Ping Zhang

List of Publications by Year
in descending order

78 papers	2,958 citations	304743 22 h-index	302126 39 g-index
78 all docs	78 docs citations	78 times ranked	1894 citing authors

#	Article	IF	Citations
1	State Estimation in Discrete Event Systems Modeled by Signal Interpreted Petri Nets. , 2022, 6, 2078-2083.		0
2	Detection of Cyber Attacks in Encrypted Control Systems. , 2022, 6, 2365-2370.		6
3	An Approach to Design Distributed Logic Controllers for Large-Scale Manufacturing Systems. , 2021, , .		0
4	Resilience and Detection of Cyber-Physical Systems to Covert Attacks by exploiting Frequency Hopping Spread Spectrum. , 2021, , .		1
5	Specification governor for fault tolerant control of large-scale manufacturing systems. European Journal of Control, 2021, 62, 198-205.	2.6	1
6	Stealthy Targeted Local Covert Attacks on Cyber-Physical Systems. , 2021, , .		1
7	Resilient Homomorphic Encryption Scheme for Cyber-Physical Systems. , 2021, , .		6
8	Reduced-Order Observer Design for Boolean Control Networks. IEEE Transactions on Automatic Control, 2020, 65, 434-441.	5.7	27
9	Reconstructibility Analysis and Observer Design for Boolean Control Networks. IEEE Transactions on Control of Network Systems, 2020, 7, 516-528.	3.7	19
10	Stealthy Local Covert Attacks on Cyber-Physical Systems. , 2020, , .		3
11	Tracking Controller Design for Petri Nets with Inputs and Outputs. , 2020, , .		2
12	Resilience of Cyber-Physical Systems to Covert Attacks by Exploiting an Improved Encryption Scheme. , 2020, , .		7
13	A Monte-Carlo Tree Search based Tracking Control Approach for Timed Petri Nets. IFAC-PapersOnLine, 2020, 53, 2095-2100.	0.9	2
14	Optimal Scheduling of Preventive Maintenance for Safety Instrumented Systems Based on Mixed-Integer Programming. Lecture Notes in Computer Science, 2020, , 83-96.	1.3	1
15	Overview and comparison of approaches towards an algebraic description of discrete event systems. Annual Reviews in Control, 2019, 48, 80-88.	7.9	3
16	Modeling of Cyber Attacks and a Time Guard Detection for ICS based on Discrete Event Systems. , 2019, , .		8
17	Observer and reference governor based control strategy to suppress stick-slip vibrations in oil well drill-string. Journal of Sound and Vibration, 2019, 457, 37-50.	3.9	24
18	Controller encryption for discrete event systems. , 2019, , .		6

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19	An improved algorithm for stabilization of Boolean networks via pinning control. , 2019, , .		0
20	Completely stealthy attacks on cyber-physical system with parity space based monitoring. , 2019, , .		6
21	Tracking Control for Petri Nets based on Monte-Carlo Tree Search. , 2019, , .		3
22	Curve form based quantization of short time series data. , 2019, , .		1
23	Fault Tolerant Control for Hexacopter with Reducing Yaw Rate. , 2019, , .		2
24	Fault-tolerant tracking control of petri nets. Automatisierungstechnik, 2018, 66, 30-40.	0.8	8
25	Tracking control for Petri nets with forbidden states. , 2018, , .		3
26	Modeling and detection of cyber attacks on discrete event systems. IFAC-PapersOnLine, 2018, 51, 285-290.	0.9	42
27	Overview of fault-tolerant control methods for discrete event systems. IFAC-PapersOnLine, 2018, 51, 88-95.	0.9	22
28	Secure estimation and attack detection in cyber-physical systems with switching attack. , 2018, , .		0
29	Active Fault Detection of Boolean Control Networks. , 2018, , .		6
30	Identification of Boolean Network Models From Time Series Data Incorporating Prior Knowledge. Frontiers in Physiology, 2018, 9, 695.	2.8	12
31	Finite Horizon Tracking Control of Boolean Control Networks. IEEE Transactions on Automatic Control, 2018, 63, 1798-1805.	5.7	42
32	Data-Driven Controller Design for Boolean Control Networks. , 2018, , .		0
33	Distributed observer design for large-scale Boolean control networks. , 2017, , .		3
34	Scenario based MPC for decentralized switched systems with Plug and Play capabilities. , 2017, , .		0
35	Optimization of Maintenance Schedule for Safety Instrumented Systems. IFAC-PapersOnLine, 2017, 50, 12484-12489.	0.9	1
36	Unknown input decoupling and estimation in observer design for Boolean control networks * *This work is supported by the Federal State of Rhineland- Palatinate, Germany in the framework of the project Complex Data Analysis in Life Sciences and Biotechnology (BioComp)".. IFAC-PapersOnLine, 2017, 50, 2917-2922.	0.9	6

