

# George J Pappas

## List of Publications by Year in descending order

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430  
papers

21,756  
citations

17429

63  
h-index

17580

121  
g-index

440  
all docs

440  
docs citations

440  
times ranked

9523  
citing authors

#	ARTICLE	IF	CITATIONS
1	Flocking in Fixed and Switching Networks. IEEE Transactions on Automatic Control, 2007, 52, 863-868.	3.6	1,210
2	Conflict resolution for air traffic management: a study in multiagent hybrid systems. IEEE Transactions on Automatic Control, 1998, 43, 509-521.	3.6	842
3	Leader-to-Formation Stability. IEEE Transactions on Automation Science and Engineering, 2004, 20, 443-455.	2.4	633
4	Discrete abstractions of hybrid systems. Proceedings of the IEEE, 2000, 88, 971-984.	16.4	601
5	Temporal-Logic-Based Reactive Mission and Motion Planning. IEEE Transactions on Robotics, 2009, 25, 1370-1381.	7.3	566
6	Analysis and Control of Epidemics: A Survey of Spreading Processes on Complex Networks. IEEE Control Systems, 2016, 36, 26-46.	1.0	439
7	Robustness of temporal logic specifications for continuous-time signals. Theoretical Computer Science, 2009, 410, 4262-4291.	0.5	413
8	A Framework for Worst-Case and Stochastic Safety Verification Using Barrier Certificates. IEEE Transactions on Automatic Control, 2007, 52, 1415-1428.	3.6	404
9	Cooperative air and ground surveillance. IEEE Robotics and Automation Magazine, 2006, 13, 16-25.	2.2	380
10	Approximation Metrics for Discrete and Continuous Systems. IEEE Transactions on Automatic Control, 2007, 52, 782-798.	3.6	345
11	Temporal logic motion planning for dynamic robots. Automatica, 2009, 45, 343-352.	3.0	336
12	Graph-theoretic connectivity control of mobile robot networks. Proceedings of the IEEE, 2011, 99, 1525-1540.	16.4	316
13	Probabilistic data association for semantic SLAM. , 2017, , .		283
14	Symbolic planning and control of robot motion [Grand Challenges of Robotics]. IEEE Robotics and Automation Magazine, 2007, 14, 61-70.	2.2	281
15	Potential Fields for Maintaining Connectivity of Mobile Networks. , 2007, 23, 812-816.		276
16	Distributed Connectivity Control of Mobile Networks. IEEE Transactions on Robotics, 2008, 24, 1416-1428.	7.3	266
17	Linear Time Logic Control of Discrete-Time Linear Systems. IEEE Transactions on Automatic Control, 2006, 51, 1862-1877.	3.6	249
18	Differentially Private Filtering. IEEE Transactions on Automatic Control, 2014, 59, 341-354.	3.6	240

#	ARTICLE	IF	CITATIONS
19	O-Minimal Hybrid Systems. Mathematics of Control, Signals, and Systems, 2000, 13, 1-21.	1.4	198
20	Optimal Resource Allocation for Network Protection Against Spreading Processes. IEEE Transactions on Control of Network Systems, 2014, 1, 99-108.	2.4	194
21	Discrete abstractions for robot motion planning and control in polygonal environments. , 2005, 21, 864-874.		188
22	Hybrid Control for Connectivity Preserving Flocking. IEEE Transactions on Automatic Control, 2009, 54, 2869-2875.	3.6	187
23	Symbolic Reachability Computation for Families of Linear Vector Fields. Journal of Symbolic Computation, 2001, 32, 231-253.	0.5	178
24	Bisimilar linear systems. Automatica, 2003, 39, 2035-2047.	3.0	171
25	Distributed multi-robot task assignment and formation control. , 2008, , .		167
26	Differentially Private Distributed Constrained Optimization. IEEE Transactions on Automatic Control, 2017, 62, 50-64.	3.6	165
27	Robustness of attack-resilient state estimators. , 2014, , .		162
28	Hierarchically consistent control systems. IEEE Transactions on Automatic Control, 2000, 45, 1144-1160.	3.6	160
29	Coding Schemes for Securing Cyber-Physical Systems Against Stealthy Data Injection Attacks. IEEE Transactions on Control of Network Systems, 2017, 4, 106-117.	2.4	160
30	A distributed auction algorithm for the assignment problem. , 2008, , .		147
31	Optimal Paths in Weighted Timed Automata. Lecture Notes in Computer Science, 2001, , 49-62.	1.0	147
32	Minimal Actuator Placement With Bounds on Control Effort. IEEE Transactions on Control of Network Systems, 2016, 3, 67-78.	2.4	144
33	Flocking while preserving network connectivity. , 2007, , .		143
34	Vision-Based Localization for Leader-Follower Formation Control. IEEE Transactions on Robotics, 2009, 25, 1431-1438.	7.3	141
35	Temporal Logic Motion Planning for Mobile Robots. , 0, , .		138
36	Attack-Resilient State Estimation for Noisy Dynamical Systems. IEEE Transactions on Control of Network Systems, 2017, 4, 82-92.	2.4	138

