

# Peng Wang

## List of Publications by Year in descending order

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125  
papers

7,514  
citations

47004

47  
h-index

56717

83  
g-index

125  
all docs

125  
docs citations

125  
times ranked

4887  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Hybrid AC/DC Microgrid and Its Coordination Control. IEEE Transactions on Smart Grid, 2011, 2, 278-286.	9.0	991
2	Implementation of Hierarchical Control in DC Microgrids. IEEE Transactions on Industrial Electronics, 2014, 61, 4032-4042.	7.9	287
3	Harmonizing AC and DC: A Hybrid AC/DC Future Grid Solution. IEEE Power and Energy Magazine, 2013, 11, 76-83.	1.6	250
4	A Decentralized Dynamic Power Sharing Strategy for Hybrid Energy Storage System in Autonomous DC Microgrid. IEEE Transactions on Industrial Electronics, 2017, 64, 5930-5941.	7.9	245
5	A Novel Composite Nonlinear Controller for Stabilization of Constant Power Load in DC Microgrid. IEEE Transactions on Smart Grid, 2019, 10, 752-761.	9.0	239
6	Hierarchical Control of Hybrid Energy Storage System in DC Microgrids. IEEE Transactions on Industrial Electronics, 2015, 62, 4915-4924.	7.9	216
7	Distributed Control for Autonomous Operation of a Three-Port AC/DC/DS Hybrid Microgrid. IEEE Transactions on Industrial Electronics, 2015, 62, 1279-1290.	7.9	208
8	Transportable Energy Storage for More Resilient Distribution Systems With Multiple Microgrids. IEEE Transactions on Smart Grid, 2019, 10, 3331-3341.	9.0	204
9	Improvement of Frequency Regulation in VSG-Based AC Microgrid Via Adaptive Virtual Inertia. IEEE Transactions on Power Electronics, 2020, 35, 1589-1602.	7.9	172
10	Distributed Secondary Control for Power Allocation and Voltage Restoration in Islanded DC Microgrids. IEEE Transactions on Sustainable Energy, 2018, 9, 1857-1869.	8.8	170
11	A Decentralized Power Management Strategy for Hybrid Energy Storage System With Autonomous Bus Voltage Restoration and State-of-Charge Recovery. IEEE Transactions on Industrial Electronics, 2017, 64, 7098-7108.	7.9	143
12	Rolling Optimization of Mobile Energy Storage Fleets for Resilient Service Restoration. IEEE Transactions on Smart Grid, 2020, 11, 1030-1043.	9.0	136
13	A Uniform Control Strategy for the Interlinking Converter in Hierarchical Controlled Hybrid AC/DC Microgrids. IEEE Transactions on Industrial Electronics, 2018, 65, 6188-6197.	7.9	125
14	Short-Term and Medium-Term Reliability Evaluation for Power Systems With High Penetration of Wind Power. IEEE Transactions on Sustainable Energy, 2014, 5, 896-906.	8.8	122
15	Reliability and Cost based Redundancy Design for Modular Multilevel Converter. IEEE Transactions on Industrial Electronics, 2018, , 1-1.	7.9	112
16	SoC-Based Droop Coefficients Stability Region Analysis of the Battery for Stand-Alone Supply Systems With Constant Power Loads. IEEE Transactions on Power Electronics, 2021, 36, 7866-7879.	7.9	105
17	Cost-Prioritized Droop Schemes for Autonomous AC Microgrids. IEEE Transactions on Power Electronics, 2015, 30, 1109-1119.	7.9	100
18	Distributed Control for a Modular Multilevel Converter. IEEE Transactions on Power Electronics, 2018, 33, 5578-5591.	7.9	99

