Xiang Yin

List of Publications by Year
in descending order

72 papers	1,472 citations	279798 23 h-index	345221 36 g-index
73 all docs	73 docs citations	73 times ranked	437 citing authors

#	ARTICLE	IF	CITATIONS
1	Online Supervisory Control of Networked Discrete Event Systems With Control Delays. IEEE Transactions on Automatic Control, 2022, 67, 2314-2329.	5.7	12
2	Local Mean Payoff Supervisory Control for Discrete Event Systems. IEEE Transactions on Automatic Control, 2022, 67, 2282-2297.	5.7	9
3	Opacity Enforcing Supervisory Control Using Nondeterministic Supervisors. IEEE Transactions on Automatic Control, 2022, 67, 6567-6582.	5.7	10
4	Secure-by-construction synthesis of cyber-physical systems. Annual Reviews in Control, 2022, 53, 30-50.	7.9	22
5	Security-preserving multi-agent coordination for complex temporal logic tasks. Control Engineering Practice, 2022, 123, 105130.	5.5	20
6	A framework for current-state opacity under dynamic information release mechanism. Automatica, 2022, 140, 110238.	5.0	5
7	On Approximate Opacity of Cyber-Physical Systems. IEEE Transactions on Automatic Control, 2021, 66, 1630-1645.	5.7	38
8	Authors' Reply to "Comments on "A new approach for the verification of infinite-step and K-step opacity using two-way observers"[Automatica, 2017(80)162-171]". Automatica, 2021, 124, 109273.	5.0	1
9	An improved approach for verifying delayed detectability of discrete-event systems. Automatica, 2021, 124, 109291.	5.0	4
10	Optimal supervisory control with mean payoff objectives and under partial observation. Automatica, 2021, 123, 109359.	5.0	19
11	Marking Predictability and Prediction in Labeled Petri Nets. IEEE Transactions on Automatic Control, 2021, 66, 3608-3623.	5.7	6
12	Opacity of Networked Supervisory Control Systems Over Insecure Communication Channels. IEEE Transactions on Control of Network Systems, 2021, 8, 884-896.	3.7	11
13	Verification and enforcement of strong infinite- and k-step opacity using state recognizers. Automatica, 2021, 133, 109838.	5.0	20
14	Distributed Sensing and Information Transmission of Discrete-Event Systems with Edge Sensors. , 2021, , .		0
15	Modeling and Analysis of Networked Supervisory Control Systems with Multiple Control Channels. , 2021, , .		0
16	Supervisory Control for Stabilization under Multiple Local Average Payoff Constraints. , 2021, , .		0
17	Secure-by-Construction Controller Synthesis for Stochastic Systems under Linear Temporal Logic Specifications. , 2021, , .		6
18	A Game-Theoretical Approach for Optimal Supervisory Control of Discrete Event Systems for Cyclic Tasks. , 2021, , .		1

#	ARTICLE	IF	CITATIONS
19	Synthesis of Dynamic Masks for Infinite-Step Opacity. IEEE Transactions on Automatic Control, 2020, 65, 1429-1441.	5.7	30
20	A New Microscopic Traffic Model Using a Spring-Mass-Damper-Clutch System. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 3322-3331.	8.0	9
21	Note that each information-Supervisory Control of Discrete-Event Systems for Infinite-Step Opacity. , 2020, , .		2
22	Recent advances on formal methods for safety and security of cyber-physical systems. Control Theory and Technology, 2020, 18, 459-461.	1.6	6
23	Optimal Stabilization of Discrete Event Systems with Guaranteed Worst Cost. IFAC-PapersOnLine, 2020, 53, 1741-1746.	0.9	2
24	Maximally Permissive Supervisory Control of Timed Discrete-Event Systems under Partial Observation. IFAC-PapersOnLine, 2020, 53, 1770-1775.	0.9	0
25	Opacity Enforcing Supervisory Control using Non-deterministic Supervisors. IFAC-PapersOnLine, 2020, 53, 1763-1769.	0.9	5
26	Local Mean Payoff Supervisory Control under Partial Observation. IFAC-PapersOnLine, 2020, 53, 390-396.	0.9	2
27	Modeling, Analysis and Control of Networked Discrete Event Systems: A Comprehensive Survey. , 2020, , .		0
28	Enforcing opacity by insertion functions under multiple energy constraints. Automatica, 2019, 108, 108476.	5.0	46
29	Towards approximate opacity of cyber-physical system. , 2019, , .		5
30	A general approach for optimizing dynamic sensor activation for discrete event systems. Automatica, 2019, 105, 376-383.	5.0	26
31	Deciding detectability for labeled Petri nets. Automatica, 2019, 104, 238-241.	5.0	20
32	Opacity of Nondeterministic Transition Systems: A (Bi)Simulation Relation Approach. IEEE Transactions on Automatic Control, 2019, 64, 5116-5123.	5.7	38
33	Opacity Enforcement Using Nondeterministic Publicly Known Edit Functions. IEEE Transactions on Automatic Control, 2019, 64, 4369-4376.	5.7	52
34	Corrections to â€œOn the Decidability and Complexity of Diagnosability for Labeled Petri Netsâ€•[Nov 17 5931-5938]. IEEE Transactions on Automatic Control, 2019, 64, 1768-1768.	5.7	2
35	Opacity of Networked Supervisory Control Systems over Insecure Multiple Channel Networks. , 2019, , .		8
36	Online Supervisory Control of Networked Discrete-Event Systems with Control Delays. , 2019, , .		5

