Ke-Yi Xing

List of Publications by Year
in descending order

70 papers	2,179 citations	201385 27 h-index	233125 45 g-index
70 all docs	70 docs citations	70 times ranked	777 citing authors

#	Article	IF	Citations
1	Deadlock avoidance policy for Petri-net modeling of flexible manufacturing systems with shared resources. IEEE Transactions on Automatic Control, 1996, 41, 289-295.	3.6	239
2	Optimal Petri-Net-Based Polynomial-Complexity Deadlock-Avoidance Policies for Automated Manufacturing Systems. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2009, 39, 188-199.	3.4	169
3	Resource-Transition Circuits and Siphons for Deadlock Control of Automated Manufacturing Systems. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2011, 41, 74-84.	3.4	121
4	Deadlock-Free Genetic Scheduling Algorithm for Automated Manufacturing Systems Based on Deadlock Control Policy. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 603-615.	5.5	118
5	Discrete differential evolution algorithm for distributed blocking flowshop scheduling with makespan criterion. Engineering Applications of Artificial Intelligence, 2018, 76, 96-107.	4.3	97
6	Transition Cover-Based Design of Petri Net Controllers for Automated Manufacturing Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2014, 44, 196-208.	5.9	63
7	Deadlock-Free Scheduling of Automated Manufacturing Systems Using Petri Nets and Hybrid Heuristic Search. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2015, 45, 530-541.	5.9	61
8	Differential evolution metaheuristics for distributed limited-buffer flowshop scheduling with makespan criterion. Computers and Operations Research, 2019, 108, 33-43.	2.4	59
9	Minimizing the total completion time in a distributed two stage assembly system with setup times. Computers and Operations Research, 2014, 47, 92-105.	2.4	56
10	A robust deadlock prevention control for automated manufacturing systems with unreliable resources. Information Sciences, 2016, 345, 243-256.	4.0	52
11	Transition Cover-Based Robust Petri Net Controllers for Automated Manufacturing Systems With a Type of Unreliable Resources. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 3019-3029.	5.9	51
12	Meta-heuristics for the distributed two-stage assembly scheduling problem with bi-criteria of makespan and mean completion time. International Journal of Production Research, 2014, 52, 2743-2766.	4.9	50
13	Scheduling distributed flowshops with flexible assembly and set-up time to minimise makespan. International Journal of Production Research, 2018, 56, 3226-3244.	4.9	49
14	Deadlock-free scheduling for flexible manufacturing systems using Petri nets and heuristic search. Computers and Industrial Engineering, 2014, 72, 297-305.	3.4	48
15	Deadlock Prevention for Flexible Manufacturing Systems via Controllable Siphon Basis of Petri Nets. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2015, 45, 519-529.	5.9	47
16	Memetic social spider optimization algorithm for scheduling two-stage assembly flowshop in a distributed environment. Computers and Industrial Engineering, 2018, 125, 423-433.	3.4	46
17	Total energy consumption optimization via genetic algorithm in flexible manufacturing systems. Computers and Industrial Engineering, 2017, 104, 188-200.	3.4	43
18	Robust supervisory control policy for avoiding deadlock in automated manufacturing systems with unreliable resources. International Journal of Production Research, 2014, 52, 1573-1591.	4.9	42

