Qing-Shan Jia

List of Publications by Year
in descending order

176	3,954	186265	144013
papers	citations	28	57
		h-index	g-index

180	180	180	3301
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	A Simulation-Based Primal-Dual Approach for Constrained V2G Scheduling in a Microgrid of Building. IEEE Transactions on Automation Science and Engineering, 2023, 20, 1851-1863.	5.2	3
2	Multiagent Dynamic Task Assignment Based on Forest Fire Point Model. IEEE Transactions on Automation Science and Engineering, 2022, 19, 833-849.	5.2	10
3	Joint Optimization for Coordinated Charging Control of Commercial Electric Vehicles Under Distributed Hydrogen Energy Supply. IEEE Transactions on Control Systems Technology, 2022, 30, 835-843.	5.2	12
4	On large action space in EV charging scheduling optimization. Science China Information Sciences, 2022, 65, 1.	4.3	11
5	Artificial neural networks for water quality soft-sensing in wastewater treatment: a review. Artificial Intelligence Review, 2022, 55, 565-587.	15.7	64
6	Control for smart systems: Challenges and trends in smart cities. Annual Reviews in Control, 2022, 53, 358-369.	7.9	11
7	On optimal charging scheduling for electric vehicles with wind power generation. Fundamental Research, 2022, , .	3.3	6
8	Deep Learning-Based Model Predictive Control for Continuous Stirred-Tank Reactor System. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 3643-3652.	11.3	53
9	A Computing Budget Allocation Method for Minimizing EV Charging Cost Using Uncertain Wind Power. IEEE Transactions on Automation Science and Engineering, 2021, 18, 681-692.	5.2	8
10	A Structural Property of Charging Scheduling Policy for Shared Electric Vehicles With Wind Power Generation. IEEE Transactions on Control Systems Technology, 2021, 29, 2393-2405.	5.2	10
11	Matching Uncertain Renewable Supply with Electric Vehicle Charging Demand—A Bi-Level Event-Based Optimization Method. Complex System Modeling and Simulation, 2021, 1, 33-44.	5.3	12
12	Soft-sensing of Wastewater Treatment Process via Deep Belief Network with Event-triggered Learning. Neurocomputing, 2021, 436, 103-113.	5.9	26
13	DNA dynamics and computation based on toehold-free strand displacement. Nature Communications, 2021, 12, 4994.	12.8	15
14	Efficient Real-Time EV Charging Scheduling via Ordinal Optimization. IEEE Transactions on Smart Grid, 2021, 12, 4029-4038.	9.0	31
15	Speed Planning for Autonomous Vehicles at Intersections. , 2021, , .		2
16	Learning-Based Safety-Critical Motion Planning with Input-to-State Barrier Certificate. , 2021, , .		1
17	Joint Scheduling of Deferrable Demand and Storage With Random Supply and Processing Rate Limits. IEEE Transactions on Automatic Control, 2021, 66, 5506-5513.	5.7	4
18	A sparse deep belief network with efficient fuzzy learning framework. Neural Networks, 2020, 121, 430-440.	5.9	48