#	ARTICLE	IF	CITATIONS
37	Where's Waldo? Sensor-Based Temporal Logic Motion Planning. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	137
38	The Wireless Control Network: A New Approach for Control Over Networks. IEEE Transactions on Automatic Control, 2011, 56, 2305-2318.	3.6	137
39	Optimal Power Management in Wireless Control Systems. IEEE Transactions on Automatic Control, 2014, 59, 1495-1510.	3.6	136
40	Differential privacy in control and network systems. , 2016, , .		132
41	Taxi Dispatch With Real-Time Sensing Data in Metropolitan Areas: A Receding Horizon Control Approach. IEEE Transactions on Automation Science and Engineering, 2016, 13, 463-478.	3.4	132
42	Resilient Flocking for Mobile Robot Teams. IEEE Robotics and Automation Letters, 2017, 2, 1039-1046.	3.3	132
43	Hierarchical modeling and analysis of embedded systems. Proceedings of the IEEE, 2003, 91, 11-28.	16.4	128
44	Verisig. , 2019, , .		128
45	Single cell manipulation using ferromagnetic composite microtransporters. Applied Physics Letters, 2010, 96, 043705.	1.5	127
46	Hierarchical control system design using approximate simulation. Automatica, 2009, 45, 566-571.	3.0	124
47	Electrokinetic and optical control of bacterial microrobots. Journal of Micromechanics and Microengineering, 2011, 21, 035001.	1.5	123
48	A New Class of Decidable Hybrid Systems. Lecture Notes in Computer Science, 1999, , 137-151.	1.0	119
49	Approximations of Stochastic Hybrid Systems. IEEE Transactions on Automatic Control, 2009, 54, 1193-1203.	3.6	114
50	Hybrid Modeling and Simulation of Biomolecular Networks. Lecture Notes in Computer Science, 2001, , 19-32.	1.0	110
51	Decentralized active information acquisition: Theory and application to multi-robot SLAM. , 2015, , .		108
52	Optimal vaccine allocation to control epidemic outbreaks in arbitrary networks. , 2013, , .		106
53	Design and Implementation of Attack-Resilient Cyberphysical Systems: With a Focus on Attack-Resilient State Estimators. IEEE Control Systems, 2017, 37, 66-81.	1.0	105
54	Hybrid Controllers for Path Planning: A Temporal Logic Approach. , 0, , .		104

