Kai Cai

List of Publications by Year
in descending order

87 papers	1,604 citations	471061 17 h-index	360668 35 g-index
90 all docs	90 docs citations	90 times ranked	789 citing authors

#	ARTICLE	IF	CITATIONS
1	A new perspective on cooperative control of multi-agent systems through different types of graph Laplacians. Advanced Robotics, 2023, 37, 2-11.	1.1	1
2	Optimal Secret Protections in Discrete-Event Systems. IEEE Transactions on Automatic Control, 2022, 67, 2816-2828.	3.6	13
3	On Resilient Supervisory Control Against Indefinite Actuator Attacks in Discrete-Event Systems. , 2022, 6, 2942-2947.		11
4	Supervisory Control of Discrete-Event Systems. , 2021, , 2245-2253.		56
5	Structural controllability and time-to-control of directed scale-free networks with minimum number of driver nodes. Systems and Control Letters, 2021, 156, 105025.	1.3	3
6	Usability aware secret protection with minimum cost. Nonlinear Analysis: Hybrid Systems, 2021, 43, 101111.	2.1	2
7	N-Step Nonblocking Supervisory Control of Discrete-Event Systems. , 2021, , .		0
8	Tight bound on parameter of surplus-based averaging algorithm over balanced digraphs. International Journal of Control, 2020, 93, 1859-1866.	1.2	7
9	Supervisor localisation for large-scale discrete-event systems under partial observation. International Journal of Control, 2020, 93, 387-399.	1.2	4
10	Supervisor Localization of Timed Discrete-Event Systems Under Partial Observation. IEEE Transactions on Automatic Control, 2020, 65, 295-301.	3.6	2
11	Localisation-based distributed control of timed discrete-event systems with communication delay. International Journal of Control, 2020, , 1-10.	1.2	0
12	Warehouse automation by logistic robotic networks: a cyber-physical control approach. Frontiers of Information Technology and Electronic Engineering, 2020, 21, 693-704.	1.5	10
13	Distributed output regulation of heterogeneous uncertain linear agents. Automatica, 2020, 119, 109094.	3.0	9
14	Distributed Dual Gradient Tracking for Resource Allocation in Unbalanced Networks. IEEE Transactions on Signal Processing, 2020, 68, 2186-2198.	3.2	44
15	Real-time estimation of the optically detected magnetic resonance shift in diamond quantum thermometry toward biological applications. Physical Review Research, 2020, 2, .	1.3	18
16	Supervisory Control of Discrete-Event Systems. , 2020, , 1-9.		2
17	Distributed algorithm for a finite time horizon resource allocation over a directed network. IET Control Theory and Applications, 2020, 14, 1170-1182.	1.2	6
18	An O(n2) Algorithm for Supervisor Reduction/Localization of Discrete-Event Systems. IFAC-PapersOnLine, 2020, 53, 211-216.	0.5	0