#	Article	IF	Citations
37	Abstraction-Based Synthesis of Opacity-Enforcing Controllers using Alternating Simulation Relations. , 2019, , .		7
38	Supervisory Control for Delayed Detectability of Discrete Event Systems. , 2019, , .		2
39	Supervisory Control under Local Mean Payoff Constraints. , 2019, , .		4
40	Infinite-step opacity and K-step opacity of stochastic discrete-event systems. Automatica, 2019, 99, 266-274.	5.0	54
41	Robust Fault Diagnosis of Stochastic Discrete Event Systems. IEEE Transactions on Automatic Control, 2019, 64, 4237-4244.	5.7	28
42	Complexity of detectability, opacity and A-diagnosability for modular discrete event systems. Automatica, 2019, 101, 290-295.	5.0	28
43	Decentralized Fault Prognosis of Discrete-Event Systems Using State-Estimate-Based Protocols. IEEE Transactions on Cybernetics, 2019, 49, 1302-1313.	9.5	30
44	Training Drift Counteraction Optimal Control Policies Using Reinforcement Learning: An Adaptive Cruise Control Example. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 2903-2912.	8.0	14
45	Verification of Prognosability for Labeled Petri Nets. IEEE Transactions on Automatic Control, 2018, 63, 1828-1834.	5.7	30
46	Minimization of Sensor Activation in Decentralized Discrete-Event Systems. IEEE Transactions on Automatic Control, 2018, 63, 3705-3718.	5.7	25
47	Visual-Manual Distraction Detection Using Driving Performance Indicators With Naturalistic Driving Data. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 2528-2535.	8.0	61
48	Verification of Opacity in Networked Supervisory Control Systems with Insecure Control Channels. , 2018, , .		15
49	Mean Payoff Supervisory Control Under Partial Observation. , 2018, , .		6
50	Verification of Coprognosability in Decentralized Fault Prognosis of Labeled Petri Nets. , 2018, , .		1
51	Opacity Enforcement by Insertion Functions under Energy Constraints. IFAC-PapersOnLine, 2018, 51, 291-297.	0.9	7
52	Synthesis of Dynamic Masks for Infinite-Step Opacity. IFAC-PapersOnLine, 2018, 51, 343-348.	0.9	3
53	Synthesis of Maximally Permissive Nonblocking Supervisors for the Lower Bound Containment Problem. IEEE Transactions on Automatic Control, 2018, 63, 4435-4441.	5.7	11
54	Trajectory detectability of discrete-event systems. Systems and Control Letters, 2018, 119, 101-107.	2.3	14

#	Article	IF	Citations
55	On the Decidability and Complexity of Diagnosability for Labeled Petri Nets. IEEE Transactions on Automatic Control, 2017, 62, 5931-5938.	5.7	44
56	A new approach for the verification of infinite-step and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si9.gif" display="inline" overflow="scroll"><mml:mi>K</mml:mi></mml:math>-step opacity using two-way observers. Automatica, 2017, 80, 162-171.	5.0	89
57	Initial-state detectability of stochastic discrete-event systems with probabilistic sensor failures. Automatica, 2017, 80, 127-134.	5.0	36
58	Synthesis of Maximally-Permissive Supervisors for the Range Control Problem. IEEE Transactions on Automatic Control, 2017, 62, 3914-3929.	5.7	39
59	Verification complexity of a class of observational properties for modular discrete events systems. Automatica, 2017, 83, 199-205.	5.0	23
60	Supervisor Synthesis for Mealy Automata With Output Functions: A Model Transformation Approach. IEEE Transactions on Automatic Control, 2017, 62, 2576-2581.	5.7	35
61	A Belief-Evolution-Based Approach for Online Control of Fuzzy Discrete-Event Systems Under Partial Observation. IEEE Transactions on Fuzzy Systems, 2017, 25, 1830-1836.	9.8	10
62	Infinite-step opacity of stochastic discrete-event systems. , 2017, , .		6
63	On two-way observer and its application to the verification of infinite-step and K-step opacity. , 2016, , .		4
64	Decentralized fault prognosis of discrete event systems with guaranteed performance bound. Automatica, 2016, 69, 375-379.	5.0	46
65	Reliable Decentralized Fault Prognosis of Discrete-Event Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2016, 46, 1598-1603.	9.3	41
66	A Uniform Approach for Synthesizing Property-Enforcing Supervisors for Partially-Observed Discrete-Event Systems. IEEE Transactions on Automatic Control, 2016, 61, 2140-2154.	5.7	131
67	Decentralized Supervisory Control With Intersection-Based Architecture. IEEE Transactions on Automatic Control, 2016, 61, 3644-3650.	5.7	15
68	Synthesis of Maximally Permissive Supervisors for Partially-Observed Discrete-Event Systems. IEEE Transactions on Automatic Control, 2016, 61, 1239-1254.	5.7	89
69	Minimization of sensor activation in decentralized fault diagnosis of discrete event systems. , 2015, , .		4
70	A general approach for solving dynamic sensor activation problems for a class of properties. , 2015, , .		16
71	Codiagnosability and coobservability under dynamic observations: Transformation and verification. Automatica, 2015, 61, 241-252.	5.0	46
72	Synthesis of maximally permissive non-blocking supervisors for partially observed discrete event systems. , 2014, , .		11