Rong Su

List of Publications by Year in Descending Order

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	A new modeling framework for networked discrete-event systems. *Automatica*, **2022**, 138, 110139	5.7	1
170	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
169	Identification of System Vulnerability under a Smart Sensor Attack via Attack Model Reduction **2022**, 1-1		
168	Networked supervisor synthesis against lossy channels with bounded network delays as non-networked synthesis. *Automatica*, **2022**, 142, 110279	5.7	0
167	Optimal control of interconnected systems with time-correlated noises: Application to vehicle platoon. *Automatica*, **2021**, 110018	5.7	1
166	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	
165	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
164	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
163	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
162	A Multi-Bus Dispatching Strategy Based on Boarding Control. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-15	6.1	0
161	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
160	An optimization model and traffic light control scheme for heterogeneous traffic systems. *Transportation Research Part C: Emerging Technologies*, **2021**, 124, 102911	8.4	5
159	Synthesis of covert actuator and sensor attackers. *Automatica*, **2021**, 130, 109714	5.7	7
158	. *IEEE Transactions on Industrial Informatics*, **2021**, 1-1	11.9	2
157	Heuristic Synthesis of Covert Attackers Against Unknown Supervisors **2021**,		1
156	Synthesis of covert actuator attackers for free. *Discrete Event Dynamic Systems: Theory and Applications*, **2020**, 30, 561-577	1	13
155	Recursive approximation of complex behaviours with IoT-data imperfections. *IEEE/CAA Journal of Automatica Sinica*, **2020**, 7, 656-667	7	6

154	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
153	Makespan optimization using Timed Petri Nets and Mixed Integer Linear Programming Problem. *IFAC-PapersOnLine*, **2020**, 53, 129-135	0.7	
152	Occupant-engaged Control for HVAC Systems with a Social Influence Model. *IFAC-PapersOnLine*, **2020**, 53, 614-617	0.7	
151	Supervisory Control of Time-Interval Discrete Event Systems. *IFAC-PapersOnLine*, **2020**, 53, 217-222	0.7	
150	Attention Based Graph Bi-LSTM Networks for Traffic Forecasting **2020**,		2
149	A Topological Approach for Computing Supremal Sublanguages **2020**,		1
148	Optimal Stabilization Control of Connected Vehicle Systems **2020**,		2
147	Flow-based Flight Routing and Scheduling under Uncertainty. *IFAC-PapersOnLine*, **2020**, 53, 15011-15016	0.7	
146	Synthesis of Covert Actuator and Sensor Attackers as Supervisor Synthesis. *IFAC-PapersOnLine*, **2020**, 53, 1-6	0.7	4
145	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
144	Continuous-time model identification: application on a behavioural (miLife) study. *International Journal of Control*, **2020**, 1-12	1.5	1
143	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
142	Bayesian filtering for building occupancy estimation from carbon dioxide concentration. *Energy and Buildings*, **2020**, 206, 109566	7	11
141	Two-Stage Scalable Air Traffic Flow Management Model Under Uncertainty. *IEEE Transactions on Intelligent Transportation Systems*, **2020**, 1-13	6.1	1
140	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
139	Flight Routing and Scheduling Under Departure and En Route Speed Uncertainty. *IEEE Transactions on Intelligent Transportation Systems*, **2020**, 21, 1915-1928	6.1	5
138	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
137	Supervisory Control of Discrete-Event Systems under Attacks: An Overview and Outlook **2019**,		24

136	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
135	Synthesis of minimally restrictive optimal stability-enforcing supervisors for nondeterministic discrete event systems. *Systems and Control Letters*, **2019**, 123, 33-39	2.4	10
134	Technical Committee on Smart Cities [Technical Activities]. *IEEE Control Systems*, **2019**, 39, 15-18	2.9	
133	. *IEEE Transactions on Automatic Control*, **2019**, 64, 5246-5252	5.9	6
132	. *IEEE Transactions on Signal Processing*, **2019**, 67, 2249-2262	4.8	21
131	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
130	. *IEEE Transactions on Automatic Control*, **2019**, 64, 896-911	5.9	4
129	Traffic Light Scheduling for Pedestrian-Vehicle Mixed-Flow Networks. *IEEE Transactions on Intelligent Transportation Systems*, **2019**, 20, 1468-1483	6.1	20
128	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
127	Short-term En route Air Traffic Flow Management Under Departure and Wind Uncertainties with a Heuristic and Greedy Solution Approach **2019**,		3
126	Synchronous Composition of Finite Interval Automata **2019**,		1
125	Supervisor Synthesis for Networked Discrete Event Systems With Communication Delays and Lossy Channels **2019**,		10
124	Towards Bounded Synthesis of Resilient Supervisors **2019**,		11
123	Supervisor Obfuscation Against Actuator Enablement Attack **2019**,		13
122	Synthesis of Supremal Successful Normal Actuator Attackers on Normal Supervisors **2019**,		11
121	Optimization of vehicle delay and drivers⊠unhappiness at a signalized network: a multi-objective approach **2019**,		2
120	Management of traffic congestion in adaptive traffic signals using a novel classification-based approach. *Engineering Optimization*, **2019**, 51, 1509-1528	2	9
119	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