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19	An Adaptive Deep Belief Network With Sparse Restricted Boltzmann Machines. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 4217-4228.	11.3	46
20	Guest Editorial Special Section on the 2017 International Conference on Automation Science and Engineering. IEEE Transactions on Automation Science and Engineering, 2020, 17, 1095-1096.	5.2	0
21	A review on charging behavior of electric vehicles: data, model, and control. Control Theory and Technology, 2020, 18, 217-230.	1.6	27
22	Event-based optimization with random packet dropping. Science China Information Sciences, 2020, 63, 1.	4.3	3
23	Optimization of Large-Scale Commercial Electric Vehicles Fleet Charging Location Schedule Under the Distributed wind Power Supply. , 2020, , .		2
24	Dynamic Sampling Allocation for Selecting a Good Enough Alternative. , 2020, , .		2
25	Learning Optimal Scheduling Policy for Remote State Estimation Under Uncertain Channel Condition. IEEE Transactions on Control of Network Systems, 2020, 7, 579-591.	3.7	25
26	Data-driven computation of natural gas pipeline network hydraulics. Results in Control and Optimization, 2020, 1, 100004.	2.3	8
27	A Review on Charging Behavior of Electric Vehicles: Data, Model, and Control. IFAC-PapersOnLine, 2020, 53, 598-601.	0.9	3
28	Decentralized Multi-agent Reinforcement Learning with Multi-time Scale of Decision Epochs. , 2020, , .		2
29	Motion Planning at Intersections with Event-driven Recurrent Q-Learning. IFAC-PapersOnLine, 2020, 53, 17047-17052.	0.9	1
30	Reinforcement Learning with Temporal Logic Constraints. IFAC-PapersOnLine, 2020, 53, 485-492.	0.9	1
31	Predictive Maintenance of VRLA Batteries in UPS towards Reliable Data Centers. IFAC-PapersOnLine, 2020, 53, 13607-13612.	0.9	9
32	Performance Loss Bound for State Aggregation in a Class of Supply Demand Matching Systems. , 2020, , .		0
33	A Game-Theoretic Reinforcement Learning Approach for Adaptive Interaction at Intersections. , 2020, , .		7
34	Bi-level Proximal Policy optimization for Stochastic Coordination of EV Charging Load with Uncertain Wind Power. , 2019, , .		5
35	A Distributed Occupancy Distribution Estimation Method For Smart Buildings. , 2019, , .		1
36	A Simulation Platform for Sensing System Selection for Occupant Distribution Estimation in Smart Buildings. , 2019, , .		2

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37	Decentralized EV-Based Charging Optimization With Building Integrated Wind Energy. IEEE Transactions on Automation Science and Engineering, 2019, 16, 1002-1017.	5.2	75
38	The 37th Chinese Control Conference (CCC2018) [Conference Reports]. IEEE Control Systems, 2019, 39, 73-78.	0.8	0
39	An Indoor Occupant Distribution Estimation Method Based on Improved Stay-Time Algorithm. , 2019, , .		0
40	Controlling the Internet of Things â€" from Energy Saving to Fast Evacuation in Smart Buildings. Advances in Industrial Control, 2018, , 293-310.	0.5	1
41	Event-driven optimal control of central air-conditioning systems: Event-space establishment. Science and Technology for the Built Environment, 2018, 24, 839-849.	1.7	23
42	Robust Scheduling of EV Charging Load With Uncertain Wind Power Integration. IEEE Transactions on Smart Grid, 2018, 9, 1043-1054.	9.0	69
43	A Simulation-Based Policy Improvement Method for Joint-Operation of Building Microgrids With Distributed Solar Power and Battery. IEEE Transactions on Smart Grid, 2018, 9, 6242-6252.	9.0	23
44	Distributed Coordination of EV Charging With Renewable Energy in a Microgrid of Buildings. IEEE Transactions on Smart Grid, 2018, 9, 6253-6264.	9.0	110
45	On Distributed Optimization for Supply Demand Coordination in Cyber Physical Energy Systems. , 2018, , .		0
46	A Convenient Indoor Positioning Method. , 2018, , .		0
47	A Q-Learning Method for Scheduling Shared EVs Under Uncertain User Demand and Wind Power Supply. , 2018, , .		5
48	Guest Editorial: Special Issue on (Industrial) Internet-of-Things for Smart and Sensing Systems: Issues, Trends, and Applications. IEEE Internet of Things Journal, 2018, 5, 4392-4395.	8.7	4
49	Cyber-Physical System-Based Optimization for Multiple Energy Systems with Imperfect State-of-Charge Knowledge of Storage Devices. , 2018, , .		0
50	On State Aggregation in a Class of Cyber Physical Energy Systems. , 2018, , .		1
51	On distributed event-based optimization for shared economy in cyber-physical energy systems. Science China Information Sciences, 2018, 61, 1.	4.3	11
52	Cyber-physical model for efficient and secured operation of CPES or energy Internet. Science China Information Sciences, 2018, 61, 1.	4.3	15
53	Event-Based HVAC Controlâ€"A Complexity-Based Approach. IEEE Transactions on Automation Science and Engineering, 2018, 15, 1909-1919.	5.2	32
54	On supply demand coordination in vehicle-to-grid â€" A brief literature review. , 2018, , .		6