#	ARTICLE	IF	CITATIONS
55	Optimal Resource Allocation for Control of Networked Epidemic Models. IEEE Transactions on Control of Network Systems, 2017, 4, 159-169.	2.4	104
56	A Framework and Architecture for Multi-Robot Coordination. International Journal of Robotics Research, 2002, 21, 977-995.	5.8	102
57	Approximate Bisimulation: A Bridge Between Computer Science and Control Theory. European Journal of Control, 2011, 17, 568-578.	1.6	100
58	Controlling Connectivity of Dynamic Graphs. , 0, , .		99
59	Translating Structured English to Robot Controllers. Advanced Robotics, 2008, 22, 1343-1359.	1.1	98
60	Compositional Modeling and Analysis of Multi-Hop Control Networks. IEEE Transactions on Automatic Control, 2011, 56, 2345-2357.	3.6	98
61	ATPC. ACM Transactions on Sensor Networks, 2016, 12, 1-31.	2.3	98
62	Monte-carlo techniques for falsification of temporal properties of non-linear hybrid systems. , 2010, , .		98
63	Motion feasibility of multi-agent formations. , 2005, 21, 387-392.		89
64	Opportunistic Control Over Shared Wireless Channels. IEEE Transactions on Automatic Control, 2015, 60, 3140-3155.	3.6	89
65	Bisimulation relations for dynamical, control, and hybrid systems. Theoretical Computer Science, 2005, 342, 229-261.	0.5	88
66	Stochastic game approach for replay attack detection. , 2013, , .		87
67	Stochastic Modeling and Control of Biological Systems: The Lactose Regulation System of <i>Escherichia Coli</i> . IEEE Transactions on Automatic Control, 2008, 53, 51-65.	3.6	84
68	Observability of Switched Linear Systems in Continuous Time. Lecture Notes in Computer Science, 2005, , 103-117.	1.0	83
69	Automated composition of motion primitives for multi-robot systems from safe LTL specifications. , 2014, , .		83
70	The Swarm at the Edge of the Cloud. IEEE Design and Test, 2014, 31, 8-20.	1.1	83
71	Dynamic Assignment in Distributed Motion Planning With Local Coordination. , 2008, 24, 232-242.		80
72	Anytime Planning for Decentralized Multirobot Active Information Gathering. IEEE Robotics and Automation Letters, 2018, 3, 1025-1032.	3.3	79

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73	Inferring stable genetic networks from steady-state data. <i>Automatica</i> , 2011, 47, 1113-1122.	3.0	78
74	Spectral mapping of brain functional connectivity from diffusion imaging. <i>Scientific Reports</i> , 2018, 8, 1411.	1.6	78
75	Modeling, control and experimental characterization of microbiorobots. <i>International Journal of Robotics Research</i> , 2011, 30, 647-658.	5.8	75
76	Network Integrity in Mobile Robotic Networks. <i>IEEE Transactions on Automatic Control</i> , 2013, 58, 3-18.	3.6	75
77	Robust Test Generation and Coverage for Hybrid Systems. <i>Lecture Notes in Computer Science</i> , 2007, , 329-342.	1.0	75
78	Robustness of Temporal Logic Specifications. <i>Lecture Notes in Computer Science</i> , 2006, , 178-192.	1.0	74
79	Approximate Simulation Relations for Hybrid Systems. <i>Discrete Event Dynamic Systems: Theory and Applications</i> , 2008, 18, 163-179.	0.6	73
80	Approximate bisimulation relations for constrained linear systems. <i>Automatica</i> , 2007, 43, 1307-1317.	3.0	72
81	Stochastic Source Seeking by Mobile Robots. <i>IEEE Transactions on Automatic Control</i> , 2012, 57, 2308-2321.	3.6	72
82	Nonmyopic View Planning for Active Object Classification and Pose Estimation. <i>IEEE Transactions on Robotics</i> , 2014, 30, 1078-1090.	7.3	72
83	Information acquisition with sensing robots: Algorithms and error bounds. , 2014, , .		71
84	Consistent abstractions of affine control systems. <i>IEEE Transactions on Automatic Control</i> , 2002, 47, 745-756.	3.6	69
85	Optimal paths in weighted timed automata. <i>Theoretical Computer Science</i> , 2004, 318, 297-322.	0.5	66
86	Vision-based Localization of Leader-Follower Formations. , 0, , .		65
87	Genetic network identification using convex programming. <i>IET Systems Biology</i> , 2009, 3, 155-166.	0.8	61
88	Teaching recurrent neural networks to infer global temporal structure from local examples. <i>Nature Machine Intelligence</i> , 2021, 3, 316-323.	8.3	61
89	Verification Using Simulation. <i>Lecture Notes in Computer Science</i> , 2006, , 272-286.	1.0	61
90	Safety Verification and Robustness Analysis of Neural Networks via Quadratic Constraints and Semidefinite Programming. <i>IEEE Transactions on Automatic Control</i> , 2022, 67, 1-15.	3.6	61