118	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
117	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
116	Meta-Heuristics for Bi-Objective Urban Traffic Light Scheduling Problems. *IEEE Transactions on Intelligent Transportation Systems*, **2019**, 20, 2618-2629	6.1	20
115	Decomposition methods for manufacturing system scheduling: a survey. *IEEE/CAA Journal of Automatica Sinica*, **2018**, 5, 389-400	7	24
114	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
113	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
112	Region-based prescriptive route guidance for travelers of multiple classes. *Transportation Research Part C: Emerging Technologies*, **2018**, 87, 138-158	8.4	7
111	Symbolic reachability analysis and maximally permissive entrance control for globally synchronized templates. *Automatica*, **2018**, 87, 290-300	5.7	1
110	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
109	Model Checking in Isomorphic Module Systems. *IEEE Transactions on Automatic Control*, **2018**, 1-1	5.9	4
108	Predictive analytics of crude oil prices by utilizing the intelligent model search engine. *Applied Energy*, **2018**, 228, 2387-2397	10.7	16
107	Learning-Based Hierarchical Distributed HVAC Scheduling With Operational Constraints. *IEEE Transactions on Control Systems Technology*, **2018**, 26, 1892-1900	4.8	18
106	Building Occupancy Detection from Carbon-dioxide and Motion Sensors **2018**,		7
105	Design of the Power Management System for Electrical Power Systems in More Electric Engine / Aircraft **2018**,		2
104	An Efficient Method of Matrix Multiplication for Heaps of Pieces. *IFAC-PapersOnLine*, **2018**, 51, 206-211	0.7	
103	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	
102	A Generalized Theory on Supervisor Reduction **2018**,		3
101	Supervisor synthesis to thwart cyber attack with bounded sensor reading alterations. *Automatica*, **2018**, 94, 35-44	5.7	56

100	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
99	What information really matters in supervisor reduction?. *Automatica*, **2018**, 95, 368-377	5.7	3
98	. *IEEE Transactions on Intelligent Transportation Systems*, **2017**, 18, 2681-2692	6.1	24
97	Control protocol synthesis for multi-agent systems with similar actions instantiated from agent and requirement templates. *Automatica*, **2017**, 79, 244-255	5.7	8
96	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
95	Reduction of Distributions: Definitions, Properties, and Applications. *IEEE Transactions on Automatic Control*, **2017**, 62, 5755-5768	5.9	1
94	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
93	Multiparty Consensus of Linear Heterogeneous Multiagent Systems. *IEEE Transactions on Automatic Control*, **2017**, 62, 5578-5589	5.9	27
92	Bipartite and cooperative output synchronizations of linear heterogeneous agents: A unified framework. *Automatica*, **2017**, 80, 172-176	5.7	48
91	Traffic light scheduling for pedestrians and vehicles **2017**,		6
90	Technical Committee on Smart Cities [Technical Activities]. *IEEE Control Systems*, **2017**, 37, 18-20	2.9	
89	Reduction of distributions and its applications **2017**,		2
88	Bi-objective Water Cycle Algorithm for Solving Remanufacturing Rescheduling Problem. *Lecture Notes in Computer Science*, **2017**, 671-683	0.9	3
87	Improved artificial bee colony algorithm for solving urban traffic light scheduling problem **2017**,		6
86	A cyber attack model with bounded sensor reading alterations **2017**,		3
85	Decentralized Multi-UAV Flight Autonomy for Moving Convoys Search and Track. *IEEE Transactions on Control Systems Technology*, **2017**, 25, 1480-1487	4.8	61
84	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
83	Metaheuristic optimisation methods for approximate solving of singular boundary value problems. *Journal of Experimental and Theoretical Artificial Intelligence*, **2017**, 29, 823-842	2	0

