Shouguang Wang

List of Publications by Year
in descending order

		430874	414414
69 papers	1,161 citations	18 h-index	32 g-index
69 all docs	69 docs citations	69 times ranked	518 citing authors

#	Article	IF	Citations
1	A Necessary and Sufficient Condition for a Resource Subset to Generate a Strict Minimal Siphon in S 4PR. IEEE Transactions on Automatic Control, 2017, 62, 4173-4179.	5.7	92
2	A Method to Compute Strict Minimal Siphons in a Class of Petri Nets Based on Loop Resource Subsets. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2012, 42, 226-237.	2.9	80
3	A reduced reachability tree for a class of unbounded petri nets. IEEE/CAA Journal of Automatica Sinica, 2015, 2, 345-352.	13.1	73
4	A Survey of Network Attacks on Cyber-Physical Systems. IEEE Access, 2020, 8, 44219-44227.	4.2	65
5	Controllability Conditions of Resultant Siphons in a Class of Petri Nets. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2012, 42, 1206-1215.	2.9	60
6	A Novel Approach for Constraint Transformation in Petri Nets With Uncontrollable Transitions. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2018, 48, 1403-1410.	9.3	50
7	An improved approach to test diagnosability of bounded petri nets. IEEE/CAA Journal of Automatica Sinica, 2017, 4, 297-303.	13.1	47
8	A Siphon-Based Deadlock Prevention Strategy for S^3PR. IEEE Access, 2019, 7, 86863-86873.	4.2	44
9	A New Modified Reachability Tree Approach and Its Applications to Unbounded Petri Nets. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2013, 43, 932-940.	9.3	42
10	Design of Optimal Monitor-Based Supervisors for a Class of Petri Nets With Uncontrollable Transitions. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2013, 43, 1248-1255.	9.3	40
11	Simultaneous Reduction of Petri Nets and Linear Constraints for Efficient Supervisor Synthesis. IEEE Transactions on Automatic Control, 2015, 60, 88-103.	5.7	40
12	An Approach for Enumerating Minimal Siphons in a Subclass of Petri Nets. IEEE Access, 2018, 6, 4255-4265.	4.2	38
13	Characterization of Admissible Marking Sets in Petri Nets with Uncontrollable Transitions. IEEE Transactions on Automatic Control, 2016, 61, 1953-1958.	5.7	33
14	Synthesis of Monitor-Based Liveness-Enforcing Supervisors for $m{S}^{3}$ PR With ${oldsymbol{xi }}$ -Resources. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2015, 45, 967-975.	9.3	25
15	Design of a Maximally Permissive Liveness€enforcing Supervisor with Reduced Complexity for Automated Manufacturing Systems. Asian Journal of Control, 2015, 17, 190-201.	3.0	24
16	Comments on "Siphon-Based Deadlock Prevention Policy for Flexible Manufacturing Systems. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2011, 41, 338-340.	2.9	21
17	Macro liveness graph and liveness of ϊ‰-independent unbounded nets. Science China Information Sciences, 2015, 58, 1-10.	4.3	21
18	Verification of Fault-predictability in Labeled Petri Nets Using Predictor Graphs. IEEE Transactions on Automatic Control, 2019, 64, 4353-4360.	5.7	20

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19	A Deadlock Prevention Policy for a Class of Multithreaded Software. IEEE Access, 2020, 8, 16676-16688.	4.2	19
20	Computation of strict minimal siphons in a class of Petri nets based on problem decomposition. Information Sciences, 2017, 409-410, 87-100.	6.9	18
21	Computation of an emptiable minimal siphon in a subclass of Petri nets using mixed-integer programming. IEEE/CAA Journal of Automatica Sinica, 2021, 8, 219-226.	13.1	17
22	Supervisory Control of Petri Nets in the Presence of Replacement Attacks. IEEE Transactions on Automatic Control, 2022, 67, 1466-1473.	5.7	16
23	Deadlock prevention policy for a class of petri nets based on complementary places and elementary siphons. Journal of Intelligent Manufacturing, 2015, 26, 321-330.	7.3	15
24	Fault Diagnosis in Partially Observed Petri Nets Using Redundancies. IEEE Access, 2018, 6, 7541-7556.	4.2	15
25	Optimal supervisor synthesis for petri nets with uncontrollable transitions: A bottom-up algorithm. Information Sciences, 2016, 363, 261-273.	6.9	14
26	Fault Diagnosis for Discrete Event Systems Modeled By Bounded Petri Nets. Asian Journal of Control, 2017, 19, 1532-1541.	3.0	13
27	K-Codiagnosability Verification of Labeled Petri Nets. IEEE Access, 2019, 7, 185055-185062.	4.2	13
28	Supervisory control of a class of Petri nets with unobservable and uncontrollable transitions. Information Sciences, 2019, 501, 635-654.	6.9	13
29	A Liveness-Enforcing Supervisor Tolerant to Sensor-Reading Modification Attacks. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 2398-2411.	9.3	13
30	SVM-BiLSTM: A Fault Detection Method for the Gas Station IoT System Based on Deep Learning. IEEE Access, 2020, 8, 203712-203723.	4.2	12
31	Design of Liveness-Enforcing Supervisors for S3PR Based on Complementary Places. Transactions on Embedded Computing Systems, 2013, 12, 1-18.	2.9	11
32	Deadlock Prevention Policy for S^4PR Nets Based on Siphon. IEEE Access, 2018, 6, 50648-50658.	4.2	11
33	Deadlock and liveness characterization for a class of generalized Petri nets. Information Sciences, 2017, 420, 403-416.	6.9	10
34	An Improved Mixed-Integer Programming Method to Compute Emptiable Minimal Siphons in S^3PR Nets. IEEE Transactions on Control Systems Technology, 2018, 26, 2135-2140.	5.2	10
35	Event Feedback Supervision for a Class of Petri Nets With Unobservable Transitions. IEEE Access, 2018, 6, 6920-6926.	4.2	10
36	An algorithm to find the minimal initial markings of resource places ensuring liveness of finite-capacity S3PR. International Journal of Production Research, 2012, 50, 1528-1538.	7.5	9