#	Article	IF	Citations
37	Detection of covert attacks on cyber-physical systems by extending the system dynamics with an auxiliary system. , 2017, , .		43
38	A novel and fast MPC based control strategy for switched linear systems including soft switching cost. , 2017, , .		1
39	Identification of boolean control networks incorporating prior knowledge. , 2017, , .		6
40	Decentralized scenario-based plug and play MPC for linear systems with multiplicative uncertainties. Journal of Physics: Conference Series, 2017, 783, 012023.	0.4	1
41	Fault detection for probabilistic boolean networks. , 2016, , .		12
42	Finite horizon tracking control of Boolean control networks. , 2016, , .		4
43	Observer design for Boolean control networks. , 2016, , .		15
44	Detection of covert attacks and zero dynamics attacks in cyber-physical systems. , 2016, , .		72
45	Detection of replay attacks in cyber-physical systems. , 2016, , .		58
46	Ein neuer Ansatz zur VerfÃ¼gbarkeitsanalyse von Sicherheitseinrichtungen. Automatisierungstechnik, 2016, 64, 457-466.	0.8	0
47	Properties of certain optimal ratio-type fault detection performance indices with respect to sampling period. IFAC-PapersOnLine, 2015, 48, 919-924.	0.9	0
48	An Integrated Design Framework of Fault-Tolerant Wireless Networked Control Systems for Industrial Automatic Control Applications. IEEE Transactions on Industrial Informatics, 2013, 9, 462-471.	11.3	127
49	A Lifting Based Approach to Observer Based Fault Detection of Linear Periodic Systems. IEEE Transactions on Automatic Control, 2012, 57, 457-462.	5.7	33
50	A comparison study of basic data-driven fault diagnosis and process monitoring methods on the benchmark Tennessee Eastman process. Journal of Process Control, 2012, 22, 1567-1581.	3.3	1,110
51	Study on modifications of PLS approach for process monitoring. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 12389-12394.	0.4	63
52	Recursive identification algorithms to design fault detection systems. Journal of Process Control, 2010, 20, 957-965.	3.3	47
53	On the application of PCA technique to fault diagnosis. Tsinghua Science and Technology, 2010, 15, 138-144.	6.1	125
54	Fault detection of networked control systems with packet based periodic communication. International Journal of Adaptive Control and Signal Processing, 2009, 23, 682-698.	4.1	35

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55	Subspace method aided data-driven design of fault detection and isolation systems. Journal of Process Control, 2009, 19, 1496-1510.	3.3	276
56	Fault detection of networked control systems with limited communication. International Journal of Control, 2009, 82, 1344-1356.	1.9	28
57	Influence of Sampling Period on a Class of Optimal Fault-Detection Performance. IEEE Transactions on Automatic Control, 2009, 54, 1396-1402.	5.7	14
58	An integrated trade-off design of observer based fault detection systems. Automatica, 2008, 44, 1886-1894.	5.0	68
59	An embedded fault detection, isolation and accommodation system in a model predictive controller for an industrial benchmark process. Computers and Chemical Engineering, 2008, 32, 2966-2985.	3.8	28
60	Networked Fault Detection Systems with Noisy Data Transmission (Vernetzte Fehlerdetektionssysteme) Tj ETQq0 0 0 rgBT /Overlock 10	0.8	0
61	On monotonicity of a class of optimal fault detection performance versus sampling period. , 2007, , .		1
62	A Generic Strategy for Fault-Tolerance in Control Systems Distributed Over a Network. European Journal of Control, 2007, 13, 280-296.	2.6	119
63	Disturbance decoupling in fault detection of linear periodic systems. Automatica, 2007, 43, 1410-1417.	5.0	56
64	Parity relation based fault estimation for nonlinear systems: An LMI approach. International Journal of Automation and Computing, 2007, 4, 164-168.	4.5	36
65	Fault Detection of Networked Control Systems With Limited Communication. , 2007, , 1074-1079.		6
66	PARITY RELATION BASED FAULT ESTIMATION FOR NONLINEAR SYSTEMS: AN LMI APPROACH 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 366-371.	0.4	4
67	FAULT DETECTION OF DESCRIPTOR SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 378-383.	0.4	0
68	FAULT DETECTION OF NETWORKED CONTROL SYSTEMS WITH LIMITED COMMUNICATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 1074-1079.	0.4	16
69	On the relationship between parity space and approaches to fault detection. Systems and Control Letters, 2006, 55, 94-100.	2.3	38
70	Parity based fault estimation for nonlinear systems: an LMI approach. , 2006, , .		1
71	Fault detection of linear discrete-time periodic systems. IEEE Transactions on Automatic Control, 2005, 50, 239-244.	5.7	110
72	BeobachtergestÃ¼tzte Ãœberwachung vernetzter regelungstechnischer Systeme (Observer Schemes for) Tj ETQq0 0 0 rgBT /Overlock	0.8	7

#	Article	IF	Citations
73	BeobachtergestÃ¼tzte Detektion von Fehlern in linearen zeitvarianten Systemen (Observer-based Fault) Tj ETQq1 1 0.784314 rgBT /Ov	0.8	6
74	Prozessidentifikations-basierter Entwurf beobachtergestÃ¼tzter Fehlerdetektionssysteme (System) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 2004, 52, 388-396.	0.8	3
75	A frequency domain approach to fault detection in sampled-data systems. Automatica, 2003, 39, 1303-1307.	5.0	42
76	Fault detection for multirate sampled-data systems with time delays. International Journal of Control, 2002, 75, 1457-1471.	1.9	59
77	A time-frequency domain fault detection approach based on parity relation and wavelet transform. , 0, , .		3
78	An LMI approach to robust fault detection filter design for discrete-time systems with model uncertainty. , 0, , .		11