Rong Su

List of Publications by Citations

171 papers	2,037 citations	24 h-index	38 g-index
224 ext. papers	2,604 ext. citations	4.4 avg, IF	5.81 L-index

#	Paper	IF	Citations
171	Global and local consistencies in distributed fault diagnosis for discrete-event systems. *IEEE Transactions on Automatic Control*, **2005**, 50, 1923-1935	5.9	107
170	Supervisor Reduction for Discrete-Event Systems. *Discrete Event Dynamic Systems: Theory and Applications*, **2004**, 14, 31-53	1	107
169	Output regulation of linear heterogeneous multi-agent systems via output and state feedback. *Automatica*, **2016**, 67, 157-164	5.7	70
168	Polynomial approach to optimal one-wafer cyclic scheduling of treelike hybrid multi-cluster tools via Petri nets. *IEEE/CAA Journal of Automatica Sinica*, **2018**, 5, 270-280	7	67
167	Decentralized Multi-UAV Flight Autonomy for Moving Convoys Search and Track. *IEEE Transactions on Control Systems Technology*, **2017**, 25, 1480-1487	4.8	61
166	Supervisor synthesis to thwart cyber attack with bounded sensor reading alterations. *Automatica*, **2018**, 94, 35-44	5.7	56
165	Optimizing urban traffic light scheduling problem using harmony search with ensemble of local search. *Applied Soft Computing Journal*, **2016**, 48, 359-372	7.5	51
164	Application of supervisory control theory to theme park vehicles. *Discrete Event Dynamic Systems: Theory and Applications*, **2012**, 22, 511-540	1	51
163	An internet of things upgrade for smart and scalable heating, ventilation and air-conditioning control in commercial buildings. *Applied Energy*, **2019**, 239, 408-424	10.7	49
162	Bipartite and cooperative output synchronizations of linear heterogeneous agents: A unified framework. *Automatica*, **2017**, 80, 172-176	5.7	48
161	Aggregative Synthesis of Distributed Supervisors Based on Automaton Abstraction. *IEEE Transactions on Automatic Control*, **2010**, 55, 1627-1640	5.9	48
160	Jaya, harmony search and water cycle algorithms for solving large-scale real-life urban traffic light scheduling problem. *Swarm and Evolutionary Computation*, **2017**, 37, 58-72	9.8	45
159	The Synthesis of Time Optimal Supervisors by Using Heaps-of-Pieces. *IEEE Transactions on Automatic Control*, **2012**, 57, 105-118	5.9	43
158	Token based scheduling for energy management in building HVAC systems. *Applied Energy*, **2016**, 173, 67-79	10.7	42
157	Self-repairing control of a helicopter with input time delay via adaptive global sliding mode control and quantum logic. *Information Sciences*, **2015**, 316, 123-131	7.7	36
156	Heterogeneous consensus of higher-order multi-agent systems with mismatched uncertainties using sliding mode control. *International Journal of Robust and Nonlinear Control*, **2017**, 27, 2303-2320	3.6	36
155	Polynomially Complex Synthesis of Distributed Supervisors for Large-Scale AMSs Using Petri Nets. *IEEE Transactions on Control Systems Technology*, **2016**, 24, 1610-1622	4.8	35

