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	An Innovative Formulation Tightening Approach for Job-Shop Scheduling. IEEE Transactions on Automation Science and Engineering, 2022, 19, 2526-2539.	5.2	3
2	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
3	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
4	Cooperative fault management for resilient integration of renewable energy. Electric Power Systems Research, 2022, 211, 108147.	3.6	2
5	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
6	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
7	A Novel Integer Linear Programming Formulation for Job-Shop Scheduling Problems. IEEE Robotics and Automation Letters, 2021, 6, 5937-5944.	5.1	9
8	Impacts of UC formulation tightening on computation of convex hull prices. , 2021, , .		1
9	DA-AFM for Ultra PV and Wind Energy Integration. , 2021, , .		1
10	A Systematic Formulation Tightening Approach for Unit Commitment Problems. IEEE Transactions on Power Systems, 2020, 35, 782-794.	6.5	29
11	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
12	Tightened Formulation and Resolution of Energy-Efficient Job-Shop Scheduling. , 2020, , .		1
13	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
14	Distributed and Asynchronous Active Fault Management for Networked Microgrids. IEEE Transactions on Power Systems, 2020, 35, 3857-3868.	6.5	19
15	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
16	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
17	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
18	Active Fault Management for Networked Microgrids. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
19	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
20	Chiller Plant Operation Optimization: Energy-Efficient Primary-Only and Primary–Secondary Systems. IEEE Transactions on Automation Science and Engineering, 2018, 15, 341-355.	5.2	17
21	Formal Analysis of Networked Microgrids Dynamics. IEEE Transactions on Power Systems, 2018, 33, 3418-3427.	6.5	36
22	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
23	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
24	Enabling resilient distributed power sharing in networked microgrids through software defined networking. Applied Energy, 2018, 210, 1251-1265.	10.1	77
25	Chiller Plant Operation Optimization With Minimum Up/Down Time Constraints. IEEE Robotics and Automation Letters, 2018, 3, 9-15.	5.1	4
26	Chiller Plant Operation Optimization with Input and Model Uncertainties. , 2018, , .		0
27	A Systematical Approach to Tighten Unit Commitment Formulations. , 2018, , .		6
28	Active Fault Management for Microgrids. , 2018, , .		4
29	Operation Optimization of Multiple Distributed Energy Systems in an Energy Community. , 2018, , .		11
30	Modeling of Decline Dynamics of Knowledge Sharing Networks (KSNets) - A Wikipedia Case. , 2018, , .		0
31	Novel Formulation and Resolution of Job-Shop Scheduling Problems. IEEE Robotics and Automation Letters, 2018, 3, 3387-3393.	5.1	17
32	Modified Social Force Model Based on Predictive Collision Avoidance Considering Degree of Competitiveness. Fire Technology, 2017, 53, 331-351.	3.0	17
33	Impacts of Anxiety in Building Fire and Smoke Evacuation: Modeling and Validation. IEEE Robotics and Automation Letters, 2017, 2, 255-260.	5.1	21
34	Operation and Design Optimization of Microgrids With Renewables. IEEE Transactions on Automation Science and Engineering, 2017, 14, 573-585.	5.2	66
35	Supervisory Control for Resilient Chiller Plants Under Condenser Fouling. IEEE Access, 2017, 5, 14028-14046.	4.2	11
36	Design optimization of a distributed energy system through cost and exergy assessments. Energy Procedia, 2017, 105, 2451-2459.	1.8	21

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37	Head Dependence of Pump-Storage-Unit Model Applied to Generation Scheduling. IEEE Transactions on Power Systems, 2017, 32, 2869-2877.	6.5	24
38	Enabling Resilient Microgrid Through Programmable Network. IEEE Transactions on Smart Grid, 2017, 8, 2826-2836.	9.0	60
39	Distributed and asynchronous unit commitment and economic dispatch. , 2017, , .		6
40	Effective modeling and resolution of generation-dependent ramp rates for unit commitment. , 2017, , .		4
41	A decomposition and coordination approach for large-scale security constrained unit commitment problems with combined cycle units. , 2017, , .		10
42	Shapley Value-Based Payment Calculation for Energy Exchange between Micro- and Utility Grids. Games, 2017, 8, 45.	0.6	13
43	Comparative Life Cycle Cost Analysis of Hardening Options for Critical Loads. Energies, 2016, 9, 553.	3.1	2
44	Exergy-based operation optimization of a distributed energy system through the energy-supply chain. Applied Thermal Engineering, 2016, 101, 741-751.	6.0	25
45	Fault diagnosis and augmented reality-based troubleshooting of HVAC systems. , 2016, , .		7
46	An efficient approach for Unit Commitment and Economic Dispatch with combined cycle units and AC Power Flow. , 2016, , .		3
47	Transmission Contingency-Constrained Unit Commitment with High Penetration of Renewables via Interval Optimization. IEEE Transactions on Power Systems, 2016, , 1-1.	6.5	16
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	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
50	Cooling load forecasting for chiller plants using similar day based wavelet neural networks. , 2015, , .		2
51	Intelligent manufacturing: New advances and challenges. Journal of Intelligent Manufacturing, 2015, 26, 841-843.	7.3	8
52	Novel exploitation of convex hull invariance for solving unit commitment by using surrogate Lagrangian relaxation and branch-and-cut. , 2015, , .		11
53	Transmission contingency-constrained unit commitment with uncertain wind generation via interval optimization. , 2015, , .		0
54	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