#	Article	IF	Citations
19	Robust deadlock control for automated manufacturing systems with an unreliable resource. Information Sciences, 2016, 346-347, 17-28.	4.0	38
20	Robust deadlock avoidance policy for automated manufacturing system with multiple unreliable resources. IEEE/CAA Journal of Automatica Sinica, 2020, 7, 812-821.	8.5	33
21	Deadlock characterization and control of flexible assembly systems with Petri nets. Automatica, 2018, 87, 358-364.	3.0	32
22	Robust supervision using shared-buffers in automated manufacturing systems with unreliable resources. Computers and Industrial Engineering, 2015, 83, 139-150.	3.4	31
23	Deadlock-free genetic scheduling for flexible manufacturing systems using Petri nets and deadlock controllers. International Journal of Production Research, 2014, 52, 1557-1572.	4.9	30
24	Scheduling a hybrid assembly-differentiation flowshop to minimize total flow time. European Journal of Operational Research, 2015, 240, 338-354.	3.5	29
25	Petri-net-based robust supervisory control of automated manufacturing systems. Control Engineering Practice, 2016, 54, 176-189.	3.2	29
26	A Petri net-based particle swarm optimization approach for scheduling deadlock-prone flexible manufacturing systems. Journal of Intelligent Manufacturing, 2018, 29, 1083-1096.	4.4	29
27	Robust supervisory control for avoiding deadlocks in automated manufacturing systems with one specified unreliable resource. Transactions of the Institute of Measurement and Control, 2014, 36, 435-444.	1.1	27
28	Resource failure and buffer space allocation control for automated manufacturing systems. Information Sciences, 2018, 450, 392-408.	4.0	26
29	Modified Dynamic Programming Algorithm for Optimization of Total Energy Consumption in Flexible Manufacturing Systems. IEEE Transactions on Automation Science and Engineering, 2019, 16, 691-705.	3.4	26
30	Robust deadlock control of automated manufacturing systems with multiple unreliable resources. Information Sciences, 2019, 479, 401-415.	4.0	26
31	Deadlock-Free Scheduling of Flexible Assembly Systems Based on Petri Nets and Local Search. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 3658-3669.	5.9	25
32	Robust Deadlock Prevention for Automated Manufacturing Systems With Unreliable Resources by Using General Petri Nets. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 3515-3527.	5.9	24
33	Robust supervisory control policy for automated manufacturing systems with a single unreliable resource. Transactions of the Institute of Measurement and Control, 2017, 39, 793-806.	1.1	23
34	Liveness Analysis and Deadlock Control for Automated Manufacturing Systems With Multiple Resource Requirements. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 525-538.	5.9	23
35	Memetic Algorithm With Meta-Lamarckian Learning and Simplex Search for Distributed Flexible Assembly Permutation Flowshop Scheduling Problem. IEEE Access, 2020, 8, 96115-96128.	2.6	21
36	Hybrid heuristic search approach for deadlock-free scheduling of flexible manufacturing systems using Petri nets. Applied Soft Computing Journal, 2017, 55, 413-423.	4.1	19

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37	An estimation of distribution algorithm for scheduling problem of flexible manufacturing systems using Petri nets. Applied Mathematical Modelling, 2018, 55, 776-788.	2.2	19
38	Two-stage design method of robust deadlock control for automated manufacturing systems with a type of unreliable resources. Information Sciences, 2019, 484, 286-301.	4.0	19
39	Distributed Co-Evolutionary Memetic Algorithm for Distributed Hybrid Differentiation Flowshop Scheduling Problem. IEEE Transactions on Evolutionary Computation, 2022, 26, 1043-1057.	7.5	18
40	Hybrid branch and bound algorithms for the two-stage assembly scheduling problem with separated setup times. International Journal of Production Research, 2019, 57, 1398-1412.	4.9	17
41	Joint state and parameter estimation in particle filtering and stochastic optimization. Journal of Control Theory and Applications, 2008, 6, 215-220.	0.8	16
42	Elite Archive-Assisted Adaptive Memetic Algorithm for a Realistic Hybrid Differentiation Flowshop Scheduling Problem. IEEE Transactions on Evolutionary Computation, 2022, 26, 100-114.	7.5	16
43	Supervisory Control of Deadlock-Prone Production Systems With Routing Flexibility and Unreliable Resources. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 3528-3540.	5.9	15
44	$\varvec{p}$ p th Moment Exponential Stability of Hybrid Delayed Reaction–Diffusion Cohen–Grossberg Neural Networks. Neural Processing Letters, 2017, 46, 83-111.	2.0	11
45	Structural Liveness Analysis of Automated Manufacturing Systems Modeled by S^4PRs. IEEE Transactions on Automation Science and Engineering, 2019, 16, 1952-1959.	3.4	11
46	Robust deadlock control for automated manufacturing systems with a single type of unreliable resources. Advances in Mechanical Engineering, 2018, 10, 1687814018877241.	0.8	9
47	Deadlock and blockage control for manufacturing systems with failure-prone workstations. IET Control Theory and Applications, 2016, 10, 939-946.	1.2	8
48	Efficient optimal deadlock control of flexible manufacturing systems. IET Control Theory and Applications, 2016, 10, 1181-1186.	1.2	8
49	A Novel MOEA/D for Multiobjective Scheduling of Flexible Manufacturing Systems. Complexity, 2019, 2019, 1-14.	0.9	8
50	Scheduling of Flexible Manufacturing Systems Subject to No-Wait Constraints via Petri Nets and Heuristic Search. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 6122-6133.	5.9	8
51	Deadlock Prevention Controller for Automated Manufacturing Systems Modeled by S^4PR. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 7403-7412.	5.9	8
52	Hybrid particle swarm optimization algorithm for scheduling flexible assembly systems with blocking and deadlock constraints. Engineering Applications of Artificial Intelligence, 2021, 105, 104411.	4.3	8
53	A hybrid discrete differential evolution algorithm for deadlock-free scheduling with setup times of flexible manufacturing systems. Transactions of the Institute of Measurement and Control, 2016, 38, 1270-1280.	1.1	7
54	Deadlock and Blockage Control of Automated Manufacturing Systems with an Unreliable Resource. Asian Journal of Control, 2020, 22, 334-345.	1.9	7