#	ARTICLE	IF	CITATIONS
19	Reduced-Order Transfer Function Model of the Droop-Controlled Inverter via Jordan Continued-Fraction Expansion. IEEE Transactions on Energy Conversion, 2020, 35, 1585-1595.	5.2	97
20	Wind Power Forecasting Using Neural Network Ensembles With Feature Selection. IEEE Transactions on Sustainable Energy, 2015, 6, 1447-1456.	8.8	96
21	A Multi-State Model for Transmission System Resilience Enhancement Against Short-Circuit Faults Caused by Extreme Weather Events. IEEE Transactions on Power Delivery, 2021, 36, 2374-2385.	4.3	93
22	Feedback Linearization-Based Current Control Strategy for Modular Multilevel Converters. IEEE Transactions on Power Electronics, 2018, 33, 161-174.	7.9	93
23	A Decentralized Control Strategy for Economic Operation of Autonomous AC, DC, and Hybrid AC/DC Microgrids. IEEE Transactions on Energy Conversion, 2017, 32, 1345-1355.	5.2	87
24	Multi-Level Energy Management System for Real-Time Scheduling of DC Microgrids With Multiple Slack Terminals. IEEE Transactions on Energy Conversion, 2016, 31, 392-400.	5.2	85
25	Seamless Fault-Tolerant Operation of a Modular Multilevel Converter With Switch Open-Circuit Fault Diagnosis in a Distributed Control Architecture. IEEE Transactions on Power Electronics, 2018, 33, 7058-7070.	7.9	84
26	Reduced-Order Aggregate Model for Large-Scale Converters With Inhomogeneous Initial Conditions in DC Microgrids. IEEE Transactions on Energy Conversion, 2021, 36, 2473-2484.	5.2	84
27	A Decentralized Control Strategy for Autonomous Transient Power Sharing and State-of-Charge Recovery in Hybrid Energy Storage Systems. IEEE Transactions on Sustainable Energy, 2017, 8, 1443-1452.	8.8	80
28	A Distributed Power Management Strategy for Multi-Paralleled Bidirectional Interlinking Converters in Hybrid AC/DC Microgrids. IEEE Transactions on Smart Grid, 2019, 10, 5696-5711.	9.0	80
29	Distributed Operation Management of Battery Swapping-Charging Systems. IEEE Transactions on Smart Grid, 2019, 10, 5320-5333.	9.0	79
30	Multilevel Energy Management System for Hybridization of Energy Storages in DC Microgrids. IEEE Transactions on Smart Grid, 2015, , 1-1.	9.0	77
31	An Integral Droop for Transient Power Allocation and Output Impedance Shaping of Hybrid Energy Storage System in DC Microgrid. IEEE Transactions on Power Electronics, 2018, 33, 6262-6277.	7.9	77
32	Allocation of Centrally Switched Fault Current Limiters Enabled by 5G in Transmission System. IEEE Transactions on Power Delivery, 2021, 36, 3231-3241.	4.3	74
33	Implementation of Bidirectional Resonant DC Transformer in Hybrid AC/DC Micro-Grid. IEEE Transactions on Smart Grid, 2019, 10, 1532-1542.	9.0	72
34	Implementation of Multiple-Slack-Terminal DC Microgrids for Smooth Transitions Between Grid-Tied and Islanded States. IEEE Transactions on Smart Grid, 2016, 7, 273-281.	9.0	68
35	Time-Delay Stability Analysis for Hybrid Energy Storage System With Hierarchical Control in DC Microgrids. IEEE Transactions on Smart Grid, 2018, 9, 6633-6645.	9.0	62
36	Intelligent Power Sharing of DC Isolated Microgrid Based on Fuzzy Sliding Mode Droop Control. IEEE Transactions on Smart Grid, 2019, 10, 2396-2406.	9.0	62

