

Spiridon Reveliotis

List of Publications by Year in descending order

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81
papers

954
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471061

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525886

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82
all docs

82
docs citations

82
times ranked

284
citing authors

#	ARTICLE	IF	CITATIONS
1	Deadlock Avoidance for Sequential Resource Allocation Systems: Hard and Easy Cases. Flexible Services and Manufacturing Journal, 2001, 13, 385-404.	0.4	80
2	Designing Compact and Maximally Permissive Deadlock Avoidance Policies for Complex Resource Allocation Systems Through Classification Theory: The Linear Case. IEEE Transactions on Automatic Control, 2011, 56, 1818-1833.	3.6	79
3	Title is missing!. Flexible Services and Manufacturing Journal, 1998, 10, 73-100.	0.4	73
4	Conflict resolution in AGV systems. IIE Transactions, 2000, 32, 647-659.	2.1	67
5	Designing Compact and Maximally Permissive Deadlock Avoidance Policies for Complex Resource Allocation Systems Through Classification Theory: The Nonlinear Case. IEEE Transactions on Automatic Control, 2012, 57, 1670-1684.	3.6	37
6	Concurrency bugs in multithreaded software: modeling and analysis using Petri nets. Discrete Event Dynamic Systems: Theory and Applications, 2013, 23, 157-195.	0.6	33
7	Designing Optimal Deadlock Avoidance Policies for Sequential Resource Allocation Systems Through Classification Theory: Existence Results and Customized Algorithms. IEEE Transactions on Automatic Control, 2013, 58, 2772-2787.	3.6	32
8	A distributed protocol for motion coordination in free-range vehicular systems. Automatica, 2013, 49, 1639-1653.	3.0	31
9	Flexible manufacturing system structural control and the Neighborhood Policy, part 1. Correctness and scalability. IIE Transactions, 1997, 29, 877-887.	2.1	30
10	Eliminating Concurrency Bugs in Multithreaded Software: A New Approach Based on Discrete-Event Control. IEEE Transactions on Control Systems Technology, 2013, 21, 2067-2082.	3.2	29
11	A Practical Approach for Maximally Permissive Liveness-Enforcing Supervision of Complex Resource Allocation Systems. IEEE Transactions on Automation Science and Engineering, 2011, 8, 766-779.	3.4	26
12	Optimal Liveness-Enforcing Control for a Class of Petri Nets Arising in Multithreaded Software. IEEE Transactions on Automatic Control, 2013, 58, 1123-1138.	3.6	22
13	Optimized Multiagent Routing for a Class of Guidepath-Based Transport Systems. IEEE Transactions on Automation Science and Engineering, 2019, 16, 363-381.	3.4	22
14	Gadara nets: Modeling and analyzing lock allocation for deadlock avoidance in multithreaded software. , 2009, , .		21
15	Logical Control of Complex Resource Allocation Systems. Foundations and Trends in Systems and Control, 2017, 4, 1-223.	3.8	21
16	High-fidelity rapid prototyping of 300 mm fabs through discrete event system modeling. Computers in Industry, 2001, 45, 79-98.	5.7	19
17	A BDD-Based Approach for Designing Maximally Permissive Deadlock Avoidance Policies for Complex Resource Allocation Systems. IEEE Transactions on Automation Science and Engineering, 2015, 12, 990-1006.	3.4	19
18	Performance optimization for a class of generalized stochastic Petri nets. Discrete Event Dynamic Systems: Theory and Applications, 2015, 25, 387-417.	0.6	17