#	ARTICLE	IF	CITATIONS
91	Encrypted Control for Networked Systems: An Illustrative Introduction and Current Challenges. IEEE Control Systems, 2021, 41, 58-78.	1.0	61
92	Privacy-aware quadratic optimization using partially homomorphic encryption. , 2016, , .		59
93	A hybrid stochastic game for secure control of cyber-physical systems. Automatica, 2018, 93, 55-63.	3.0	59
94	Accurate Event Detection for Simulating Hybrid Systems. Lecture Notes in Computer Science, 2001, , 204-217.	1.0	58
95	Differentially private filtering. , 2012, , .		57
96	Cloud-Based MPC with Encrypted Data. , 2018, , .		56
97	Valet parking without a valet. , 2007, , .		55
98	Distributed Algorithms for Stochastic Source Seeking With Mobile Robot Networks. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	0.9	55
99	Bisimilar control affine systems. Systems and Control Letters, 2004, 52, 49-58.	1.3	54
100	Leader-Follower Formations: Uncalibrated Vision-Based Localization and Control. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	53
101	Resilient Active Target Tracking With Multiple Robots. IEEE Robotics and Automation Letters, 2019, 4, 129-136.	3.3	53
102	Model Checking LTL over Controllable Linear Systems Is Decidable. Lecture Notes in Computer Science, 2003, , 498-513.	1.0	53
103	The wireless control network: Monitoring for malicious behavior. , 2010, , .		52
104	Approximate Bisimulations for Nonlinear Dynamical Systems. , 0, , .		51
105	Maintaining Connectivity in Mobile Robot Networks. Springer Tracts in Advanced Robotics, 2009, , 117-126.	0.3	51
106	Optimal Resource Allocation for Competitive Spreading Processes on Bilayer Networks. IEEE Transactions on Control of Network Systems, 2018, 5, 298-307.	2.4	50
107	Flocking in Teams of Nonholonomic Agents. Lecture Notes in Control and Information Sciences, 0, , 229-239.	0.6	50
108	Compositional safety analysis using barrier certificates. , 2012, , .		49

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109	Coding sensor outputs for injection attacks detection. , 2014, , .		49
110	High-Confidence Medical Device Software and Systems. Computer, 2006, 39, 33-38.	1.2	48
111	On trajectory optimization for active sensing in Gaussian process models. , 2009, , .		48
112	Attack-resilient state estimation in the presence of noise. , 2015, , .		48
113	Experimental cooperative control of fixed-wing unmanned aerial vehicles. , 2004, , .		47
114	Localization from semantic observations via the matrix permanent. International Journal of Robotics Research, 2016, 35, 73-99.	5.8	47
115	Models of communication and control for brain networks: distinctions, convergence, and future outlook. Network Neuroscience, 2020, 4, 1122-1159.	1.4	46
116	Green scheduling of control systems for peak demand reduction. , 2011, , .		45
117	Finite Sample Analysis of Stochastic System Identification. , 2019, , .		43
118	Attack resilient state estimation for autonomous robotic systems. , 2014, , .		42
119	Reach-SDP: Reachability Analysis of Closed-Loop Systems with Neural Network Controllers via Semidefinite Programming. , 2020, , .		41
120	Multi-UAV Cooperative Surveillance with Spatio-Temporal Specifications. , 2006, , .		40
121	Courteous Cars. IEEE Robotics and Automation Magazine, 2008, 15, 30-38.	2.2	40
122	Online planning for energy-efficient and disturbance-aware UAV operations. , 2016, , .		39
123	Distributed connectivity control of mobile networks. , 2007, , .		38
124	Modeling and Analysis of Multi-hop Control Networks. , 2009, , .		38
125	Data-Driven Robust Taxi Dispatch Under Demand Uncertainties. IEEE Transactions on Control Systems Technology, 2019, 27, 175-191.	3.2	38
126	Wireless manipulation of single cells using magnetic microtransporters. , 2011, , .		37