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55	BIM-based PV system optimization and deployment. Energy and Buildings, 2017, 150, 13-22.	6.7	34
56	A Multi-Timescale and Bilevel Coordination Approach for Matching Uncertain Wind Supply With EV Charging Demand. IEEE Transactions on Automation Science and Engineering, 2017, 14, 694-704.	5.2	61
57	Review of wind power forecasting methods: From multi-spatial and temporal perspective. , 2017, , .		9
58	An evacuation guider location optimization method based on road network centrality measures. , 2017, , .		0
59	Multi-scale event-based optimization for matching uncertain wind supply with EV charging demand. , 2017, , .		12
60	An ordinal optimization based method for selecting events. , 2017, , .		2
61	Design of diamond ring resonator by ordinal optimization. , 2017, , .		0
62	An occupancy distribution estimation method using the surveillance cameras in buildings. , 2017, , .		8
63	Optimization of sensor location for improving wind power prediction accuracy. , 2017, , .		2
64	Stochastic coordination of aggregated electric vehicle charging with on-site wind power at multiple buildings. , 2017, , .		1
65	Community-level Geothermal Heat Pump system management via an aggregation-disaggregation framework. , 2017, , .		0
66	Initial location assignment and dynamic reassignment optimization for urban evacuation guiders. , 2017, , .		1
67	Operational Optimization for Microgrid of Buildings with Distributed Solar Power and Battery. Asian Journal of Control, 2017, 19, 996-1008.	3.0	24
68	On Joint Control of Heating, Ventilation, and Air Conditioning and Natural Ventilation in a Meeting Room for Energy Saving. Asian Journal of Control, 2016, 18, 1781-1804.	3.0	5
69	The joint scheduling of EV charging load with building mounted wind power using simulation-based policy improvement. , 2016, , .		2
70	Improving the prediction accuracy of building energy consumption using location of occupant â€" A case study. , 2016, , .		2
71	Coordinating EV charging demand with wind supply in a bi-level energy dispatch framework. , 2016, , .		1
72	Simulation optimization in the era of Industrial 4.0 and the Industrial Internet. Journal of Simulation, 2016, 10, 310-320.	1.5	111

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73	A three-level human movement model in the whole building scale. , 2016, , .		5
74	A review of occupant behavior models in residential building: Sensing, modeling, and prediction. , 2016, , .		7
75	A Review of EV Load Scheduling with Wind Power Integration*This work is supported in part by NSFC (61222302, 61174072, 61221063, 91224008, and U1301254), 111 International Collaboration Program of China (B06002), the National Key Technology R&D Program (2013BAG18B00), TNList Funding for Cross Disciplinary Research, TNList Funding for Excellent Young Scholar, and the Program for New Star of Science and Technology in Beijing (No. xx2014B056). Q.-S. Jia is the corresponding author.. IFAC-PapersOnLine, 2015, 48, 223-228.	0.9	10
76	Technical Committee on Discrete-Event Systems [Technical Activities]. IEEE Control Systems, 2015, 35, 30-31.	0.8	0
77	Event-Based Parallel Simulation with a Sensing System for Occupant Distribution Estimation in the Whole Building Scale. , 2015, , .		1
78	Numerical testbed of a multiple-chiller plant for centralized HVAC systems. , 2015, , .		0
79	Multi-timescale optimization between distributed wind generators and electric vehicles in microgrid. , 2015, , .		6
80	Local and global event-based optimization: Performace and complexity. , 2015, , .		0
81	A Decentralized Stay-Time Based Occupant Distribution Estimation Method for Buildings. IEEE Transactions on Automation Science and Engineering, 2015, 12, 1482-1491.	5.2	18
82	Event-Based Optimization Within the Lagrangian Relaxation Framework for Energy Savings in HVAC Systems. IEEE Transactions on Automation Science and Engineering, 2015, 12, 1396-1406.	5.2	47
83	Parameterized Markov decision process and its application to service rate control. Automatica, 2015, 54, 29-35.	5.0	16
84	Matching EV Charging Load With Uncertain Wind: A Simulation-Based Policy Improvement Approach. IEEE Transactions on Smart Grid, 2015, 6, 1425-1433.	9.0	117
85	Supply Demand Coordination for Building Energy Saving: Explore the Soft Comfort. IEEE Transactions on Automation Science and Engineering, 2015, 12, 656-665.	5.2	19
86	EV charging load scheduling with high wind power penetration: A robust shortest path approach. , 2015, , .		4
87	Optimal storage battery scheduling for energy-efficient buildings in a microgrid. , 2015, , .		2
88	Optimal Control of Multiroom HVAC System: An Event-Based Approach. IEEE Transactions on Control Systems Technology, 2015, , 1-1.	5.2	35
89	Optimal operation for energy-efficient building micro-grid. , 2015, , .		2
90	Local event-based sensor activation for occupant distribution estimation in buildings. , 2014, , .		0

