Lexuan Meng

List of Publications by Year
in descending order

76 papers	3,204 citations	257101 24 h-index	395343 33 g-index
76 all docs	76 docs citations	76 times ranked	2960 citing authors

#	Article	IF	Citations
1	Microgrid supervisory controllers and energy management systems: A literature review. Renewable and Sustainable Energy Reviews, 2016, 60, 1263-1273.	8.2	323
2	Review on Control of DC Microgrids. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, , 1-1.	3.7	289
3	Next-Generation Shipboard DC Power System: Introduction Smart Grid and dc Microgrid Technologies into Maritime Electrical Netowrks. IEEE Electrification Magazine, 2016, 4, 45-57.	1.8	255
4	Modeling and Sensitivity Study of Consensus Algorithm-Based Distributed Hierarchical Control for DC Microgrids. IEEE Transactions on Smart Grid, 2016, 7, 1504-1515.	6.2	190
5	Distributed Voltage Unbalance Compensation in Islanded Microgrids by Using a Dynamic Consensus Algorithm. IEEE Transactions on Power Electronics, 2016, 31, 827-838.	5.4	161
6	Fast Frequency Response From Energy Storage Systemsâ€"A Review of Grid Standards, Projects and Technical Issues. IEEE Transactions on Smart Grid, 2020, 11, 1566-1581.	6.2	161
7	Hierarchical Control Design for a Shipboard Power System With DC Distribution and Energy Storage Aboard Future More-Electric Ships. IEEE Transactions on Industrial Informatics, 2018, 14, 703-714.	7.2	143
8	Distributed Nonlinear Control With Event-Triggered Communication to Achieve Current-Sharing and Voltage Regulation in DC Microgrids. IEEE Transactions on Power Electronics, 2018, 33, 6416-6433.	5.4	142
9	Tertiary and Secondary Control Levels for Efficiency Optimization and System Damping in Droop Controlled DCâ€"DC Converters. IEEE Transactions on Smart Grid, 2015, 6, 2615-2626.	6.2	110
10	Tertiary Control of Voltage Unbalance Compensation for Optimal Power Quality in Islanded Microgrids. IEEE Transactions on Energy Conversion, 2014, 29, 802-815.	3.7	102
11	Distributed Active Synchronization Strategy for Microgrid Seamless Reconnection to the Grid Under Unbalance and Harmonic Distortion. IEEE Transactions on Smart Grid, 2015, 6, 2757-2769.	6.2	98
12	Stable current sharing and voltage balancing in DC microgrids: A consensus-based secondary control layer. Automatica, 2018, 95, 1-13.	3.0	95
13	Containment and Consensus-Based Distributed Coordination Control to Achieve Bounded Voltage and Precise Reactive Power Sharing in Islanded AC Microgrids. IEEE Transactions on Industry Applications, 2017, 53, 5187-5199.	3.3	88
14	Online Energy Management Systems for Microgrids: Experimental Validation and Assessment Framework. IEEE Transactions on Power Electronics, 2018, 33, 2201-2215.	5.4	87
15	An MPC-Based ESS Control Method for PV Power Smoothing Applications. IEEE Transactions on Power Electronics, 2018, 33, 2136-2144.	5.4	75
16	Multirate Fractional-Order Repetitive Control of Shunt Active Power Filter Suitable for Microgrid Applications. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 809-819.	3.7	70
17	Dynamic consensus algorithm based distributed global efficiency optimization of a droop controlled DC microgrid. , 2014, , .		61
18	Microgrid central controller development and hierarchical control implementation in the intelligent microgrid lab of Aalborg University. , 2015, , .		55

#	Article	IF	Citations
19	Compromised Controller Design for Current Sharing and Voltage Regulation in DC Microgrid. IEEE Transactions on Power Electronics, 2019, 34, 8045-8061.	5.4	52
20	A Dynamic Consensus Algorithm to Adjust Virtual Impedance Loops for Discharge Rate Balancing of AC Microgrid Energy Storage Units. IEEE Transactions on Smart Grid, 2018, 9, 4847-4860.	6.2	48
21	Flexible System Integration and Advanced Hierarchical Control Architectures in the Microgrid Research Laboratory of Aalborg University. IEEE Transactions on Industry Applications, 2015, , 1-1.	3.3	40
22	A Unified Voltage Harmonic Control Strategy for Coordinated Compensation With VCM and CCM Converters. IEEE Transactions on Power Electronics, 2018, 33, 7132-7147.	5.4	40
23	Model predictive control methods of leakage current elimination for a three‐level T‐type transformerless PV inverter. IET Power Electronics, 2018, 11, 1492-1498.	1.5	37
24	Distributed and decentralized control architectures for converter-interfaced microgrids. Chinese Journal of Electrical Engineering, 2017, 3, 41-52.	2.3	34
25	Optimal planning and operation management of a ship electrical power system with energy storage system. , 2016, , .		30
26	A Voltage Feedback Based Harmonic Compensation Strategy for Current-Controlled Converters. IEEE Transactions on Industry Applications, 2018, 54, 2616-2627.	3.3	29
27	Optimization with system damping restoration for droop controlled DC-DC converters. , 2013, , .		28
28	An Integrated DC Series Arc Fault Detection Method for Different Operating Conditions. IEEE Transactions on Industrial Electronics, 2021, 68, 12720-12729.	5.2	27
29	Adaptive Control Design for Autonomous Operation of Multiple Energy Storage Systems in Power Smoothing Applications. IEEE Transactions on Industrial Electronics, 2018, 65, 6612-6624.	5.2	23
30	Optimization for Customized Power Quality Service in Multibus Microgrids. IEEE Transactions on Industrial Electronics, 2017, 64, 8767-8777.	5.2	22
31	Hierarchical control with virtual resistance optimization for efficiency enhancement and State-of-Charge balancing in DC microgrids. , 2015, , .		20
32	Optimal Power Flow in Islanded Microgrids Using a Simple Distributed Algorithm. Energies, 2015, 8, 11493-11514.	1.6	17
33	Frequency-division power sharing and hierarchical control design for DC shipboard microgrids with hybrid energy storage systems. , 2017, , .		16
34	On the Impact of Wireless Jamming on the Distributed Secondary Microgrid Control. , 2016, , .		14
35	Comparative admittance-based analysis for different droop control approaches in DC microgrids. , 2017, , .		14
36	Admittance-type RC-mode droop control to introduce virtual inertia in DC microgrids. , 2017, , .		14

