D Wu

List of Publications by Year
in descending order

64	2,606	304368	301761
papers	citations	22 h-index	39 g-index

85	85	85	2312
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A survey of distributed optimization. Annual Reviews in Control, 2019, 47, 278-305.	4.4	427
2	Load Scheduling and Dispatch for Aggregators of Plug-In Electric Vehicles. IEEE Transactions on Smart Grid, 2012, 3, 368-376.	6.2	339
3	Electric Energy and Power Consumption by Light-Duty Plug-In Electric Vehicles. IEEE Transactions on Power Systems, 2011, 26, 738-746.	4.6	225
4	A Distributed Algorithm for Economic Dispatch Over Time-Varying Directed Networks With Delays. IEEE Transactions on Industrial Electronics, 2017, 64, 5095-5106.	5.2	183
5	Optimal Coordination of Building Loads and Energy Storage for Power Grid and End User Services. IEEE Transactions on Smart Grid, 2018, 9, 4335-4345.	6.2	119
6	Minimum-Time Consensus-Based Approach for Power System Applications. IEEE Transactions on Industrial Electronics, 2016, 63, 1318-1328.	5.2	85
7	Assigning value to energy storage systems at multiple points in an electrical grid. Energy and Environmental Science, 2018, 11, 1926-1944.	15.6	76
8	Vulnerability of the US western electric grid to hydro-climatological conditions: How bad can it get?. Energy, 2016, 115, 1-12.	4.5	65
9	Distributed Optimal Coordination for Distributed Energy Resources in Power Systems. IEEE Transactions on Automation Science and Engineering, 2017, 14, 414-424.	3.4	64
10	An energy storage assessment: Using optimal control strategies to capture multiple services. , 2015, , .		61
11	Distributed Optimal Dispatch of Distributed Energy Resources Over Lossy Communication Networks. IEEE Transactions on Smart Grid, 2017, 8, 3125-3137.	6.2	59
12	Quantifying impacts of heat waves on power grid operation. Applied Energy, 2016, 183, 504-512.	5.1	53
13	Distributed Energy Resource Coordination Over Time-Varying Directed Communication Networks. IEEE Transactions on Control of Network Systems, 2019, 6, 1124-1134.	2.4	53
14	Intelligent Residential Air-Conditioning System With Smart-Grid Functionality. IEEE Transactions on Smart Grid, 2012, 3, 2240-2251.	6.2	51
15	On the Choice Between Uncontrolled and Controlled Charging by Owners of PHEVs. IEEE Transactions on Power Delivery, 2011, 26, 2882-2884.	2.9	44
16	A hierarchical charging control of plug-in electric vehicles with simple flexibility model. Applied Energy, 2019, 253, 113490.	5.1	43
17	Economic analysis and optimal sizing for behind-the-meter battery storage. , 2016, , .		40
18	Simulation-based performance evaluation of model predictive control for building energy systems. Applied Energy, 2021, 281, 116027.	5.1	40

#	Article	IF	Citations
19	Comparative Implementation of High Performance Computing for Power System Dynamic Simulations. IEEE Transactions on Smart Grid, 2017, 8, 1387-1395.	6.2	39
20	Synchronization of Coupled Dynamical Systems: Tolerance to Weak Connectivity and Arbitrarily Bounded Time-Varying Delays. IEEE Transactions on Automatic Control, 2018, 63, 1791-1797.	3.6	37
21	Deep Reinforcement Learning From Demonstrations to Assist Service Restoration in Islanded Microgrids. IEEE Transactions on Sustainable Energy, 2022, 13, 1062-1072.	5.9	30
22	Opportunities for Joint Waterâ€“Energy Management: Sensitivity of the 2010 Western U.S. Electricity Grid Operations to Climate Oscillations. Bulletin of the American Meteorological Society, 2018, 99, 299-312.	1.7	29
23	Operating a Commercial Building HVAC Load as a Virtual Battery Through Airflow Control. IEEE Transactions on Sustainable Energy, 2021, 12, 158-168.	5.9	29
24	Analytical sizing methods for behind-the-meter battery storage. Journal of Energy Storage, 2017, 12, 297-304.	3.9	29
25	A techno-economic assessment framework for hydrogen energy storage toward multiple energy delivery pathways and grid services. Energy, 2022, 249, 123638.	4.5	26
26	Validation on aggregate flexibility from residential air conditioning systems for building-to-grid integration. Energy and Buildings, 2019, 200, 58-67.	3.1	23
27	On Parallelizing Single Dynamic Simulation Using HPC Techniques and APIs of Commercial Software. IEEE Transactions on Power Systems, 2017, 32, 2225-2233.	4.6	20
28	Flexibility Estimation and Control of Thermostatically Controlled Loads With Lock Time for Regulation Service. IEEE Transactions on Smart Grid, 2020, 11, 3221-3230.	6.2	20
29	Hierarchical control framework for integrated coordination between distributed energy resources and demand response. Electric Power Systems Research, 2017, 150, 45-54.	2.1	19
30	Modeling light-duty plug-in electric vehicles for national energy and transportation planning. Energy Policy, 2013, 63, 419-432.	4.2	17
31	Distributed coordination of energy storage with distributed generators. , 2016, , .		17
32	A Real-Time Greedy-Index Dispatching Policy for Using PEVs to Provide Frequency Regulation Service. IEEE Transactions on Smart Grid, 2019, 10, 864-877.	6.2	17
33	Evaluating transactive controls of integrated transmission and distribution systems using the Framework for Network Co-Simulation. , 2017, , .		16
34	Potential impacts of aggregator-controlled plug-in electric vehicles on distribution systems. , 2011, , .		13
35	Accelerated Distributed Energy Management for Microgrids. , 2018, , .		13
36	An economic assessment of behind-the-meter photovoltaics paired with batteries on the Hawaiian Islands. Applied Energy, 2021, 286, 116550.	5.1	13