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37	A Distributed Control Architecture for Global System Economic Operation in Autonomous Hybrid AC/DC Microgrids. IEEE Transactions on Smart Grid, 2019, 10, 2603-2617.	9.0	61
38	Two-Level Distributed Volt/Var Control Using Aggregated PV Inverters in Distribution Networks. IEEE Transactions on Power Delivery, 2020, 35, 1844-1855.	4.3	61
39	Nodal Reliability Evaluation of Interdependent Gas and Power Systems Considering Cascading Effects. IEEE Transactions on Smart Grid, 2020, 11, 4090-4104.	9.0	60
40	Modular Multilevel Converter Synthetic Inertia-Based Frequency Support for Medium-Voltage Microgrids. IEEE Transactions on Industrial Electronics, 2019, 66, 8992-9002.	7.9	59
41	A Novel Assorted Nonlinear Stabilizer for DC-DC Multilevel Boost Converter With Constant Power Load in DC Microgrid. IEEE Transactions on Power Electronics, 2020, 35, 11181-11192.	7.9	56
42	Unreliability cost assessment of an electric power system using reliability network equivalent approaches. IEEE Transactions on Power Systems, 2002, 17, 549-556.	6.5	55
43	A Distributed and Robust Energy Management System for Networked Hybrid AC/DC Microgrids. IEEE Transactions on Smart Grid, 2020, 11, 3496-3508.	9.0	55
44	A Semi-Consensus Strategy Toward Multi-Functional Hybrid Energy Storage System in DC Microgrids. IEEE Transactions on Energy Conversion, 2020, 35, 336-346.	5.2	54
45	Large-Signal Stability of Interleave Boost Converter System With Constant Power Load Using Sliding-Mode Control. IEEE Transactions on Industrial Electronics, 2020, 67, 9450-9459.	7.9	53
46	A Data-Driven Bottom-Up Approach for Spatial and Temporal Electric Load Forecasting. IEEE Transactions on Power Systems, 2019, 34, 1966-1979.	6.5	52
47	Distributed Supervisory Secondary Control for a DC Microgrid. IEEE Transactions on Energy Conversion, 2020, 35, 1736-1746.	5.2	51
48	One-Cycle-Controlled Three-Phase PWM Rectifiers With Improved Regulation Under Unbalanced and Distorted Input-Voltage Conditions. IEEE Transactions on Power Electronics, 2010, 25, 2786-2796.	7.9	48
49	A hybrid AC/DC micro-grid architecture, operation and control. , 2011, , .		48
50	A Decentralized Composite Controller for Unified Voltage Control With Global System Large-Signal Stability in DC Microgrids. IEEE Transactions on Smart Grid, 2019, 10, 5075-5091.	9.0	43
51	Accurate Current Sharing and Voltage Regulation in Hybrid Wind/Solar Systems: An Adaptive Dynamic Programming Approach. IEEE Transactions on Consumer Electronics, 2022, 68, 261-272.	3.6	41
52	Mitigation of DC and Harmonic Currents Generated by Voltage Measurement Errors and Grid Voltage Distortions in Transformerless Grid-Connected Inverters. IEEE Transactions on Energy Conversion, 2018, 33, 801-813.	5.2	40
53	Power Decoupling Control for Modular Multilevel Converter. IEEE Transactions on Power Electronics, 2018, 33, 9296-9309.	7.9	39
54	Comprehensive Coordinated Frequency Control of Symmetrical CLLC-DC Transformer in Hybrid AC/DC Microgrids. IEEE Transactions on Power Electronics, 2020, 35, 10374-10384.	7.9	39

