

# Shouguang Wang

## List of Publications by Year in descending order

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69  
papers

1,161  
citations

430442

18  
h-index

414034

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 <sub>4PR</sub> . IEEE Transactions on Automatic Control, 2017, 62, 4173-4179.	3.6	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.	3.4	80
3	A reduced reachability tree for a class of unbounded petri nets. IEEE/CAA Journal of Automatica Sinica, 2015, 2, 345-352.	8.5	73
4	A Survey of Network Attacks on Cyber-Physical Systems. IEEE Access, 2020, 8, 44219-44227.	2.6	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.	3.4	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.	5.9	50
7	An improved approach to test diagnosability of bounded petri nets. IEEE/CAA Journal of Automatica Sinica, 2017, 4, 297-303.	8.5	47
8	A Siphon-Based Deadlock Prevention Strategy for S <sup>3</sup> PR. IEEE Access, 2019, 7, 86863-86873.	2.6	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.	5.9	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.	5.9	40
11	Simultaneous Reduction of Petri Nets and Linear Constraints for Efficient Supervisor Synthesis. IEEE Transactions on Automatic Control, 2015, 60, 88-103.	3.6	40
12	An Approach for Enumerating Minimal Siphons in a Subclass of Petri Nets. IEEE Access, 2018, 6, 4255-4265.	2.6	38
13	Characterization of Admissible Marking Sets in Petri Nets with Uncontrollable Transitions. IEEE Transactions on Automatic Control, 2016, 61, 1953-1958.	3.6	33
14	Synthesis of Monitor-Based Liveness-Enforcing Supervisors for $m\{S\}^3$ PR With $\xi$ -Resources. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2015, 45, 967-975.	5.9	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.	1.9	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.	3.4	21
17	Macro liveness graph and liveness of $\tau$ -independent unbounded nets. Science China Information Sciences, 2015, 58, 1-10.	2.7	21
18	Verification of Fault-predictability in Labeled Petri Nets Using Predictor Graphs. IEEE Transactions on Automatic Control, 2019, 64, 4353-4360.	3.6	20

#	ARTICLE	IF	CITATIONS
19	A Deadlock Prevention Policy for a Class of Multithreaded Software. IEEE Access, 2020, 8, 16676-16688.	2.6	19
20	Computation of strict minimal siphons in a class of Petri nets based on problem decomposition. Information Sciences, 2017, 409-410, 87-100.	4.0	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.	8.5	17
22	Supervisory Control of Petri Nets in the Presence of Replacement Attacks. IEEE Transactions on Automatic Control, 2022, 67, 1466-1473.	3.6	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.	4.4	15
24	Fault Diagnosis in Partially Observed Petri Nets Using Redundancies. IEEE Access, 2018, 6, 7541-7556.	2.6	15
25	Optimal supervisor synthesis for petri nets with uncontrollable transitions: A bottom-up algorithm. Information Sciences, 2016, 363, 261-273.	4.0	14
26	Fault Diagnosis for Discrete Event Systems Modeled By Bounded Petri Nets. Asian Journal of Control, 2017, 19, 1532-1541.	1.9	13
27	K-Codiagnosability Verification of Labeled Petri Nets. IEEE Access, 2019, 7, 185055-185062.	2.6	13
28	Supervisory control of a class of Petri nets with unobservable and uncontrollable transitions. Information Sciences, 2019, 501, 635-654.	4.0	13
29	A Liveness-Enforcing Supervisor Tolerant to Sensor-Reading Modification Attacks. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 2398-2411.	5.9	13
30	SVM-BiLSTM: A Fault Detection Method for the Gas Station IoT System Based on Deep Learning. IEEE Access, 2020, 8, 203712-203723.	2.6	12
31	Design of Liveness-Enforcing Supervisors for S3PR Based on Complementary Places. Transactions on Embedded Computing Systems, 2013, 12, 1-18.	2.1	11
32	Deadlock Prevention Policy for S <sup>4</sup> PR Nets Based on Siphon. IEEE Access, 2018, 6, 50648-50658.	2.6	11
33	Deadlock and liveness characterization for a class of generalized Petri nets. Information Sciences, 2017, 420, 403-416.	4.0	10
34	An Improved Mixed-Integer Programming Method to Compute Emptiable Minimal Siphons in S <sup>3</sup> PR Nets. IEEE Transactions on Control Systems Technology, 2018, 26, 2135-2140.	3.2	10
35	Event Feedback Supervision for a Class of Petri Nets With Unobservable Transitions. IEEE Access, 2018, 6, 6920-6926.	2.6	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.	4.9	9



#	ARTICLE	IF	CITATIONS
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.	1.1	1
59	Comments on "Simultaneous Reduction of Petri Nets and Linear Constraints for Efficient Supervisor Synthesis": IEEE Transactions on Automatic Control, 2017, 62, 2603-2606.	3.6	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&lt;sup>3&lt;/sup>PR nets. , 2015, , .		0