154	Model Abstraction of Nondeterministic Finite-State Automata in Supervisor Synthesis. *IEEE Transactions on Automatic Control*, **2010**, 55, 2527-2541	5.9	35
153	Nonconflict check by using sequential automaton abstractions based on weak observation equivalence. *Automatica*, **2010**, 46, 968-978	5.7	30
152	Integrated multi-agent system framework: decentralised search, tasking and tracking. *IET Control Theory and Applications*, **2015**, 9, 493-502	2.5	29
151	A Weighted Pair Graph Representation for Reconstructibility of Boolean Control Networks. *SIAM Journal on Control and Optimization*, **2016**, 54, 3040-3060	1.9	29
150	On the application of predictive control techniques for adaptive performance management of computing systems. *IEEE Transactions on Network and Service Management*, **2009**, 6, 212-225	4.8	28
149	Multiparty Consensus of Linear Heterogeneous Multiagent Systems. *IEEE Transactions on Automatic Control*, **2017**, 62, 5578-5589	5.9	27
148	. *IEEE Transactions on Intelligent Transportation Systems*, **2017**, 18, 2681-2692	6.1	24
147	Supervisory Control of Discrete-Event Systems under Attacks: An Overview and Outlook **2019**,		24
146	Decomposition methods for manufacturing system scheduling: a survey. *IEEE/CAA Journal of Automatica Sinica*, **2018**, 5, 389-400	7	24
145	Output regulation of heterogeneous linear multi-agent systems with differential graphical game. *International Journal of Robust and Nonlinear Control*, **2016**, 26, 2256-2278	3.6	24
144	Maximally permissive coordinated distributed supervisory control of nondeterministic discrete-event systems. *Automatica*, **2012**, 48, 1237-1247	5.7	23
143	String execution time for finite languages: Max is easy, min is hard. *Automatica*, **2011**, 47, 2326-2329	5.7	22
142	. *IEEE Transactions on Signal Processing*, **2019**, 67, 2249-2262	4.8	21
141	Traffic Light Scheduling for Pedestrian-Vehicle Mixed-Flow Networks. *IEEE Transactions on Intelligent Transportation Systems*, **2019**, 20, 1468-1483	6.1	20
140	Meta-Heuristics for Bi-Objective Urban Traffic Light Scheduling Problems. *IEEE Transactions on Intelligent Transportation Systems*, **2019**, 20, 2618-2629	6.1	20
139	Optimal Tracking Cooperative Control for Cyber-Physical Systems: Dynamic Fault-Tolerant Control and Resilient Management. *IEEE Transactions on Industrial Informatics*, **2021**, 17, 158-167	11.9	20
138	Solving Traffic Signal Scheduling Problems in Heterogeneous Traffic Network by Using Meta-Heuristics. *IEEE Transactions on Intelligent Transportation Systems*, **2019**, 20, 3272-3282	6.1	19
137	An Energy Efficient Power Management Solution for a Fault-Tolerant More Electric Engine/Aircraft. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 5663-5675	8.9	19

136	Learning-Based Hierarchical Distributed HVAC Scheduling With Operational Constraints. *IEEE Transactions on Control Systems Technology*, **2018**, 26, 1892-1900	4.8	18
135	Predictive analytics of crude oil prices by utilizing the intelligent model search engine. *Applied Energy*, **2018**, 228, 2387-2397	10.7	16
134	Hierarchical Fault Diagnosis for Discrete-Event Systems under Global Consistency. *Discrete Event Dynamic Systems: Theory and Applications*, **2006**, 16, 39-70	1	15
133	Distributed diagnosis for qualitative systems		15
132	Time Optimal Synthesis Based Upon Sequential Abstraction and Its Application to Cluster Tools. *IEEE Transactions on Automation Science and Engineering*, **2017**, 14, 772-784	4.9	14
131	Adaptive Resilient Event-Triggered Control Design of Autonomous Vehicles With an Iterative Single Critic Learning Framework. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, 32, 5502-5511	10.3	14
130	Synthesis of covert actuator attackers for free. *Discrete Event Dynamic Systems: Theory and Applications*, **2020**, 30, 561-577	1	13
129	**2016**,		13
128	Supervisor Obfuscation Against Actuator Enablement Attack **2019**,		13
127	Modeling and Optimal Cyclic Scheduling of Time-Constrained Single-Robot-Arm Cluster Tools via Petri Nets and Linear Programming. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2020**, 50, 871-883	7.3	12
126	Intelligent power allocation and load management of more electric aircraft **2015**,		11
125	Parallel Optimal Tracking Control Schemes for Mode-Dependent Control of Coupled Markov Jump Systems via Integral RL Method. *IEEE Transactions on Automation Science and Engineering*, **2020**, 1-11	4.9	11
124	Bayesian filtering for building occupancy estimation from carbon dioxide concentration. *Energy and Buildings*, **2020**, 206, 109566	7	11
123	Towards Bounded Synthesis of Resilient Supervisors **2019**,		11
122	Synthesis of Supremal Successful Normal Actuator Attackers on Normal Supervisors **2019**,		11
121	Synthesis of minimally restrictive optimal stability-enforcing supervisors for nondeterministic discrete event systems. *Systems and Control Letters*, **2019**, 123, 33-39	2.4	10
120	Synthesize nonblocking distributed supervisors with coordinators **2009**,		10
119	Adaptive runtime fault management for service instances in component-based software applications. *IET Software*, **2007**, 1, 18-28	1	10