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19	Supervisory Control of Discrete-Event Systems. Communications and Control Engineering, 2019, , .	1.0	113
20	Multi-Objective Optimal Charging Control of Plug-In Hybrid Electric Vehicles in Power Distribution Systems. Energies, 2019, 12, 2563.	1.6	8
21	On scalable supervisory control of multi-agent discrete-event systems. Automatica, 2019, 108, 108460.	3.0	26
22	Secret Securing with Multiple Protections and Minimum Costs. , 2019, , .		4
23	Top-Down Synthesis of Multiagent Formation Control: An Eigenstructure Assignment Based Approach. IEEE Transactions on Control of Network Systems, 2019, 6, 1404-1414.	2.4	10
24	Relative coobservability for decentralised supervisory control of discrete-event systems. International Journal of Control, 2019, 92, 1481-1489.	1.2	0
25	Supervisory Control of Timed Discrete-Event Systems. Communications and Control Engineering, 2019, , 411-444.	1.0	165
26	Supervision of Discrete-Event Systems: Basics. Communications and Control Engineering, 2019, , 85-146.	1.0	1
27	State-Based Control of Discrete-Event Systems. Communications and Control Engineering, 2019, , 339-359.	1.0	0
28	Supervision of Vector Discrete-Event Systems. Communications and Control Engineering, 2019, , 361-410.	1.0	0
29	Algebraic Preliminaries. Communications and Control Engineering, 2019, , 1-43.	1.0	0
30	Hierarchical Supervision of Discrete-Event Systems. Communications and Control Engineering, 2019, , 205-255.	1.0	0
31	Decentralized and Distributed Supervision of Discrete-Event Systems. Communications and Control Engineering, 2019, , 147-203.	1.0	0
32	Supervisory control of discrete-event systems: A brief history. Annual Reviews in Control, 2018, 45, 250-256.	4.4	52
33	Characterizations and effective computation of supremal relatively observable sublanguages. Discrete Event Dynamic Systems: Theory and Applications, 2018, 28, 269-287.	0.6	4
34	Decentralized Opacity Enforcement in Discrete Event Systems Using Supervisory Control. , 2018, , .		7
35	On Scalable Supervisory Control of Multi-Agent Discrete-Event Systems. IFAC-PapersOnLine, 2018, 51, 25-30.	0.5	4
36	Supervisor Localization of Discrete-Event Systems with Infinite Behavior. IFAC-PapersOnLine, 2018, 51, 361-366.	0.5	4

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37	Localization-based distributed control for large discrete-event systems under partial observation. , 2018, , .		1
38	Application of online supervisory control of discrete-event systems to multi-robot warehouse automation. Control Engineering Practice, 2018, 81, 97-104.	3.2	26
39	On algebraic connectivity of directed scale-free networks. Journal of the Franklin Institute, 2018, 355, 8065-8078.	1.9	6
40	Correction to "Relative Observability of Discrete-Event Systems and Its Supremal Sublanguages" IEEE Transactions on Automatic Control, 2017, 62, 511-511.	3.6	1
41	A Distributed Algorithm for Resource Allocation Over Dynamic Digraphs. IEEE Transactions on Signal Processing, 2017, 65, 2600-2612.	3.2	86
42	Supervisor localization of discrete-event systems under partial observation. Automatica, 2017, 81, 142-147.	3.0	13
43	Parameter optimization of motion artifact canceling PPG-based heart rate sensor by means of cross validation. , 2017, , .		5
44	Fast centralized integer resource allocation algorithm and its distributed extension over digraphs. Neurocomputing, 2017, 270, 91-100.	3.5	7
45	Top-down synthesis of multi-agent formation control: An eigenstructure assignment based approach. , 2017, , .		7
46	Supervisory Control of Discrete-Event Systems: A Brief History – 1980-2015. IFAC-PapersOnLine, 2017, 50, 1791-1797.	0.5	29
47	Cooperative monitoring multiple humans using UAVs and fixed camera. , 2017, , .		0
48	Supervisor localization of timed discrete-event systems under partial observation. , 2016, , .		1
49	On supervisor localization based distributed control of discrete-event systems under partial observation. , 2016, , .		6
50	A new algorithm for computing the supremal relatively observable sublanguage. , 2016, , .		5
51	Distributed supervisory control of discrete-event systems with communication delay. Discrete Event Dynamic Systems: Theory and Applications, 2016, 26, 263-293.	0.6	32
52	Relative Observability and Coobservability of Timed Discrete-Event Systems. IEEE Transactions on Automatic Control, 2016, 61, 3382-3395.	3.6	14
53	Delay-robustness in distributed control of timed discrete-event systems based on supervisor localisation. International Journal of Control, 2016, 89, 2055-2072.	1.2	7
54	Supervisor Localization. Lecture Notes in Control and Information Sciences, 2016, , .	0.6	14