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37	Power Factor Correction in Feeders With Distributed Photovoltaics Using Residential Appliances as Virtual Batteries. IEEE Access, 2019, 7, 99115-99122.	2.6	11
38	Development of an agent-based distribution test feeder with smart-grid functionality. , 2012, , .		10
39	Cooperative optimal coordination for distributed energy resources. , 2017, , .		9
40	Approximate dynamic programming with policy-based exploration for microgrid dispatch under uncertainties. International Journal of Electrical Power and Energy Systems, 2022, 142, 108359.	3.3	9
41	Regional Assessment of Virtual Battery Potential from Building Loads. , 2018, , .		8
42	Modeling and Optimization Methods for Controlling and Sizing Grid-Connected Energy Storage: A Review. Current Sustainable/Renewable Energy Reports, 2021, 8, 123-130.	1.2	8
43	Parallel implementation of power system dynamic simulation. , 2013, , .		7
44	Impacts of time delays on distributed algorithms for economic dispatch. , 2015, , .		7
45	Implementation of Parallel Dynamic Simulation on Shared-Memory vs. Distributed-Memory Environments. IFAC-PapersOnLine, 2015, 48, 221-226.	0.5	7
46	An Evaluation of the Economic and Resilience Benefits of a Microgrid in Northampton, Massachusetts. Energies, 2020, 13, 4802.	1.6	7
47	Cooperative management of a lithium-ion battery energy storage network: A distributed MPC approach. , 2016, , .		6
48	Experimental investigation on thermal inertia characterization of commercial buildings for demand response. Energy and Buildings, 2021, 252, 111384.	3.1	6
49	Optimization Methods for Evaluating PEV Charging Considering Customer Behavior. , 2018, , .		5
50	Communication-efficient Distributed Solutions to a System of Linear Equations with Laplacian Sparse Structure. , 2018, , .		5
51	Scheduling and Control of Flexible Building Loads for Grid Services based on a Virtual Battery Model. IFAC-PapersOnLine, 2020, 53, 13333-13338.	0.5	5
52	On the configuration of the US Western Interconnection voltage stability boundary. , 2014, , .		3
53	Uncertainty-based estimation of the secure range for ISO New England dynamic interchange adjustment. , 2014, , .		3
54	Bidirectional Power Transfer between HEVs and Grid without External Power Converters. , 2008, , .		2

#	Article	IF	Citations
55	Distributed load shedding over directed communication networks with time delays. , 2016, , .		2
56	A Data-driven Control Method for Operating the Commercial HVAC Load as a Virtual Battery. , 2019, , .		2
57	Experimental Validation of Approximate Dynamic Programming Based optimization and Convergence on Microgrid Applications. , 2020, , .		2
58	A modified priority list-based MILP method for solving large-scale unit commitment problems. , 2015, , .		1
59	Theoretical framework for integrating distributed energy resources into distribution systems. , 2017, , .		1
60	Impacts of Lock-off Time on Virtual Battery Model from Thermostatically Controlled Loads. , 2019, , .		1
61	Building Battery Energy Storage System Performance Data into an Economic Assessment. , 2020, , .		1
62	Distributed and communication-efficient solutions to linear equations with special sparse structure. Systems and Control Letters, 2022, 160, 105065.	1.3	1
63	Optimal operation and sizing of pumped thermal energy storage for net benefits maximization. IET Generation, Transmission and Distribution, 2022, 16, 3509-3521.	1.4	1
64	Hierarchical control for hybrid wind systems. , 2009, , .		0