Three-Phase PFC Power Supplies Connected to Non-ideal Power Grid. , 2012, , .		0
95	Line-frequency instability of three-phase PFC power supplies connecting to non-ideal power grid. , 2012, , .		0
96	IRREVERSIBLE BIFURCATION PHENOMENON IN POWER-GRID CONNECTED CONVERTER SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250155.	0.7	0
97	Current control for single-phase grid-connected inverters by splitting the elements of LLCL filter. , 2013, , .		0
98	Hopf bifurcation in single-phase inverter connected to inductive load. , 2016, , .		0
99	Dead-time effect suppression with PMR control in single-phase H-bridge inverters. , 2016, , .		0
100	Study on SVG plus FC allocation optimization by considering reactive load fluctuation coefficients and probabilistic analysis of compensating capacity. , 2016, , .		0
101	Study on SVG plus FC allocation optimization by considering reactive load fluctuation coefficients and probabilistic analysis of compensating capacity. , 2016, , .		0
102	Redefinition of safety operating area (SOA) considering transient thermal dynamics of IGBT module. , 2017, , .		0
103	Comb filtering assisted proportional-repetitive control achieving zero static error for single-phase inverters. , 2017, , .		0
104	A research of discrete-time modeling method for the modular multilevel converter. , 2017, , .		0
105	Frequency-dependent impedance modeling of power grid with high power electronics penetration. , 2017, , .		0
106	Interaction of voltage and current control loop in three-phase voltage source converter. , 2017, , .		0
107	Transient Current Calculation of Grid-Connected Converters under Grid Faults. , 2018, , .		0
108	Dynamic State Estimation for DFIG Wind Turbine with Stochastic Wind Speed in Power System. , 2018, , .		0

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109	Stability Analysis of MMC under Grid Voltage Phase Change. , 2019, , .		0
110	Guest Editorial Stability and Robustness of Power Grids With High Penetration of Power Electronics. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2021, 11, 1-4.	2.7	0
111	Voltage Balancing Scheme Based on Active Voltage Cross Control for Series-Connected IGBTs. , 2020, , .		0
112	Lifetime Estimation for Aluminum Electrolytic Capacitors in Active Power Filter. , 2020, , .		0
113	Interaction Analysis of Current Control Loops in MMC Under Asymmetrical Grid Faults. , 2021, , .		0
114	Optimization of DC-Link Capacitance Based on the Power Loss Modeling of IGBT for Inverters Under Swing Bus Operation. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2022, 12, 73-80.	2.7	0
115	Transient Stability Analysis for Grid-tied Virtual Synchronous Generator Based on T-S Fuzzy Modeling and LMI Approach. , 2021, , .		0
116	Research on Improvement Mechanism of Transient Stability of Droop Converter Based on SVG Compensation. , 2021, , .		0