#	ARTICLE	IF	CITATIONS
55	Stochastic Scheduling of Mobile Energy Storage in Coupled Distribution and Transportation Networks for Conversion Capacity Enhancement. IEEE Transactions on Smart Grid, 2021, 12, 117-130.	9.0	39
56	Power-Capacity-Based Bus-Voltage Region Partition and Online Droop Coefficient Tuning for Real-Time Operation of DC Microgrids. IEEE Transactions on Energy Conversion, 2015, 30, 1338-1347.	5.2	37
57	Resilience Assessment of Interdependent Energy Systems Under Hurricanes. IEEE Transactions on Power Systems, 2020, 35, 3682-3694.	6.5	37
58	Coordinated secondary control for autonomous hybrid three-port AC/DC/DS microgrid. CSEE Journal of Power and Energy Systems, 2018, 4, 1-10.	1.1	36
59	The SVC Additional Adaptive Voltage Controller of Isolated Wind-Diesel Power System Based on Double Sliding-Mode Optimal Strategy. IEEE Transactions on Sustainable Energy, 2018, 9, 24-34.	8.8	36
60	Reliability Evaluation of Power Systems Considering Restructuring and Renewable Generators. IEEE Transactions on Power Systems, 2012, 27, 243-250.	6.5	35
61	Pad $\hat{A}$ -Based Stability Analysis for a Modular Multilevel Converter Considering the Time Delay in the Digital Control System. IEEE Transactions on Industrial Electronics, 2019, 66, 5242-5253.	7.9	35
62	An Improved Control Strategy of Three-Phase PWM Rectifiers Under Input Voltage Distortions and DC-Offset Measurement Errors. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 1164-1176.	5.4	33
63	A Robust Droop-Based Autonomous Controller for Decentralized Power Sharing in DC Microgrid Considering Large-Signal Stability. IEEE Transactions on Industrial Informatics, 2020, 16, 1483-1494.	11.3	33
64	Vehicle-Vehicle Energy Interaction Converter of Electric Vehicles: A Disturbance Observer Based Sliding Mode Control Algorithm. IEEE Transactions on Vehicular Technology, 2021, 70, 9910-9921.	6.3	33
65	On Autonomous Large-Signal Stabilization for Islanded Multibus DC Microgrids: A Uniform Nonsmooth Control Scheme. IEEE Transactions on Industrial Electronics, 2020, 67, 4600-4612.	7.9	32
66	A Fast Contingency Screening Technique for Generation System Reliability Evaluation. IEEE Transactions on Power Systems, 2013, 28, 4127-4133.	6.5	29
67	Spatial-Temporal Reliability and Damage Assessment of Transmission Networks Under Hurricanes. IEEE Transactions on Smart Grid, 2020, 11, 1044-1054.	9.0	29
68	A Module-Based Approach for Stability Analysis of Complex More-Electric Aircraft Power System. IEEE Transactions on Transportation Electrification, 2017, 3, 901-919.	7.8	27
69	Deception Attack Detection of Isolated DC Microgrids Under Consensus-Based Distributed Voltage Control Architecture. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2021, 11, 155-167.	3.6	26
70	A Bidirectional DC-DC Converter With High Voltage Conversion Ratio and Zero Ripple Current for Battery Energy Storage System. IEEE Transactions on Power Electronics, 2021, 36, 8012-8027.	7.9	26
71	Decentralized Economic Operation Control for Hybrid AC/DC Microgrid. IEEE Transactions on Sustainable Energy, 2020, 11, 1898-1910.	8.8	25
72	Resilient Unit Commitment for Day-Ahead Market Considering Probabilistic Impacts of Hurricanes. IEEE Transactions on Power Systems, 2021, 36, 1082-1094.	6.5	25