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55	Probabilistic forecasting of dynamic line rating for over-head transmission lines. , 2015, , .		19
56	Convergence of the Surrogate Lagrangian Relaxation Method. Journal of Optimization Theory and Applications, 2015, 164, 173-201.	1.5	99
57	Forecasting real-time net interchange of electric power. , 2014, , .		3
58	Energy-efficient building clusters. , 2014, , .		3
59	Surrogate Lagrangian relaxation and branch-and-cut for unit commitment with combined cycle units. , 2014, , .		10
60	Exergy-efficient management of energy districts. , 2014, , .		5
61	Guidance optimization of building evacuation considering psychological features in route choice. , 2014, , .		2
62	Markov-based stochastic multi-period market settlement with wind uncertainties. , 2014, , .		0
63	Ramp requirement design for reliable and efficient integration of renewable energy[1]. , 2014, , .		0
64	Grid Integration of Intermittent Wind Generation: A Markovian Approach. IEEE Transactions on Smart Grid, 2014, 5, 732-741.	9.0	54
65	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
66	Comparative life cycle cost analysis of hardening options for critical loads. , 2014, , .		0
67	The Subgradient Simplex Cutting Plane Method for Extended Locational Marginal Prices. IEEE Transactions on Power Systems, 2013, 28, 2758-2767.	6.5	23
68	Opportunistic Lagrangian Relaxation for Joint Replacement Policy. Zidonghua Xuebao/Acta Automatica Sinica, 2013, 39, 263-271.	1.5	0
69	Litho Machine Scheduling With Convex Hull Analyses. IEEE Transactions on Automation Science and Engineering, 2013, 10, 928-937.	5.2	18
70	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
71	Markov-based stochastic unit commitment considering wind power forecasts. , 2013, , .		2
72	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

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73	Requirement design for a reliable and efficient ramp capability product. , 2013, , .		9
74	Efficient surrogate optimization for payment cost co-optimization with transmission capacity constraints. , 2013, , .		7
75	A decentralized framework of unit commitment for future power markets. , 2013, , .		3
76	An efficient approach for short-term substation load forecasting. , 2013, , .		5
77	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
78	Truthful auction mechanism design for short-interval secondary spectrum access market. , 2012, , .		0
79	The power game between a MIMO radar and jammer. , 2012, , .		4
80	Near optimal furnace tool allocation with batching and waiting time constraints. , 2011, , .		7
81	Fire evacuation model with confidence intervals. , 2011, , .		0
82	Efficient dual-armed cluster tool performance via branch and cut optimization algorithm. , 2011, , .		0
83	Optimization-based litho machine scheduling with multiple reticles and setups. , 2011, , .		2
84	Analysis and simulation of payment cost minimization and bid cost minimization with strategic bidders. , 2011, , .		1
85	Analysis of a partially decentralized framework for operating future power systems. , 2011, , .		2
86	Short-term wind generation forecasting and confidence interval estimation based on neural networks trained by extended Kalman particle filter. , 2011, , .		1
87	A mixed fuzzy recursive least-squares estimation for online identification of Takagi-Sugeno models. , 2010, , .		0
88	The subgradient-simplex based cutting plane method to solve Linear matrix inequalities. , 2010, , .		0
89	Achieving equilibrium and local incentive compatibility for electricity markets by using redundant constraints. , 2010, , .		0
90	Interacting multiple model approach for very short-term load forecasting and confidence interval estimation. , 2010, , .		1

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91	An integrated control of shading blinds, natural ventilation, and HVAC systems for energy saving and human comfort. , 2010, , .		11
92	Efficient optimization of building emergency evacuation considering social bond of evacuees. , 2009, , .		12
93	On reducing uplift payment in electricity markets. , 2009, , .		14
94	Building automation: Modeling and optimization of emergency. , 2009, , .		0
95	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
96	Short-term load forecasting: Similar day-based wavelet neural networks. , 2008, , .		6
97	Bid Cost Minimization vs. Payment Cost Minimization: A Game Theoretic Study of Electricity Markets. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	6
98	Incremental Value Iteration for Time-Aggregated Markov-Decision Processes. IEEE Transactions on Automatic Control, 2007, 52, 2177-2182.	5.7	23
99	From Manufacturing Scheduling to Supply Chain Coordination: The Control of Complexity and Uncertainty. , 2007, , .		0
100	Coherent Modeling and Effective Coordination for Building Emergency Evacuation. , 2007, , .		4
101	Intra-Organizational Logistics Management Through Multi-Agent Systems. Electronic Commerce Research, 2003, 3, 337-364.	5.0	14
102	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
103	Optimization-based manufacturing scheduling with multiple resources, setup requirements, and transfer lots. IIE Transactions, 2003, 35, 973-985.	2.1	17