82	An Application of Incremental Scheduling to a Cluster Photolithography Tool. *IFAC-PapersOnLine*, **2017**, 50, 1114-1120	0.7	2
81	Contraction Based Tracking Control of Autonomous Underwater Vehicle. *IFAC-PapersOnLine*, **2017**, 50, 2665-2670	0.7	2
80	Flight routing and scheduling with departure uncertainties in air traffic flow management **2017**,		6
79	Time optimal synthesis based upon sequential abstraction and maximizing parallelism **2017**,		1
78	A macroscopic propagation model for bidirectional pedestrian flows on signalized crosswalks **2017**,		1
77	A hierarchical approach for air traffic routing and scheduling **2017**,		3
76	An Internet of Things compliant model identification methodology for smart buildings **2017**,		4
75	On Distributed and Parameterized Supervisor Synthesis Problems. *IEEE Transactions on Automatic Control*, **2016**, 61, 777-782	5.9	7
74	Finite time tracking control of higher order nonlinear multi agent systems with actuator saturation. *IFAC-PapersOnLine*, **2016**, 49, 165-170	0.7	7
73	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
72	A Flow-based Flight Scheduler for En-route Air Traffic Management. *IFAC-PapersOnLine*, **2016**, 49, 353-358	0.7	7
71	Disturbance observer based consensus control for higher order multi-agent systems with mismatched uncertainties **2016**,		1
70	**2016**,		13
69	Output regulation of linear heterogeneous multi-agent systems via output and state feedback. *Automatica*, **2016**, 67, 157-164	5.7	70
68	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
67	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
66	Comparing MILP, CP, and A* for multiple stacker crane scheduling **2016**,		2
65	Incremental scheduling of discrete event systems **2016**,		5

64	A Weighted Pair Graph Representation for Reconstructibility of Boolean Control Networks. *SIAM Journal on Control and Optimization*, **2016**, 54, 3040-3060	1.9	29
63	Discrete Jaya algorithm for flexible job shop scheduling problem with new job insertion **2016**,		5
62	Jaya algorithm for solving urban traffic signal control problem **2016**,		7
61	**2016**,		10
60	Output H synchronization of heterogeneous linear multi-agent systems via a distributed output-feedback **2016**,		2
59	Distributed flight routing and scheduling in air traffic flow management **2016**,		2
58	Optimal power flow solution using water cycle algorithm **2016**,		3
57	Region-based dynamic forecast routing for autonomous vehicles **2016**,		3
56	Token based scheduling for energy management in building HVAC systems. *Applied Energy*, **2016**, 173, 67-79	10.7	42
55	Sector-based Distributed Scheduling Strategy in Air Traffic Flow Management. *IFAC-PapersOnLine*, **2016**, 49, 365-370	0.7	6
54	Integrated multi-agent system framework: decentralised search, tasking and tracking. *IET Control Theory and Applications*, **2015**, 9, 493-502	2.5	29
53	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
52	Token based scheduling of HVAC Services in commercial buildings **2015**,		4
51	Output regulation of heterogeneous multi-agent systems: A graphical game approach **2015**,		6
50	Supervisory control of concurrent discrete-event systems. *Journal of Control and Decision*, **2015**, 2, 99-123	3.9	3
49	Leader-follower output consensus of linear heterogeneous multi-agent systems via output feedback **2015**,		3
48	Urban road traffic light real-time scheduling **2015**,		7
47	Progressive time optimal control of reactive systems **2015**,		2