#	ARTICLE	IF	CITATIONS
73	Feasible Power-Flow Solution Analysis of DC Microgrids Under Droop Control. IEEE Transactions on Smart Grid, 2020, 11, 2771-2781.	9.0	23
74	Distributed Dynamic Event-Triggered Control for Voltage Restoration and Current Sharing in DC Microgrids. IEEE Transactions on Sustainable Energy, 2022, 13, 619-628.	8.8	23
75	Stability Analysis of PV Generators With Consideration of P&O-Based Power Control. IEEE Transactions on Industrial Electronics, 2019, 66, 6483-6492.	7.9	22
76	Systematic Reliability Modeling and Evaluation for On-Board Power Systems of More Electric Aircrafts. IEEE Transactions on Power Systems, 2019, 34, 3264-3273.	6.5	22
77	Convergence Analysis of Newton-Raphson Method in Feasible Power-Flow for DC Network. IEEE Transactions on Power Systems, 2020, 35, 4100-4103.	6.5	22
78	A Distributed Cooperative Control Algorithm for Optimal Power Flow and Voltage Regulation in DC Power System. IEEE Transactions on Power Delivery, 2020, 35, 892-903.	4.3	21
79	New Analysis Framework for Transient Stability Evaluation of DC Microgrids. IEEE Transactions on Smart Grid, 2020, 11, 2794-2804.	9.0	21
80	Nodal Reliability Evaluation for a VSC-MTDC-Based Hybrid AC/DC Power System. IEEE Transactions on Power Systems, 2020, 35, 2300-2312.	6.5	21
81	A Composite Finite-Time Controller for Decentralized Power Sharing and Stabilization of Hybrid Fuel Cell/Supercapacitor System With Constant Power Load. IEEE Transactions on Industrial Electronics, 2021, 68, 1388-1400.	7.9	20
82	An Autonomous Control Scheme of Global Smooth Transitions for Bidirectional DC-DC Converter in DC Microgrid. IEEE Transactions on Energy Conversion, 2021, 36, 950-960.	5.2	20
83	Toward Large-Signal Stabilization of Floating Dual Boost Converter-Powered DC Microgrids Feeding Constant Power Loads. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 580-589.	5.4	20
84	Calculation of DC Bias Reactive Power Loss of Converter Transformer via Finite Element Analysis. IEEE Transactions on Power Delivery, 2021, 36, 751-759.	4.3	19
85	Multifrequency Modulation to Achieve an Individual and Continuous Power Distribution for Simultaneous MR-WPT System With an Inverter. IEEE Transactions on Power Electronics, 2021, 36, 12440-12455.	7.9	19
86	Self-Disciplined Large Signal Stabilizer Design for Hybrid Energy Storage System in Renewable DC Power Systems. IEEE Transactions on Sustainable Energy, 2020, 11, 2345-2355.	8.8	18
87	Stability-Oriented Droop Coefficients Region Identification for Inverters Within Weak Grid: An Impedance-Based Approach. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 2258-2268.	9.3	18
88	Dual-Predictive Control With Adaptive Error Correction Strategy for AC Microgrids. IEEE Transactions on Power Delivery, 2022, 37, 1930-1940.	4.3	18
89	Energy-Management Strategy of Battery Energy Storage Systems in DC Microgrids: A Distributed Dynamic Event-Triggered Consensus Control. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 5692-5701.	9.3	18
90	Control Strategy to Compensate for Current and Voltage Measurement Errors in Three-Phase PWM Rectifiers. IEEE Transactions on Industry Applications, 2019, 55, 2879-2889.	4.9	17

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91	Further Results on Newton-Raphson Method in Feasible Power-Flow for DC Distribution Networks. IEEE Transactions on Power Delivery, 2022, 37, 1348-1351.	4.3	17
92	Distributed Uniform Control for Parallel Bidirectional Interlinking Converters for Resilient Operation of Hybrid AC/DC Microgrid. IEEE Transactions on Sustainable Energy, 2022, 13, 3-13.	8.8	16
93	Fully Distributed Dynamic Edge-Event-Triggered Current Sharing Control Strategy for Multibus DC Microgrids With Power Coupling. IEEE Transactions on Industrial Informatics, 2023, 19, 5667-5678.	11.3	16
94	Coordination secondary control for autonomous hybrid AC/DC microgrids with global power sharing operation. , 2016, , .		15
95	Line Inductance Stability Operation Domain Assessment for Weak Grids With Multiple Constant Power Loads. IEEE Transactions on Energy Conversion, 2021, 36, 1045-1055.	5.2	15
96	Reliability evaluation of restructured power systems using a novel optimal powerâ€flowâ€based approach. IET Generation, Transmission and Distribution, 2013, 7, 192-199.	2.5	14
97	Secondary control for DC microgrids: A review. , 2016, , .		14
98	Fixed and Smooth-Switch-Sequence Modulation for Voltage Balancing Based on Single-Phase Three-Level Neutral Point Clamped Cascaded Rectifier. IEEE Transactions on Industry Applications, 2020, , 1-1.	4.9	13
99	Stability-Oriented Minimum Switching/Sampling Frequency for Cyber-Physical Systems: Grid-Connected Inverters Under Weak Grid. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 946-955.	5.4	12
100	Generalized Extended State Observer-Based Distributed Attack-Resilient Control for DC Microgrids. IEEE Transactions on Sustainable Energy, 2022, 13, 1469-1480.	8.8	12
101	Hierarchical control of active hybrid energy storage system (HESS) in DC microgrids. , 2014, , .		11
102	Steady-state Stability Assessment of AC-busbar Plug-in Electric Vehicle Charging Station with Photovoltaic. Journal of Modern Power Systems and Clean Energy, 2020, 8, 884-894.	5.4	11
103	Riskâ€based manyâ€objective configuration of power system fault current limiters utilising NSGAâ€III. IET Generation, Transmission and Distribution, 2020, 14, 5646-5654.	2.5	11
104	A Decentralized Automatic Load Power Allocation Strategy for Hybrid Energy Storage System. IEEE Transactions on Energy Conversion, 2021, 36, 2227-2238.	5.2	10
105	Feasible Power-Flow Solution Analysis of DC Microgrid Considering Distributed Generations Under MPPT Control. IEEE Transactions on Smart Grid, 2022, 13, 139-148.	9.0	10
106	DDPG-Based Backstepping Controller for DC Solid State Transformer in DC Microgrid With Constant Power Loads. IEEE Transactions on Smart Grid, 2022, 13, 4269-4283.	9.0	10
107	Modular Circulating Current and Second Harmonic Current Suppression Strategy by Virtual Impedance for DC Solid-State Transformer. IEEE Transactions on Power Electronics, 2021, 36, 11921-11933.	7.9	9
108	A Modulized Three-Port Interlinking Converter for Hybrid AC/DC/DS Microgrids Featured With a Decentralized Power Management Strategy. IEEE Transactions on Industrial Electronics, 2021, 68, 12430-12440.	7.9	9