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55	Iterative Widen Heuristic Beam Search Algorithm for Scheduling Problem of Flexible Assembly Systems. IEEE Transactions on Industrial Informatics, 2021, 17, 7348-7358.	7.2	7
56	Combined Parameter and State Estimation in Particle Filtering. , 2007, , .		6
57	Optimal deadlock avoidance Petri net supervisors for automated manufacturing systems. Journal of Control Theory and Applications, 2007, 5, 152-158.	0.8	6
58	Comment on "On Siphon Computation for Deadlock Control in a Class of Petri Nets. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2009, 39, 1348-1350.	3.4	6
59	Parameter estimation of piecewise Hammerstein systems. Transactions of the Institute of Measurement and Control, 2014, 36, 1024-1032.	1.1	6
60	Enumeration Algorithms for Maximal Perfect-resource-transition Circuits and Strict Minimal Siphons in S3PR. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 14490-14495.	0.4	5
61	A Hybrid Estimation-of-Distribution Algorithm for Scheduling Flexible Job Shop With Limited Buffers Based on Petri Nets. IEEE Access, 2020, 8, 165396-165408.	2.6	5
62	A Polynomial Algorithm for Computing Elementary Siphons in a Class of <scp>P</scp>etri Nets. Asian Journal of Control, 2012, 14, 1141-1149.	1.9	4
63	Adaptive synchronization of delayed reaction-diffusion FCNNs via learning control approach. Journal of Intelligent and Fuzzy Systems, 2015, 28, 141-150.	0.8	4
64	Enforcing the Liveness of S^4PR by Using the Approach of Allocating Resources. IEEE Access, 2019, 7, 185811-185820.	2.6	4
65	Polynomial-complexity robust deadlock controllers for a class of automated manufacturing systems with unreliable resources using Petri nets. Information Sciences, 2020, 533, 181-199.	4.0	4
66	Event-triggered synchronization of uncertain delayed generalized RDNNs. Soft Computing, 2021, 25, 13243-13261.	2.1	4
67	Two-stage deadlock prevention policy based on resource-transition circuits. , 2012, , .		2
68	Optimal Polynomial Complexity Deadlock Avoidance Policies for Manufacturing Systems with Flexible Routings. , 2006, , .		1
69	Adaptive Iterative Learning Control in Optimization of Industrial Process. , 2007, , .		0
70	Performance bounds analysis for hybrid estimation. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2007, 221, 733-740.	0.7	0