Peter B Luh

List of Publications by Year
in descending order

103 papers	1,655 citations	331670 21 h-index	330143 37 g-index
104 all docs	104 docs citations	104 times ranked	1645 citing authors

#	Article	IF	Citations
1	Risk Analysis for Distribution Systems in the Northeast U.S. Under Wind Storms. IEEE Transactions on Power Systems, 2014, 29, 889-898.	6.5	157
2	Hybrid Kalman Filters for Very Short-Term Load Forecasting and Prediction Interval Estimation. IEEE Transactions on Power Systems, 2013, 28, 3806-3817.	6.5	130
3	Convergence of the Surrogate Lagrangian Relaxation Method. Journal of Optimization Theory and Applications, 2015, 164, 173-201.	1.5	99
4	Enabling resilient distributed power sharing in networked microgrids through software defined networking. Applied Energy, 2018, 210, 1251-1265.	10.1	77
5	Operation and Design Optimization of Microgrids With Renewables. IEEE Transactions on Automation Science and Engineering, 2017, 14, 573-585.	5.2	66
6	Multi-objective operation optimization of a Distributed Energy System for a large-scale utility customer. Applied Thermal Engineering, 2016, 101, 752-761.	6.0	62
7	Enabling Resilient Microgrid Through Programmable Network. IEEE Transactions on Smart Grid, 2017, 8, 2826-2836.	9.0	60
8	Grid Integration of Intermittent Wind Generation: A Markovian Approach. IEEE Transactions on Smart Grid, 2014, 5, 732-741.	9.0	54
9	A Novel Decomposition and Coordination Approach for Large Day-Ahead Unit Commitment With Combined Cycle Units. IEEE Transactions on Power Systems, 2018, 33, 5297-5308.	6.5	44
10	Markovian-based stochastic operation optimization of multiple distributed energy systems with renewables in a local energy community. Electric Power Systems Research, 2020, 186, 106364.	3.6	43
11	Group Elevator Scheduling With Advance Information for Normal and Emergency Modes. IEEE Transactions on Automation Science and Engineering, 2008, 5, 245-258.	5.2	39
12	Formal Analysis of Networked Microgrids Dynamics. IEEE Transactions on Power Systems, 2018, 33, 3418-3427.	6.5	36
13	A Scalable Solution Methodology for Mixed-Integer Linear Programming Problems Arising in Automation. IEEE Transactions on Automation Science and Engineering, 2019, 16, 531-541.	5.2	34
14	A Dynamic Regrouping Based Dynamic Programming Approach for Unit Commitment of the Transmission-Constrained Multi-Site Combined Heat and Power System. IEEE Transactions on Power Systems, 2018, 33, 714-722.	6.5	33
15	Decentralised online charging scheduling for large populations of electric vehicles: a cyber-physical system approach. International Journal of Parallel, Emergent and Distributed Systems, 2013, 28, 29-45.	1.0	31
16	A Systematic Formulation Tightening Approach for Unit Commitment Problems. IEEE Transactions on Power Systems, 2020, 35, 782-794.	6.5	29
17	An Effective Subgradient Method for Scheduling a Steelmaking-Continuous Casting Process. IEEE Transactions on Automation Science and Engineering, 2015, 12, 1140-1152.	5.2	27
18	Exergy-based operation optimization of a distributed energy system through the energy-supply chain. Applied Thermal Engineering, 2016, 101, 741-751.	6.0	25