118	**2016**,		10
117	Supervisor Synthesis for Networked Discrete Event Systems With Communication Delays and Lossy Channels **2019**,		10
116	Efficient Approach to Scheduling of Transient Processes for Time-Constrained Single-Arm Cluster Tools With Parallel Chambers. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2020**, 50, 3646-3657	7.3	10
115	H∞ output regulation of linear heterogeneous multiagent systems over switching graphs. *International Journal of Robust and Nonlinear Control*, **2018**, 28, 3852-3870	3.6	9
114	**2014**,		9
113	Discrete-event modeling of multi-agent systems with broadcasting-based parallel composition. *Automatica*, **2013**, 49, 3502-3506	5.7	9
112	Computing finitely reachable containable region for switching systems. *IET Control Theory and Applications*, **2005**, 152, 477-486		9
111	Management of traffic congestion in adaptive traffic signals using a novel classification-based approach. *Engineering Optimization*, **2019**, 51, 1509-1528	2	9
110	Efficient Approach to Cyclic Scheduling of Single-Arm Cluster Tools With Chamber Cleaning Operations and Wafer Residency Time Constraint. *IEEE Transactions on Semiconductor Manufacturing*, **2018**, 31, 196-205	2.6	9
109	Control protocol synthesis for multi-agent systems with similar actions instantiated from agent and requirement templates. *Automatica*, **2017**, 79, 244-255	5.7	8
108	Distributed supervisor synthesis for automated manufacturing systems using Petri nets **2014**,		8
107	On Distributed and Parameterized Supervisor Synthesis Problems. *IEEE Transactions on Automatic Control*, **2016**, 61, 777-782	5.9	7
106	Region-based prescriptive route guidance for travelers of multiple classes. *Transportation Research Part C: Emerging Technologies*, **2018**, 87, 138-158	8.4	7
105	Finite time tracking control of higher order nonlinear multi agent systems with actuator saturation. *IFAC-PapersOnLine*, **2016**, 49, 165-170	0.7	7
104	A Flow-based Flight Scheduler for En-route Air Traffic Management. *IFAC-PapersOnLine*, **2016**, 49, 353-358	0.7	7
103	Decentralized Control of Multi-UAVs for Target Search, Tasking and Tracking. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 10048-10053		7
102	Urban road traffic light real-time scheduling **2015**,		7
101	A Distributed Supervisor Synthesis Approach Based on Weak Bisimulation		7