46	Intelligent power allocation and load management of more electric aircraft **2015**,		11
45	Review of high speed electrical machines in gas turbine electrical power generation **2015**,		2
44	A Polynomial-Time Algorithm for Computing Finite-Makespan Controllable Sublanguages. *IEEE Transactions on Automatic Control*, **2015**, 60, 534-539	5.9	3
43	**2014**,		9
42	Optimal scheduling of HVAC operations with non-preemptive air distributions for precooling **2014**,		4
41	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
40	Distributed Scheduling for Efficient HVAC Pre-cooling Operations. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 10451-10456		3
39	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
38	Time-dependent partitioning of urban traffic network into homogeneous regions **2014**,		3
37	Discrete-event based vehicle dispatching and scheduling in multicommodity transportations **2014**,		1
36	Automaton-based timed supervisory control for operational planning and scheduling under multiple job deadlines **2014**,		1
35	Distributed supervisor synthesis for automated manufacturing systems using Petri nets **2014**,		8
34	On the complexity of synthesizing a minimum-weighted supervisor under partial observation. *Automatica*, **2014**, 50, 1725-1729	5.7	3
33	Discrete-event modeling of multi-agent systems with broadcasting-based parallel composition. *Automatica*, **2013**, 49, 3502-3506	5.7	9
32	The Synthesis of Time Optimal Supervisors by Using Heaps-of-Pieces. *IEEE Transactions on Automatic Control*, **2012**, 57, 105-118	5.9	43
31	A greedy algorithm for computing finite-makespan controllable sublanguages **2012**,		2
30	Remarks on the difficulty of top-down supervisor synthesis **2012**,		1
29	Application of supervisory control theory to theme park vehicles. *Discrete Event Dynamic Systems: Theory and Applications*, **2012**, 22, 511-540	1	51

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28	Maximally permissive coordinated distributed supervisory control of nondeterministic discrete-event systems. *Automatica*, **2012**, 48, 1237-1247	5.7	23
27	Abstraction-based Synthesis of Timed Supervisors for Time-Weighted Systems. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2012**, 45, 128-134		6
26	String execution time for finite languages: Max is easy, min is hard. *Automatica*, **2011**, 47, 2326-2329	5.7	22
25	A case study on timed supervisory control on a linear cluster tool using aggregated timed synthesis **2011**,		1
24	Supervisory control of concurrent discrete-event systems **2011**,		1
23	Maximally permissive distributed supervisory control of nondeterministic discrete-event systems **2011**,		1
22	Aggregative Synthesis of Distributed Supervisors Based on Automaton Abstraction. *IEEE Transactions on Automatic Control*, **2010**, 55, 1627-1640	5.9	48
21	Model Abstraction of Nondeterministic Finite-State Automata in Supervisor Synthesis. *IEEE Transactions on Automatic Control*, **2010**, 55, 2527-2541	5.9	35
20	Nonconflict check by using sequential automaton abstractions based on weak observation equivalence. *Automatica*, **2010**, 46, 968-978	5.7	30
19	Synthesize nonblocking distributed supervisors with coordinators **2009**,		10
18	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
17	Distributed Trace Estimation Under Timing Mismatch and Channel Distortion. *IEEE Transactions on Automatic Control*, **2008**, 53, 2409-2414	5.9	2
16	Supervisor synthesis based on abstractions of nondeterministic automata **2008**,		2
15	Synthesizing nonblocking distributed supervisors based on automaton abstraction **2008**,		1
14	. *IEEE Transactions on Automatic Control*, **2007**, 52, 1429-1441	5.9	1
13	Adaptive runtime fault management for service instances in component-based software applications. *IET Software*, **2007**, 1, 18-28	1	10
12	Language-based access control approach for component-based software applications. *IET Software*, **2007**, 1, 206-216		1
11	Hierarchical Fault Diagnosis for Discrete-Event Systems under Global Consistency. *Discrete Event Dynamic Systems: Theory and Applications*, **2006**, 16, 39-70	1	15

List of Publications

10	Global and local consistencies in distributed fault diagnosis for discrete-event systems. *IEEE Transactions on Automatic Control*, **2005**, 50, 1923-1935	5.9	107
9	Computing finitely reachable containable region for switching systems. *IET Control Theory and Applications*, **2005**, 152, 477-486		9
8	An algorithm to achieve local consistency in distributed systems **2004**,		2
7	Supervisor Reduction for Discrete-Event Systems. *Discrete Event Dynamic Systems: Theory and Applications*, **2004**, 14, 31-53	1	107
6	Distributed diagnosis under global consistency **2004**,		3
5	A Distributed Supervisor Synthesis Approach Based on Weak Bisimulation		7
4	A feasible lookahead control for systems with finite control set		4
3			1
2	Distributed diagnosis for qualitative systems		15
1	Observation-assisted heuristic synthesis of covert attackers against unknown supervisors. *Discrete Event Dynamic Systems: Theory and Applications*,1	1	1