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91	EV charging load scheduling following uncertain renewable energy supply by stochastic matching. , 2014, , .		9
92	Technical Committee on Discrete-Event Systems [Technical Activities]. IEEE Control Systems, 2014, 34, 19-20.	0.8	0
93	A dual-infrared sensing system for occupant distribution estimation in buildings. , 2014, , .		2
94	A brief tutorial on event-based optimization with applications in smart buildings. , 2014, , .		0
95	Event-based optimization for stochastic matching EV charging load with uncertain renewable energy. , 2014, , .		7
96	A new method to solve large-scale building energy management for energy saving. , 2014, , .		6
97	Platform and Algorithm Development for a RFID-Based Indoor Positioning System. Unmanned Systems, 2014, 02, 279-291.	3.6	44
98	Sample path sharing in simulation-based policy improvement. , 2014, , .		2
99	Event-based optimization for multi-room HVAC system. , 2014, , .		2
100	Guest editorial: event-based control and optimization. Discrete Event Dynamic Systems: Theory and Applications, 2014, 24, 99-102.	1.5	5
101	A tutorial on event-based optimization—a new optimization framework. Discrete Event Dynamic Systems: Theory and Applications, 2014, 24, 103-132.	1.5	54
102	Indoor Occupant Positioning System Using Active RFID Deployment and Particle Filters. , 2014, , .		11
103	Weather-forecast based optimal unit scheduling with solar power integration. , 2014, , .		1
104	Smart Building Technology [TC Spotlight]. IEEE Robotics and Automation Magazine, 2014, 21, 18-20.	2.0	15
105	Building occupant level estimation based on heterogeneous information fusion. Information Sciences, 2014, 272, 145-157.	6.9	14
106	Building Energy Doctors: An SPC and Kalman Filter-Based Method for System-Level Fault Detection in HVAC Systems. IEEE Transactions on Automation Science and Engineering, 2014, 11, 215-229.	5.2	89
107	Green Building Facilitated by Supply Demand Coordination in Microgrid. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7671-7677.	0.4	3
108	Sample Path Sharing in Policy Improvement for Indoor Air Temperature Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 247-252.	0.4	2