100	Jaya algorithm for solving urban traffic signal control problem **2016**,		7
99	Pedestrian-Safety-Aware Traffic Light Control Strategy for Urban Traffic Congestion Alleviation. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 22, 178-193	6.1	7
98	Building Occupancy Detection from Carbon-dioxide and Motion Sensors **2018**,		7
97	Synthesis of covert actuator and sensor attackers. *Automatica*, **2021**, 130, 109714	5.7	7
96	Traffic light scheduling for pedestrians and vehicles **2017**,		6
95	. *IEEE Transactions on Automatic Control*, **2019**, 64, 5246-5252	5.9	6
94	Output regulation of heterogeneous multi-agent systems: A graphical game approach **2015**,		6
93	Recursive approximation of complex behaviours with IoT-data imperfections. *IEEE/CAA Journal of Automatica Sinica*, **2020**, 7, 656-667	7	6
92	Improved artificial bee colony algorithm for solving urban traffic light scheduling problem **2017**,		6
91	Flight routing and scheduling with departure uncertainties in air traffic flow management **2017**,		6
90	Abstraction-based Synthesis of Timed Supervisors for Time-Weighted Systems. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2012**, 45, 128-134		6
89	Sector-based Distributed Scheduling Strategy in Air Traffic Flow Management. *IFAC-PapersOnLine*, **2016**, 49, 365-370	0.7	6
88	A Hierarchical Heuristic Approach for Solving Air Traffic Scheduling and Routing Problem With a Novel Air Traffic Model. *IEEE Transactions on Intelligent Transportation Systems*, **2019**, 20, 3421-3434	6.1	6
87	Power Scheduling in More Electric Aircraft Based on an Optimal Adaptive Control Strategy. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 10911-10921	8.9	5
86	Incremental scheduling of discrete event systems **2016**,		5
85	Discrete Jaya algorithm for flexible job shop scheduling problem with new job insertion **2016**,		5
84	Flight Routing and Scheduling Under Departure and En Route Speed Uncertainty. *IEEE Transactions on Intelligent Transportation Systems*, **2020**, 21, 1915-1928	6.1	5
83	An optimization model and traffic light control scheme for heterogeneous traffic systems. *Transportation Research Part C: Emerging Technologies*, **2021**, 124, 102911	8.4	5

82	Token based scheduling of HVAC Services in commercial buildings **2015**,		4
81	Petri Net-Based Efficient Determination of Optimal Schedules for Transport-Dominant Single-Arm Multi-Cluster Tools. *IEEE Access*, **2018**, 6, 355-365	3.5	4
80	Model Checking in Isomorphic Module Systems. *IEEE Transactions on Automatic Control*, **2018**, 1-1	5.9	4
79	. *IEEE Transactions on Automatic Control*, **2019**, 64, 896-911	5.9	4
78	Optimal scheduling of HVAC operations with non-preemptive air distributions for precooling **2014**,		4
77	An Internet of Things compliant model identification methodology for smart buildings **2017**,		4
76	A feasible lookahead control for systems with finite control set		4
75	Synthesis of Covert Actuator and Sensor Attackers as Supervisor Synthesis. *IFAC-PapersOnLine*, **2020**, 53, 1-6	0.7	4
74	Differential graphical games for H∞ control of linear heterogeneous multiagent systems. *International Journal of Robust and Nonlinear Control*, **2019**, 29, 2995-3013	3.6	3
73	A method for quickly bounding the optimal objective value of an OPF problem using a semidefinite relaxation and a local solution. *Electric Power Systems Research*, **2019**, 177, 105954	3.5	3
72	Distributed Scheduling for Efficient HVAC Pre-cooling Operations. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 10451-10456		3
71	Bi-objective Water Cycle Algorithm for Solving Remanufacturing Rescheduling Problem. *Lecture Notes in Computer Science*, **2017**, 671-683	0.9	3
70	A cyber attack model with bounded sensor reading alterations **2017**,		3
69	A hierarchical approach for air traffic routing and scheduling **2017**,		3
68	Supervisory control of concurrent discrete-event systems. *Journal of Control and Decision*, **2015**, 2, 99-123	1.9	3
67	Leader-follower output consensus of linear heterogeneous multi-agent systems via output feedback **2015**,		3
66	A Polynomial-Time Algorithm for Computing Finite-Makespan Controllable Sublanguages. *IEEE Transactions on Automatic Control*, **2015**, 60, 534-539	5.9	3
65	Time-dependent partitioning of urban traffic network into homogeneous regions **2014**,		3