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19	Robust Deadlock Avoidance for Sequential Resource Allocation Systems With Resource Outages. IEEE Transactions on Automation Science and Engineering, 2017, 14, 1695-1711.	3.4	17
20	Coordinating Autonomy: Sequential Resource Allocation Systems for Automation. IEEE Robotics and Automation Magazine, 2015, 22, 77-94.	2.2	16
21	Efficient Enumeration of Minimal Unsafe States in Complex Resource Allocation Systems. IEEE Transactions on Automation Science and Engineering, 2014, 11, 111-124.	3.4	13
22	Maximally permissive deadlock avoidance for resource allocation systems with R/W-locks. Discrete Event Dynamic Systems: Theory and Applications, 2015, 25, 31-63.	0.6	13
23	Title is missing!. IIE Transactions, 1997, 29, 877-887.	2.1	11
24	Deadlock Avoidance Policies for Automated Manufacturing Systems Using Finite State Automata. Industrial Information Technology Series, 2014, , 169-195.	0.2	11
25	Flexible manufacturing system structural control and the Neighborhood Policy, part 2. Generalization, optimization, and efficiency. IIE Transactions, 1997, 29, 889-899.	2.1	10
26	Optimal Linear Separation of the Safe and Unsafe Subspaces of Sequential Resource Allocation Systems as a Set-Covering Problem: Algorithmic Procedures and Geometric Insights. SIAM Journal on Control and Optimization, 2013, 51, 1707-1726.	1.1	10
27	An MPC Scheme for Traffic Coordination in Open and Irreversible, Zone-Controlled, Guidepath-Based Transport Systems. IEEE Transactions on Automation Science and Engineering, 2020, 17, 1528-1542.	3.4	10
28	Conflict resolution in multi-vehicle systems: A resource allocation paradigm. , 2008, , .		9
29	A practical approach to the design of maximally permissive liveness-enforcing supervisors for complex resource allocation systems. , 2010, , .		9
30	Real-time management of complex resource allocation systems: Necessity, achievements and further challenges. Annual Reviews in Control, 2016, 41, 147-158.	4.4	9
31	Efficient Liveness Assessment for Traffic States in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems. IEEE Transactions on Automatic Control, 2020, 65, 2883-2898.	3.6	9
32	Synthesis of maximally-permissive liveness-enforcing control policies for Gadara petri nets. , 2010, , .		8
33	Correctness Verification of Generalized Algebraic Deadlock Avoidance Policies Through Mathematical Programming. IEEE Transactions on Automation Science and Engineering, 2010, 7, 240-248.	3.4	8
34	Optimized multi-agent routing in shared guidepath networks. , 2017, , .		8
35	Optimal node visitation in acyclic stochastic digraphs. , 2006, , .		7
36	Efficient PAC Learning for Episodic Tasks with Acyclic State Spaces. Discrete Event Dynamic Systems: Theory and Applications, 2007, 17, 307-327.	0.6	7

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37	Deadlock-avoidance control of multithreaded software: An efficient siphon-based algorithm for Gadara petri nets. , 2011, , .		7
38	Designing parsimonious scheduling policies for complex resource allocation systems through concurrency theory. Discrete Event Dynamic Systems: Theory and Applications, 2016, 26, 511-537.	0.6	7
39	Throughput maximization of complex resource allocation systems through timed-continuous-Petri-net modeling. Discrete Event Dynamic Systems: Theory and Applications, 2019, 29, 393-409.	0.6	6
40	Throughput Maximization of Capacitated Re-Entrant Lines Through Fluid Relaxation. IEEE Transactions on Automation Science and Engineering, 2019, 16, 792-810.	3.4	6
41	Algebraic Deadlock Avoidance Policies for Sequential Resource Allocation Systems. Engineering and Management Innovation, 2007, , .	0.1	6
42	Optimal Node Visitation in Stochastic Digraphs. IEEE Transactions on Automatic Control, 2008, 53, 2558-2570.	3.6	5
43	Guest Editorial: Special Section on Advances in Discrete-Event Systems for Automation. IEEE Transactions on Automation Science and Engineering, 2014, 11, 3-5.	3.4	5
44	Some novel traffic coordination problems and their analytical study based on Lagrangian Duality theory. , 2016, , .		5
45	Robust deadlock avoidance for sequential resource allocation systems with resource outages. , 2016, , .		4
46	Preservation of Traffic Liveness in MPC Schemes for Guidepath-based Transport Systems. , 2018, , .		4
47	Some new results on the state liveness of open guidepath-based traffic systems. , 2019, , .		4
48	On the state liveness of some classes of guidepath-based transport systems and its computational complexity. Automatica, 2020, 113, 108777.	3.0	4
49	Min-Time Coverage in Constricted Environments: Problem Formulations and Complexity Analysis. IEEE Transactions on Control of Network Systems, 2022, 9, 172-183.	2.4	4
50	Title is missing!. IIE Transactions, 1997, 29, 889-899.	2.1	3
51	On the Optimality of Randomized Deadlock Avoidance Policies. Discrete Event Dynamic Systems: Theory and Applications, 2003, 13, 303-320.	0.6	3
52	Efficient policies for the problem of optimal node visitation in acyclic stochastic digraphs. , 2007, , .		3
53	Optimal Node Visitation in Acyclic Stochastic Digraphs with Multi-threaded Traversals and Internal Visitation Requirements. Discrete Event Dynamic Systems: Theory and Applications, 2009, 19, 347-376.	0.6	3
54	Maximally permissive deadlock avoidance for multithreaded computer programs (Extended abstract). , 2009, , .		3