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19	Head Dependence of Pump-Storage-Unit Model Applied to Generation Scheduling. IEEE Transactions on Power Systems, 2017, 32, 2869-2877.	6.5	24
20	Incremental Value Iteration for Time-Aggregated Markov-Decision Processes. IEEE Transactions on Automatic Control, 2007, 52, 2177-2182.	5.7	23
21	The Subgradient Simplex Cutting Plane Method for Extended Locational Marginal Prices. IEEE Transactions on Power Systems, 2013, 28, 2758-2767.	6.5	23
22	Impacts of Anxiety in Building Fire and Smoke Evacuation: Modeling and Validation. IEEE Robotics and Automation Letters, 2017, 2, 255-260.	5.1	21
23	Design optimization of a distributed energy system through cost and exergy assessments. Energy Procedia, 2017, 105, 2451-2459.	1.8	21
24	Probabilistic forecasting of dynamic line rating for over-head transmission lines. , 2015, , .		19
25	Fault Diagnosis of Components and Sensors in HVAC Air Handling Systems With New Types of Faults. IEEE Access, 2018, 6, 21682-21696.	4.2	19
26	Distributed and Asynchronous Active Fault Management for Networked Microgrids. IEEE Transactions on Power Systems, 2020, 35, 3857-3868.	6.5	19
27	Litho Machine Scheduling With Convex Hull Analyses. IEEE Transactions on Automation Science and Engineering, 2013, 10, 928-937.	5.2	18
28	Optimization-based manufacturing scheduling with multiple resources, setup requirements, and transfer lots. IIE Transactions, 2003, 35, 973-985.	2.1	17
29	Modified Social Force Model Based on Predictive Collision Avoidance Considering Degree of Competitiveness. Fire Technology, 2017, 53, 331-351.	3.0	17
30	Chiller Plant Operation Optimization: Energy-Efficient Primary-Only and Primaryâ€“Secondary Systems. IEEE Transactions on Automation Science and Engineering, 2018, 15, 341-355.	5.2	17
31	Novel Formulation and Resolution of Job-Shop Scheduling Problems. IEEE Robotics and Automation Letters, 2018, 3, 3387-3393.	5.1	17
32	Transmission Contingency-Constrained Unit Commitment with High Penetration of Renewables via Interval Optimization. IEEE Transactions on Power Systems, 2016, , 1-1.	6.5	16
33	Fault Prognosis of Key Components in HVAC Air-Handling Systems at Component and System Levels. IEEE Transactions on Automation Science and Engineering, 2020, 17, 2145-2153.	5.2	15
34	Intra-Organizational Logistics Management Through Multi-Agent Systems. Electronic Commerce Research, 2003, 3, 337-364.	5.0	14
35	On reducing uplift payment in electricity markets. , 2009, , .		14
36	Shapley Value-Based Payment Calculation for Energy Exchange between Micro- and Utility Grids. Games, 2017, 8, 45.	0.6	13

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37	Ordinal-Optimization Concept Enabled Decomposition and Coordination of Mixed-Integer Linear Programming Problems. IEEE Robotics and Automation Letters, 2020, 5, 5051-5058.	5.1	13
38	Efficient optimization of building emergency evacuation considering social bond of evacuees. , 2009, , .		12
39	Distributed and Asynchronous Coordination of a Mixed-Integer Linear System via Surrogate Lagrangian Relaxation. IEEE Transactions on Automation Science and Engineering, 2021, 18, 1191-1205.	5.2	12
40	An integrated control of shading blinds, natural ventilation, and HVAC systems for energy saving and human comfort. , 2010, , .		11
41	Novel exploitation of convex hull invariance for solving unit commitment by using surrogate Lagrangian relaxation and branch-and-cut. , 2015, , .		11
42	Supervisory Control for Resilient Chiller Plants Under Condenser Fouling. IEEE Access, 2017, 5, 14028-14046.	4.2	11
43	Operation Optimization of Multiple Distributed Energy Systems in an Energy Community. , 2018, , .		11
44	Surrogate Lagrangian relaxation and branch-and-cut for unit commitment with combined cycle units. , 2014, , .		10
45	A decomposition and coordination approach for large-scale security constrained unit commitment problems with combined cycle units. , 2017, , .		10
46	A Novel Optimization Approach for Sub-Hourly Unit Commitment With Large Numbers of Units and Virtual Transactions. IEEE Transactions on Power Systems, 2022, 37, 3716-3725.	6.5	10
47	Requirement design for a reliable and efficient ramp capability product. , 2013, , .		9
48	An efficient approach for solving mixed-integer programming problems under the monotonic condition. Journal of Control and Decision, 2016, 3, 44-67.	1.6	9
49	A Novel Integer Linear Programming Formulation for Job-Shop Scheduling Problems. IEEE Robotics and Automation Letters, 2021, 6, 5937-5944.	5.1	9
50	Intelligent manufacturing: New advances and challenges. Journal of Intelligent Manufacturing, 2015, 26, 841-843.	7.3	8
51	From manufacturing scheduling to supply chain coordination: The control of complexity and uncertainty. Journal of Systems Science and Systems Engineering, 2003, 12, 279-297.	1.6	7
52	Near optimal furnace tool allocation with batching and waiting time constraints. , 2011, , .		7
53	Efficient surrogate optimization for payment cost co-optimization with transmission capacity constraints. , 2013, , .		7
54	Fault diagnosis and augmented reality-based troubleshooting of HVAC systems. , 2016, , .		7