64	On the complexity of synthesizing a minimum-weighted supervisor under partial observation. *Automatica*, **2014**, 50, 1725-1729	5.7	3
63	Distributed diagnosis under global consistency **2004**,		3
62	Optimal power flow solution using water cycle algorithm **2016**,		3
61	Region-based dynamic forecast routing for autonomous vehicles **2016**,		3
60	Short-term En route Air Traffic Flow Management Under Departure and Wind Uncertainties with a Heuristic and Greedy Solution Approach **2019**,		3
59	A Generalized Theory on Supervisor Reduction **2018**,		3
58	What information really matters in supervisor reduction?. *Automatica*, **2018**, 95, 368-377	5.7	3
57	Reduction of distributions and its applications **2017**,		2
56	An Application of Incremental Scheduling to a Cluster Photolithography Tool. *IFAC-PapersOnLine*, **2017**, 50, 1114-1120	0.7	2
55	Contraction Based Tracking Control of Autonomous Underwater Vehicle. *IFAC-PapersOnLine*, **2017**, 50, 2665-2670	0.7	2
54	Progressive time optimal control of reactive systems **2015**,		2
53	Review of high speed electrical machines in gas turbine electrical power generation **2015**,		2
52	A greedy algorithm for computing finite-makespan controllable sublanguages **2012**,		2
51	Distributed Trace Estimation Under Timing Mismatch and Channel Distortion. *IEEE Transactions on Automatic Control*, **2008**, 53, 2409-2414	5.9	2
50	Supervisor synthesis based on abstractions of nondeterministic automata **2008**,		2
49	An algorithm to achieve local consistency in distributed systems **2004**,		2
48	Attention Based Graph Bi-LSTM Networks for Traffic Forecasting **2020**,		2
47	Optimal Stabilization Control of Connected Vehicle Systems **2020**,		2

46	Comparing MILP, CP, and A* for multiple stacker crane scheduling **2016**,		2
45	Output H𝟤synchronization of heterogeneous linear multi-agent systems via a distributed output-feedback **2016**,		2
44	Distributed flight routing and scheduling in air traffic flow management **2016**,		2
43	Optimization of vehicle delay and drivers⬚unhappiness at a signalized network: a multi-objective approach **2019**,		2
42	A Safety-Aware Real-Time Air Traffic Flow Management Model Under Demand and Capacity Uncertainties. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-14	6.1	2
41	Design of the Power Management System for Electrical Power Systems in More Electric Engine / Aircraft **2018**,		2
40	. *IEEE Transactions on Industrial Informatics*, **2021**, 1-1	11.9	2
39	Reduction of Distributions: Definitions, Properties, and Applications. *IEEE Transactions on Automatic Control*, **2017**, 62, 5755-5768	5.9	1
38	Wafer sojourn time fluctuation analysis for time-constrained dual-arm multi-cluster tools with activity time variation. *International Journal of Computer Integrated Manufacturing*, **2020**, 1-17	4.3	1
37	Symbolic reachability analysis and maximally permissive entrance control for globally synchronized templates. *Automatica*, **2018**, 87, 290-300	5.7	1
36	Disturbance observer based consensus control for higher order multi-agent systems with mismatched uncertainties **2016**,		1
35	Supervisory Control for a Class of Discrete Event Systems for Optimal Throughput. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 201-207		1
34	Time optimal synthesis based upon sequential abstraction and maximizing parallelism **2017**,		1
33	A macroscopic propagation model for bidirectional pedestrian flows on signalized crosswalks **2017**,		1
32	Discrete-event based vehicle dispatching and scheduling in multicommodity transportations **2014**,		1
31	Automaton-based timed supervisory control for operational planning and scheduling under multiple job deadlines **2014**,		1
30	Remarks on the difficulty of top-down supervisor synthesis **2012**,		1
29	A case study on timed supervisory control on a linear cluster tool using aggregated timed synthesis **2011**,		1