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55	Localization of Timed Discrete-Event Systems. Lecture Notes in Control and Information Sciences, 2016, , 153-173.	0.6	3
56	On relative coobservability of discrete-event systems. , 2015, , .		8
57	Online computation of supremal relatively observable sublanguage of discrete-event systems. , 2015, , .		1
58	A fully distributed approach to resource allocation problem under directed and switching topologies. , 2015, , .		4
59	Relative Observability of Discrete-Event Systems and Its Supremal Sublanguages. IEEE Transactions on Automatic Control, 2015, 60, 659-670.	3.6	76
60	Local average consensus in distributed measurement of spatialâ€"temporal varying parameters: 1D case. Automatica, 2015, 52, 135-145.	3.0	2
61	New results on supervisor localization, with case studies. Discrete Event Dynamic Systems: Theory and Applications, 2015, 25, 203-226.	0.6	18
62	Delay-robustness in distributed control of timed discrete-event systems based on supervisor localization. , 2014, , .		5
63	Average Consensus on Arbitrary Strongly Connected Digraphs With Time-Varying Topologies. IEEE Transactions on Automatic Control, 2014, 59, 1066-1071.	3.6	65
64	Supervisor Localization of Discrete-Event Systems Based on State Tree Structures. IEEE Transactions on Automatic Control, 2014, 59, 1329-1335.	3.6	7
65	On Relative Observability of Timed Discrete-Event Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 208-213.	0.4	3
66	Supervision localization of timed discrete-event systems. Automatica, 2013, 49, 2786-2794.	3.0	21
67	Supervision localization of timed discrete-event systems. , 2013, , .		2
68	On relative observability of discrete-event systems. , 2013, , .		9
69	Local average consensus in distributed measurement of spatial-temporal varying parameters: 1D case. , 2013, , .		2
70	Checking delay-robustness of distributed supervisors of discrete-event systems. , 2012, , .		3
71	New Results on Supervisor Localization, with Application to Multi-Agent Formations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 233-238.	0.4	1
72	Convergence time analysis of quantized gossip consensus on digraphs. Automatica, 2012, 48, 2344-2351.	3.0	16

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73	Average consensus on general strongly connected digraphs. Automatica, 2012, 48, 2750-2761.	3.0	194
74	Averaging Over General Random Networks. IEEE Transactions on Automatic Control, 2012, 57, 3186-3191.	3.6	6
75	Average consensus on arbitrary strongly connected digraphs with dynamic topologies. , 2012, , .		8
76	Supervisor localization of discrete-event systems based on State Tree Structures. , 2012, , .		3
77	Quantized Consensus and Averaging on Gossip Digraphs. IEEE Transactions on Automatic Control, 2011, 56, 2087-2100.	3.6	98
78	Average consensus on general digraphs. , 2011, , .		19
79	Quantized Average Consensus on Gossip Digraphs with Reduced Computation. SICE Journal of Control Measurement and System Integration, 2011, 4, 236-242.	0.4	3
80	Supervisor localization for large discrete-event systems. International Journal of Advanced Manufacturing Technology, 2010, 50, 1189-1202.	1.5	31
81	Further results on randomized quantized averaging: A surplus-based approach. , 2010, , .		2
82	Gossip consensus and averaging algorithms with quantization. , 2010, , .		11
83	Convergence time analysis of quantized gossip algorithms on digraphs. , 2010, , .		6
84	Supervisor Localization: A Top-Down Approach to Distributed Control of Discrete-Event Systems. IEEE Transactions on Automatic Control, 2010, 55, 605-618.	3.6	93
85	Supervisor Localization: A Top-Down Approach to Distributed Control of Discrete-Event Systems. , 2009, , .		6
86	A structural approach to the non-blocking supervisory control of discrete-event systems. International Journal of Advanced Manufacturing Technology, 2009, 41, 1152-1168.	1.5	29
87	Supervisor localization for large-scale discrete-event systems. , 2009, , .		3