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37	New reachability trees for unbounded Petri nets. , 2015, , .		9
38	Computation of an Optimal Transformed Linear Constraint in a Class of Petri Nets With Uncontrollable Transitions. IEEE Access, 2017, 5, 6780-6790.	4.2	9
39	Overview of Opacity in Discrete Event Systems. IEEE Access, 2020, 8, 48731-48741.	4.2	9
40	New Controllability Condition for Siphons in Ws^{3}PR Nets. Asian Journal of Control, 2015, 17, 908-916.	3.0	8
41	An MIP-Based Deadlock Prevention Policy for Siphon Control. IEEE Access, 2019, 7, 153782-153790.	4.2	8
42	A transformation algorithm for optimal admissible generalized mutual exclusion constraints on Petri nets with uncontrollable transitions. , 2011, , .		7
43	New reachability trees for analyzing unbounded Petri nets with semilinear reachability sets. Science China Information Sciences, 2018, 61, 1.	4.3	7
44	A Refined Siphon-Based Deadlock Prevention Policy for a Class of Petri Nets. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2023, 53, 191-203.	9.3	6
45	A method of computing strict minimal siphons in an S^{3}PR based on resource circuits. , 2010, , .		5
46	Comments on "Liveness of an extended <mml:math altimg="si5.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="ht. Automatica, 2014, 50, 219	5.0	5
47	A Resource Allocation Approach for Enforcing Liveness on a Class of Petri Nets. IEEE Access, 2018, 6, 48577-48587.	4.2	5
48	Maximal Good Step Graph Methods for Reducing the Generation of the State Space. IEEE Access, 2019, 7, 155805-155817.	4.2	5
49	Complete enumeration of minimal siphons in ordinary Petri nets based on problem partitioning. , 2015, , .		4
50	Repair Process Models Containing Non-Free-Choice Structures Based on Logic Petri Nets. IEEE Access, 2019, 7, 105132-105145.	4.2	4
51	Extracting all minimal siphons from maximal unmarked siphons in manufacturing-oriented Petri nets. , 2011, , .		3
52	Computation of Minimal Siphons in Petri Nets Using Problem Partitioning Approaches. IEEE/CAA Journal of Automatica Sinica, 2022, 9, 329-338.	13.1	3
53	An Algorithm of Recognizing Unbounded Petri Nets With Semilinear Reachability Sets and Constructing Their Reachability Trees. IEEE Access, 2018, 6, 43732-43742.	4.2	2
54	Necessary and sufficient conditions for resultant siphons to be controlled. , 2011, , .		1

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55	A new reachability tree for unbounded Petri nets. , 2013, , .		1
56	Controllability of complex siphons for deadlock prevention in Systems of Simple Sequential Processes with Resources. , 2015, , .		1
57	A new linear constraint transformation approach for Petri nets with uncontrollable transitions. , 2016, , .		1
58	A resource configuration method for liveness of a class of Petri nets. IMA Journal of Mathematical Control and Information, 2016, 33, 933-950.	1.7	1
59	Comments on â€œSimultaneous Reduction of Petri Nets and Linear Constraints for Efficient Supervisor Synthesisâ€. IEEE Transactions on Automatic Control, 2017, 62, 2603-2606.	5.7	1
60	Liveness Enforcement for a Class of Petri Nets via Resource Allocation. , 2018, , .		1
61	An iterative Deadlock Prevention Policy Based on siphons. , 2019, , .		1
62	Low Power Nodes Revocation Scheme in Sensor Networks. , 2009, , .		0
63	An algorithm to find the condition on initial markings of resource places and job places for liveness of S3PMR. , 2010, , .		0
64	On Computation of Resource Circuits in a Class of Petri Nets. , 2011, , .		0
65	Optimal siphon-based deadlock prevention policy for a class of Petri nets in automation. , 2011, , .		0
66	New controllability condition for WS3PR nets. , 2013, , .		0
67	A method to check liveness of WS3PR. , 2014, , .		0
68	Monitor-based liveness-enforcing petri net supervisors for flexible manufacturing systems. , 2014, , .		0
69	A three-stage deadlock prevention strategy for S<sup>3</sup>PR nets. , 2015, , .		0