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109	Building Energy Management: Integrated Control of Active and Passive Heating, Cooling, Lighting, Shading, and Ventilation Systems. IEEE Transactions on Automation Science and Engineering, 2013, 10, 588-602.	5.2	177
110	Reconfiguring Networked Infrastructures by Adding Wireless Communication Capabilities to Selected Nodes. IEEE Transactions on Wireless Communications, 2013, 12, 4518-4528.	9.2	3
111	Efficient computing budget allocation for finding simplest good designs. IIE Transactions, 2013, 45, 736-750.	2.1	16
112	Efficient Computing Budget Allocation for Simulation-Based Optimization With Stochastic Simulation Time. IEEE Transactions on Automatic Control, 2013, 58, 539-544.	5.7	13
113	Supply demand coordination for building energy saving. , 2013, , .		5
114	Policy iteration for parameterized Markov decision processes and its application. , 2013, , .		2
115	Event-Based Sensor Data Scheduling: Trade-Off Between Communication Rate and Estimation Quality. IEEE Transactions on Automatic Control, 2013, 58, 1041-1046.	5.7	393
116	Smart Management of Multiple Energy Systems in Automotive Painting Shop. IEEE Transactions on Automation Science and Engineering, 2013, 10, 603-614.	5.2	14
117	Event-based optimization with non-stationary uncertainties to save energy costs of HVAC systems in buildings. , 2013, , .		8
118	Advances in simulation optimization and its applications. IIE Transactions, 2013, 45, 683-684.	2.1	18
119	Game theoretical control of service rates in closed jackson networks. , 2013, , .		1
120	An RFID indoor positioning system by using weighted path loss and extreme learning machine. , 2013, , .		37
121	An integrative Weighted Path Loss and Extreme Learning Machine approach to Rfid based Indoor Positioning. , 2013, , .		17
122	Fundamentals of Ordinal Optimization. , 2013, , 159-174.		0
123	Applications of Ordinal Optimization. , 2013, , 227-245.		0
124	Efficient topology optimization for a wired networked system by adding wireless communication. , 2012, , .		2
125	Optimal scheduling of storage devices for building energy saving. , 2012, , .		1
126	On Optimal Partial Broadcasting of Wireless Sensor Networks for Kalman Filtering. IEEE Transactions on Automatic Control, 2012, 57, 715-721.	5.7	25

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127	Event-based sensor activation for indoor occupant distribution estimation. , 2012, , .		8
128	Approximate Event-Based Optimization for Evacuation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 372-377.	0.4	3
129	Estimation of occupant distribution by detecting the entrance and leaving events of zones in building. , 2012, , .		8
130	Event-based evacuation in outdoor environment. , 2012, , .		7
131	Efficient Computing Budget Allocation for Simulation-Based Policy Improvement. IEEE Transactions on Automation Science and Engineering, 2012, 9, 342-352.	5.2	24
132	Simulation-Based Policy Improvement for Energy Management in Commercial Office Buildings. IEEE Transactions on Smart Grid, 2012, 3, 2211-2223.	9.0	89
133	Performance Analysis and Comparison on Energy Storage Devices for Smart Building Energy Management. IEEE Transactions on Smart Grid, 2012, 3, 2136-2147.	9.0	256
134	A systematic method for network topology reconfiguration with limited link additions. Journal of Network and Computer Applications, 2012, 35, 1979-1989.	9.1	8
135	Ordinal Optimization-Based Multi-energy System Scheduling for Building Energy Saving. Lecture Notes in Computer Science, 2012, , 251-259.	1.3	1
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137	An Adaptive Sampling Algorithm for Simulation-Based Optimization With Descriptive Complexity Preference. IEEE Transactions on Automation Science and Engineering, 2011, 8, 720-731.	5.2	7
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140	On Solving Event-Based Optimization With Average Reward Over Infinite Stages. IEEE Transactions on Automatic Control, 2011, 56, 2912-2917.	5.7	27
141	On Computing Budget Allocation for Finding the Simplest Good Enough Design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 8247-8252.	0.4	0
142	Remanufacturing planning based on constrained ordinal optimization. Frontiers of Electrical and Electronic Engineering in China: Selected Publications From Chinese Universities, 2011, 6, 443-452.	0.6	9
143	Tracking a moving object via a sensor network with a partial information broadcasting scheme. Information Sciences, 2011, 181, 4733-4753.	6.9	34
144	Sensor scheduling over a packet-delaying network. Automatica, 2011, 47, 1089-1092.	5.0	22