28	Supervisory control of concurrent discrete-event systems **2011**,		1
27	Maximally permissive distributed supervisory control of nondeterministic discrete-event systems **2011**,		1
26	Synthesizing nonblocking distributed supervisors based on automaton abstraction **2008**,		1
25	. *IEEE Transactions on Automatic Control*, **2007**, 52, 1429-1441	5.9	1
24			1
23	A new modeling framework for networked discrete-event systems. *Automatica*, **2022**, 138, 110139	5.7	1
22	Optimal control of interconnected systems with time-correlated noises: Application to vehicle platoon. *Automatica*, **2021**, 110018	5.7	1
21	A Topological Approach for Computing Supremal Sublanguages **2020**,		1
20	Continuous-time model identification: application on a behavioural (miLife) study. *International Journal of Control*, **2020**, 1-12	1.5	1
19	Two-Stage Scalable Air Traffic Flow Management Model Under Uncertainty. *IEEE Transactions on Intelligent Transportation Systems*, **2020**, 1-13	6.1	1
18	Synchronous Composition of Finite Interval Automata **2019**,		1
17	Observation-assisted heuristic synthesis of covert attackers against unknown supervisors. *Discrete Event Dynamic Systems: Theory and Applications*,1	1	1
16	Heuristic Synthesis of Covert Attackers Against Unknown Supervisors **2021**,		1
15	Metaheuristic optimisation methods for approximate solving of singular boundary value problems. *Journal of Experimental and Theoretical Artificial Intelligence*, **2017**, 29, 823-842	2	0
14	A Multi-Bus Dispatching Strategy Based on Boarding Control. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-15	6.1	0
13	Urban traffic light scheduling for pedestrian⬚vehicle mixed-flow networks using discrete sine⬚cosine algorithm and its variants. *Applied Soft Computing Journal*, **2022**, 120, 108656	7.5	0
12	Networked supervisor synthesis against lossy channels with bounded network delays as non-networked synthesis. *Automatica*, **2022**, 142, 110279	5.7	0
11	Technical Committee on Smart Cities [Technical Activities]. *IEEE Control Systems*, **2019**, 39, 15-18	2.9	

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10	Technical Committee on Smart Cities [Technical Activities]. *IEEE Control Systems*, **2017**, 37, 18-20	2.9
9	Language-based access control approach for component-based software applications. *IET Software*, **2007**, 1, 206-216	1
8	Makespan optimization using Timed Petri Nets and Mixed Integer Linear Programming Problem. *IFAC-PapersOnLine*, **2020**, 53, 129-135	0.7
7	Occupant-engaged Control for HVAC Systems with a Social Influence Model. *IFAC-PapersOnLine*, **2020**, 53, 614-617	0.7
6	Supervisory Control of Time-Interval Discrete Event Systems. *IFAC-PapersOnLine*, **2020**, 53, 217-222	0.7
5	Dynamic Multi-Bus Dispatching Strategy With Boarding and Holding Control for Passenger Delay Alleviation and Schedule Reliability: A Combined Dispatching-Operation System. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-15	6.1
4	Flow-based Flight Routing and Scheduling under Uncertainty. *IFAC-PapersOnLine*, **2020**, 53, 15011-15016	0.7
3	An Efficient Method of Matrix Multiplication for Heaps of Pieces. *IFAC-PapersOnLine*, **2018**, 51, 206-211	0.7
2	Scheduling and Control of Start-up Process for Time-Constrained Single-Arm Cluster Tools with Parallel Chambers. *IFAC-PapersOnLine*, **2018**, 51, 251-256	0.7
1	Identification of System Vulnerability under a Smart Sensor Attack via Attack Model Reduction **2022**, 1-1	