#	ARTICLE	IF	CITATIONS
109	Energy Cooperation for Wind Farm and Hydrogen Refueling Stations: A RO-Based and Nash-Harsanyi Bargaining Solution. IEEE Transactions on Industry Applications, 2022, 58, 6768-6779.	4.9	8
110	Enhancing resilience of integrated electricity-gas systems: A skeleton-network based strategy. Advances in Applied Energy, 2022, 7, 100101.	13.2	8
111	Coordinated control of series compensation link and bus interface converter in the AC-DC hybrid microgrid. Journal of Power Electronics, 2020, 20, 590-600.	1.5	6
112	Proactive Resilient Day-Ahead Unit Commitment With Cloud Computing Data Centers. IEEE Transactions on Industry Applications, 2022, 58, 1675-1684.	4.9	6
113	A Modulation Reference Compensation Method to Realize Fully Decoupled Power Control for Modular Multilevel Converters. IEEE Transactions on Power Electronics, 2019, 34, 7230-7241.	7.9	5
114	Unified Active Damping Control Algorithm of Inverter for LCL Resonance and Mechanical Torsional Vibration Suppression. IEEE Transactions on Industrial Electronics, 2022, 69, 6611-6623.	7.9	5
115	Short-term reliability evaluation of integrated electricity and gas systems considering dynamics of gas flow. IET Generation, Transmission and Distribution, 2021, 15, 2857-2871.	2.5	5
116	Resilient Operation of an MMC With Communication Interruption in a Distributed Control Architecture. IEEE Transactions on Power Electronics, 2021, 36, 12057-12069.	7.9	5
117	Metrics and quantification of power-line and pipeline resiliency in integrated gas and power systems. IET Generation, Transmission and Distribution, 2021, 15, 3001-3016.	2.5	4
118	Fast Charging Control Method for Electric Vehicle-to-Vehicle Energy Interaction Devices. IEEE Transactions on Transportation Electrification, 2023, 9, 4941-4950.	7.8	3
119	Transportable Energy Storage for More Resilient Distribution Systems with Multiple Microgrids. , 2019, , .		2
120	A Compact Interlinking Converter Modular for Hybrid AC/DC/DS Microgrids with a Decentralized Power Management Strategy. , 2019, , .		2
121	Analysis of Persistent Oscillation Mechanism and Low Frequency Coupling Characteristics of Power System From the Perspective of Grid-Connected Converter. IEEE Access, 2021, 9, 167545-167555.	4.2	2
122	A distributed control architecture for hybrid AC/DC microgrid economic operation. , 2018, , .		1
123	Transient Time-delay Stability Analysis of the Distributed Coordination in AC Microgrids. , 2019, , .		1
124	Proactive Resilient Day-ahead Unit Commitment with Cloud Computing Data Centers. , 2021, , .		1
125	Distributed Event-Triggered Control for Harmonic Voltage Compensation in Islanded AC Microgrids. IEEE Transactions on Smart Grid, 2022, 13, 4190-4201.	9.0	1