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55	Bid Cost Minimization vs. Payment Cost Minimization: A Game Theoretic Study of Electricity Markets. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	6
56	Short-term load forecasting: Similar day-based wavelet neural networks. , 2008, , .		6
57	Distributed and asynchronous unit commitment and economic dispatch. , 2017, , .		6
58	A Systematical Approach to Tighten Unit Commitment Formulations. , 2018, , .		6
59	An efficient approach for short-term substation load forecasting. , 2013, , .		5
60	Exergy-efficient management of energy districts. , 2014, , .		5
61	Exploiting soft constraints within decomposition and coordination methods for sub-hourly unit commitment. International Journal of Electrical Power and Energy Systems, 2022, 139, 108023.	5.5	5
62	Computationally Distributed and Asynchronous Operational Optimization of Droop-Controlled Networked Microgrids. IEEE Open Access Journal of Power and Energy, 2022, 9, 265-277.	3.4	5
63	Coherent Modeling and Effective Coordination for Building Emergency Evacuation. , 2007, , .		4
64	The power game between a MIMO radar and jammer. , 2012, , .		4
65	Effective modeling and resolution of generation-dependent ramp rates for unit commitment. , 2017, , .		4
66	Chiller Plant Operation Optimization With Minimum Up/Down Time Constraints. IEEE Robotics and Automation Letters, 2018, 3, 9-15.	5.1	4
67	Active Fault Management for Microgrids. , 2018, , .		4
68	A decentralized framework of unit commitment for future power markets. , 2013, , .		3
69	Forecasting real-time net interchange of electric power. , 2014, , .		3
70	Energy-efficient building clusters. , 2014, , .		3
71	An efficient approach for Unit Commitment and Economic Dispatch with combined cycle units and AC Power Flow. , 2016, , .		3
72	An Innovative Formulation Tightening Approach for Job-Shop Scheduling. IEEE Transactions on Automation Science and Engineering, 2022, 19, 2526-2539.	5.2	3

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73	Optimization-based litho machine scheduling with multiple reticles and setups. , 2011, , .		2
74	Analysis of a partially decentralized framework for operating future power systems. , 2011, , .		2
75	Markov-based stochastic unit commitment considering wind power forecasts. , 2013, , .		2
76	Guidance optimization of building evacuation considering psychological features in route choice. , 2014, , .		2
77	Cooling load forecasting for chiller plants using similar day based wavelet neural networks. , 2015, , .		2
78	Comparative Life Cycle Cost Analysis of Hardening Options for Critical Loads. Energies, 2016, 9, 553.	3.1	2
79	Efficiency and Reliability Joint Optimization of Chiller Plants Based on a Hybrid Model. IEEE Robotics and Automation Letters, 2019, 4, 3224-3231.	5.1	2
80	Active Fault Management for Networked Microgrids. , 2019, , .		2
81	Cooperative fault management for resilient integration of renewable energy. Electric Power Systems Research, 2022, 211, 108147.	3.6	2
82	Interacting multiple model approach for very short-term load forecasting and confidence interval estimation. , 2010, , .		1
83	Analysis and simulation of payment cost minimization and bid cost minimization with strategic bidders. , 2011, , .		1
84	Short-term wind generation forecasting and confidence interval estimation based on neural networks trained by extended Kalman particle filter. , 2011, , .		1
85	Adaptive General Predictive Control Using Optimally Scheduled Multiple Models for Parallel-Coursing Utility Units With a Header. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2012, 134, .	1.6	1
86	Tightened Formulation and Resolution of Energy-Efficient Job-Shop Scheduling. , 2020, , .		1
87	Impacts of UC formulation tightening on computation of convex hull prices. , 2021, , .		1
88	DA-AFM for Ultra PV and Wind Energy Integration. , 2021, , .		1
89	From Manufacturing Scheduling to Supply Chain Coordination: The Control of Complexity and Uncertainty. , 2007, , .		0
90	Building automation: Modeling and optimization of emergency. , 2009, , .		0

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91	A mixed fuzzy recursive least-squares estimation for online identification of Takagi-Sugeno models. , 2010, , .		0
92	The subgradient-simplex based cutting plane method to solve Linear matrix inequalities. , 2010, , .		0
93	Achieving equilibrium and local incentive compatibility for electricity markets by using redundant constraints. , 2010, , .		0
94	Fire evacuation model with confidence intervals. , 2011, , .		0
95	Efficient dual-armed cluster tool performance via branch and cut optimization algorithm. , 2011, , .		0
96	Truthful auction mechanism design for short-interval secondary spectrum access market. , 2012, , .		0
97	Opportunistic Lagrangian Relaxation for Joint Replacement Policy. Zidonghua Xuebao/Acta Automatica Sinica, 2013, 39, 263-271.	1.5	0
98	Markov-based stochastic multi-period market settlement with wind uncertainties. , 2014, , .		0
99	Ramp requirement design for reliable and efficient integration of renewable energy¹. , 2014, , .		0
100	Comparative life cycle cost analysis of hardening options for critical loads. , 2014, , .		0
101	Transmission contingency-constrained unit commitment with uncertain wind generation via interval optimization. , 2015, , .		0
102	Chiller Plant Operation Optimization with Input and Model Uncertainties. , 2018, , .		0
103	Modeling of Decline Dynamics of Knowledge Sharing Networks (KSNets) - A Wikipedia Case. , 2018, , .		0