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55	Symbolic computation of boundary unsafe states in complex resource allocation systems using partitioning techniques. , 2015, , .		3
56	Optimized Multi-Agent Routing in Guidepath Networks. IFAC-PapersOnLine, 2017, 50, 9686-9693.	0.5	3
57	Generalized Algebraic Deadlock Avoidance Policies for Sequential Resource Allocation Systems. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	2
58	Customized learning algorithms for episodic tasks with acyclic state spaces. , 2009, , .		2
59	Symbolic computation and representation of deadlock avoidance policies for complex resource allocation systems with application to multithreaded software. , 2014, , .		2
60	Solving the Lagrangian dual problem for some traffic coordination problems through linear programming. , 2017, , .		2
61	Maximal Linear Deadlock Avoidance Policies for Sequential Resource Allocation Systems: Characterization, Computation, and Approximation. IEEE Transactions on Automatic Control, 2021, 66, 3906-3921.	3.6	2
62	Throughput maximization of capacitated re-entrant lines through fluid relaxation. , 2018, , .		2
63	Optimal node visitation in acyclic stochastic digraphs with multi-threaded traversals and internal visitation requirements. , 2008, , .		1
64	Establishing the NP-hardness of maximally permissive RAS-based approaches to multi-vehicle system safety. , 2010, , .		1
65	Optimal flow control in acyclic networks with uncontrollable routings and precedence constraints. Discrete Event Dynamic Systems: Theory and Applications, 2011, 21, 499-518.	0.6	1
66	Optimized scheduling of complex resource allocation systems through approximate dynamic programming. , 2011, , .		1
67	Applications of Discrete Event Systems. , 2013, , 1-10.		1
68	Maximal Linear Deadlock Avoidance Policies for Complex Resource Allocation Systems. , 2018, , .		1
69	Throughput maximization of complex resource allocation systems through timed-continuous-Petri-net modeling (Extended Abstract). , 2019, , .		1
70	Polynomial-time optimal liveness enforcement for guidepath-based transport systems. Nonlinear Analysis: Hybrid Systems, 2021, 41, 101058.	2.1	1
71	Efficient learning algorithms for episodic tasks with acyclic state spaces. , 2006, , .		0
72	Correctness Verification of Generalized Algebraic Deadlock Avoidance Policies through Mathematical Programming. , 2007, , .		0

#	ARTICLE	IF	CITATIONS
73	On the Linear Separability of the Safe and Unsafe State Subsets of Single-Unit Resource Allocation Systems. IEEE Transactions on Automatic Control, 2014, 59, 2509-2511.	3.6	0
74	Designing parsimonious scheduling policies for complex resource allocation systems through concurrency theory. , 2015, , .		0
75	On the Complexity of Some State-Counting Problems for Bounded Petri Nets. IEEE Transactions on Automatic Control, 2015, 60, 205-210.	3.6	0
76	On the "Counter-Example" in the Article "Max S^{\prime} -Controlled Siphons for Liveness of S^3PGR^2 " Regarding the Results in "Deadlock Avoidance in Sequential Resource Allocation Systems With Multiple Resource Acquisitions and Flexible Routings". IEEE Transactions on Automatic Control, 2016, 61, 194-197.	3.6	0
77	Efficient generation of performance bounds for a class of traffic scheduling problems. Discrete Event Dynamic Systems: Theory and Applications, 2019, 29, 211-235.	0.6	0
78	A Correction and Some Comments on the Article "Polynomially Complex Synthesis of Distributed Supervisors for Large-Scale AMSs Using Petri Nets". IEEE Transactions on Control Systems Technology, 2019, 27, 459-461.	3.2	0
79	Applications of Discrete Event Systems. , 2021, , 67-76.		0
80	Assessing and Restoring "Traffic-State Order" in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems. IEEE Transactions on Automation Science and Engineering, 2022, 19, 1286-1295.	3.4	0
81	Applications of Discrete Event Systems. , 2020, , 1-10.		0