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37	Modeling and sensitivity analysis of consensus algorithm based distributed hierarchical control for DC microgrids. , 2015, , .		11
38	Droop-free distributed control with event-triggered communication in DC micro-grid. , 2017, , .		11
39	Online optimization of a multi-conversion-level DC home microgrid for system efficiency enhancement. Sustainable Cities and Society, 2017, 35, 417-429.	5.1	11
40	Constant power load instability mitigation in DC shipboard power systems using negative series virtual inductor method. , 2017, , .		11
41	A direct voltage unbalance compensation strategy for islanded microgrids. , 2015, , .		10
42	Generation-side power scheduling in a grid-connected DC microgrid. , 2015, , .		10
43	Analysis and distributed control of power flow in DC microgrids to improve system efficiency. , 2016, , .		10
44	An Analytical AC Resistance Calculation Method for Multiple-Conductor Feeder Cables in Aircraft Electric Power Systems. IEEE Transactions on Industrial Electronics, 2020, 67, 3340-3349.	5.2	10
45	Plug-and-play control and consensus algorithms for current sharing in DC microgrids. IFAC-PapersOnLine, 2017, 50, 12440-12445.	0.5	9
46	Distributed low voltage ride-through operation of power converters in grid-connected microgrids under voltage sags. , 2015, , .		8
47	Design of energy storage control strategy to improve the PV system power quality. , 2016, , .		7
48	Hybrid droop control strategy applied to grid-supporting converters in DC microgrids: Modeling, design and analysis. , 2017, , .		7
49	Multi-Level Modeling Methodology for Optimal Design of Electric Machines Based on Multi-Disciplinary Design Optimization. Energies, 2019, 12, 4173.	1.6	7
50	Tertiary control for optimal unbalance compensation in islanded microgrids. , 2014, , .		6
51	Dynamic consensus algorithm based distributed voltage harmonic compensation in islanded microgrids. , 2015, , .		6
52	An embedded voltage harmonic compensation strategy for current controlled DG interfacing converters. , 2016, , .		6
53	Adaptive control of energy storage systems for power smoothing applications. , 2017, , .		6
54	Modeling and control of flexible HEV charging station upgraded with flywheel energy storage. , 2014, , .		4

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55	Maritime DC microgrids - a combination of microgrid technologies and maritime onboard power system for future ships. , 2016, , .		4
56	Containment and consensus-based distributed coordination control for voltage bound and reactive power sharing in AC microgrid. , 2017, , .		4
57	Specialized hierarchical control strategy for DC distribution based shipboard microgrids: A combination of emerging DC shipboard power systems and microgrid technologies. , 2017, , .		4
58	Integrated Simulation of Electric Power Systems Based on LabVIEW and Simulink. , 2011, , .		3
59	Modeling and simulation of aircraft automatic power distribution system. , 2012, , .		3
60	Containment-based distributed coordination control to achieve both bounded voltage and precise current sharing in reverse-droop-based DC microgrid. , 2017, , .		3
61	Optimum power quality service in multi-bus microgrid systems. , 2017, , .		3
62	Hardware-in-loop test for automatic voltage regulator based on identification model. , 2012, , .		2
63	Stability constrained efficiency optimization for droop controlled DC-DC conversion system. , 2013, , .		2
64	Secondary voltage unbalance compensation for three-phase four-wire islanded microgrids. , 2014, , .		2
65	Four-quadrant bidirectional operation of charging station upgraded with flywheel energy storage system. , 2016, , .		2
66	Discharge rate balancing control strategy based on dynamic consensus algorithm for energy storage units in AC microgrids. , 2017, , .		2
67	Customized power quality service provided by converter interfaced microgrids â€" Voltage harmonics as a study case. , 2017, , .		2
68	A Novel Adaptive Model Predictive Control Based Three-Phase Inverter Current Control Method. Applied Sciences (Switzerland), 2019, 9, 5413.	1.3	2
69	Agent-based distributed unbalance compensation for optimal power quality in islanded microgrids. , 2014, , .		1
70	Coupling/tradeoff analysis and novel containment control for reactive power, output voltage in islanded Micro-Grid. , 2016, , .		1
71	A dynamic consensus algorithm based low-voltage ride-through operation of power converters in grid-interactive microgrids. , 2016, , .		1
72	Tertiary control of voltage unbalance compensation for optimal power quality in islanded microgrids. , 2016, , .		1

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73	Active load sharing technique for on-line efficiency optimization in DC microgrids. , 2017, , .		1
74	Optimization and improvement of ac resistance calculation method for multi-phase parallel-wiring cables. Chinese Journal of Aeronautics, 2021, , .	2.8	1
75	Dynamic consensus algorithm based distributed unbalance compensation in islanded microgrids. , 2015, , .		0
76	Hysteresis-based energy management strategy for a microgrid with controllable heating loads. IET Renewable Power Generation, 2020, 14, 1340-1348.	1.7	0