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146	A Rollout Method for Finite-Stage Event-Based Decision Processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 247-252.	0.4	2
147	An Occupant Behavior Model for Building Energy Efficiency and Safety. AIP Conference Proceedings, 2010, , .	0.4	3
148	Quantifying Heuristics in the Ordinal Optimization Framework. Discrete Event Dynamic Systems: Theory and Applications, 2010, 20, 441-471.	1.5	6
149	Energy-Efficient Buildings Facilitated by Microgrid. IEEE Transactions on Smart Grid, 2010, 1, 243-252.	9.0	569
150	Estimation of occupancy level in indoor environment based on heterogeneous information fusion. , 2010, , .		21
151	Dynamic water resources planning with locational release and annual consumption constraints. , 2010, , .		0
152	A Structural Property of Optimal Policies for Multi-Component Maintenance Problems. IEEE Transactions on Automation Science and Engineering, 2010, 7, 677-680.	5.2	27
153	Long-Term Scheduling for Cascaded Hydro Energy Systems With Annual Water Consumption and Release Constraints. IEEE Transactions on Automation Science and Engineering, 2010, 7, 969-976.	5.2	23
154	Prediction-Based Activation in WSN Tracking. , 2010, , .		0
155	An integrated control of shading blinds, natural ventilation, and HVAC systems for energy saving and human comfort. , 2010, , .		11
156	Bursty Propagation Model for Incidental Events in Blog Networks. Ruan Jian Xue Bao/Journal of Software, 2010, 20, 1384-1392.	0.3	11
157	Discovering the Knowledge Hierarchy of MathWorld for Web Intelligence. , 2009, , .		2
158	Tracking moving object via a sensor network with partial information broadcasting scheme. , 2009, , .		1
159	Ordinal optimization based security dispatching in deregulated power systems. , 2009, , .		2
160	Universal Alignment Probability Revisited. Journal of Optimization Theory and Applications, 2009, 141, 371-376.	1.5	6
161	Improved constrained ordinal optimization for simulation-based constrained optimization. , 2009, , .		3
162	An adaptive sampling algorithm for simulation-based optimization with descriptive complexity constraints. , 2009, , .		1

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163	An Indoor Localization Algorithm for Lighting Control using RFID. , 2008, , .		35
164	A Structure Property of Optimal Policies for Maintenance Problems With Safety-Critical Components. IEEE Transactions on Automation Science and Engineering, 2008, 5, 519-531.	5.2	32
165	A potential-based method for finite-stage Markov Decision Process. , 2008, , .		1
166	Event-based optimization for dispatching policies in material handling systems of general assembly lines. , 2008, , .		9
167	How Topology Affects Security: An Upper Bound of Electric Power Network Security. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 12947-12952.	0.4	0
168	Ordinal Optimization. , 2007, , .		121
169	How much spare capacity is necessary for the security of resource networks?. Physica A: Statistical Mechanics and Its Applications, 2007, 373, 861-873.	2.6	1
170	Comparison of selection rules for ordinal optimization. Mathematical and Computer Modelling, 2006, 43, 1150-1171.	2.0	18
171	The Equivalence between Ordinal Optimization in Deterministic Complex Problems and in Stochastic Simulation Problems. Discrete Event Dynamic Systems: Theory and Applications, 2006, 16, 405-411.	1.5	2
172	A method based on Kolmogorov complexity to improve the efficiency of strategy optimization with limited memory space. , 2006, , .		3
173	Vector Ordinal Optimization. Journal of Optimization Theory and Applications, 2005, 125, 259-274.	1.5	33
174	Planning Remanufacturing Systems by Constrained Ordinal Optimization Method with Feasibility Model. , 0, , .		6
175	A SVM-based method for engine maintenance strategy optimization. , 0, , .		2
176	Enhancing the Robustness and Efficiency of Scale-free Network with Limited Link Addition. KSII Transactions on Internet and Information Systems, 0, , .	0.3	1