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127	State Estimation with Secrecy against Eavesdroppers. IFAC-PapersOnLine, 2017, 50, 8385-8392.	0.5	37
128	State-Secrecy Codes for Networked Linear Systems. IEEE Transactions on Automatic Control, 2020, 65, 2001-2015.	3.6	37
129	Guest Editorial Special Issue on Control of Cyber-Physical Systems. IEEE Transactions on Automatic Control, 2014, 59, 3120-3121.	3.6	36
130	Compositional Abstractions of Hybrid Control Systems. Discrete Event Dynamic Systems: Theory and Applications, 2004, 14, 203-238.	0.6	35
131	Stochastic source seeking in complex environments. , 2012, , .		35
132	Adaptive Communication-Constrained Deployment of Unmanned Vehicle Systems. IEEE Journal on Selected Areas in Communications, 2012, 30, 923-934.	9.7	35
133	SMC: Satisfiability Modulo Convex Programming. Proceedings of the IEEE, 2018, 106, 1655-1679.	16.4	35
134	Semantic Localization Via the Matrix Permanent. , 0, , .		35
135	Distributed formation control with permutation symmetries. , 2007, , .		34
136	Adaptive Deployment of Mobile Robotic Networks. IEEE Transactions on Automatic Control, 2013, 58, 654-666.	3.6	34
137	Robust Economic Model Predictive Control of Continuous-Time Epidemic Processes. IEEE Transactions on Automatic Control, 2020, 65, 1116-1131.	3.6	34
138	Quotients of Fully Nonlinear Control Systems. SIAM Journal on Control and Optimization, 2005, 43, 1844-1866.	1.1	33
139	Data-driven distributionally robust vehicle balancing using dynamic region partitions. , 2017, , .		33
140	Linear temporal logic motion planning for teams of underactuated robots using satisfiability modulo convex programming. , 2017, , .		33
141	From structured english to robot motion. , 2007, , .		32
142	Differentially private convex optimization with piecewise affine objectives. , 2014, , .		32
143	Identification of stable genetic networks using convex programming. , 2008, , .		31
144	Data-Driven Network Resource Allocation for Controlling Spreading Processes. IEEE Transactions on Network Science and Engineering, 2015, 2, 127-138.	4.1	31

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145	Cloud-Based Quadratic Optimization With Partially Homomorphic Encryption. IEEE Transactions on Automatic Control, 2021, 66, 2357-2364.	3.6	31
146	Approximate Bisimulations for Constrained Linear Systems. , 0, , .		30
147	Topological conditions for wireless control networks. , 2011, , .		30
148	Privacy in Control and Dynamical Systems. Annual Review of Control, Robotics, and Autonomous Systems, 2018, 1, 309-332.	7.5	30
149	Minimal Edge Addition for Network Controllability. IEEE Transactions on Control of Network Systems, 2019, 6, 312-323.	2.4	30
150	Temporal Logic Verification Using Simulation. Lecture Notes in Computer Science, 2006, , 171-186.	1.0	30
151	Asymptotically Optimal Planning for Non-Myopic Multi-Robot Information Gathering. , 0, , .		30
152	Translating Temporal Logic to Controller Specifications. , 2006, , .		29
153	Verification of Hybrid Systems. , 2018, , 1047-1110.		29
154	SMC. , 2017, , .		29
155	Modeling and analyzing biomolecular networks. Computing in Science and Engineering, 2002, 4, 20-31.	1.2	27
156	Hierarchical trajectory refinement for a class of nonlinear systems. Automatica, 2005, 41, 701-708.	3.0	27
157	A control-theoretic approach to disseminating values and overcoming malicious links in wireless networks. Automatica, 2012, 48, 2894-2901.	3.0	27
158	Random access design for wireless control systems. Automatica, 2018, 91, 1-9.	3.0	27
159	Mobility & routing control in networks of robots. , 2010, , .		26
160	Topological Conditions for In-Network Stabilization of Dynamical Systems. IEEE Journal on Selected Areas in Communications, 2013, 31, 794-807.	9.7	26
161	Mode Switching Synthesis for Reachability Specifications. Lecture Notes in Computer Science, 2001, , 333-346.	1.0	26
162	Bisimulation Relations for Dynamical and Control Systems. Electronic Notes in Theoretical Computer Science, 2003, 69, 120-136.	0.9	25

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163	Receding-horizon supervisory control of green buildings. , 2011, , .		25
164	Encrypted Cooperative Control Revisited. , 2019, , .		25
165	LQG Control and Sensing Co-Design. IEEE Transactions on Automatic Control, 2021, 66, 1468-1483.	3.6	25
166	Verisig 2.0: Verification of Neural Network Controllers Using Taylor Model Preconditioning. Lecture Notes in Computer Science, 2021, , 249-262.	1.0	25
167	Approximate reduction of dynamic systems. Systems and Control Letters, 2008, 57, 538-545.	1.3	24
168	Characterization of novel microsatellite markers in <i>Musa acuminata</i> subsp. <i>burmannicoides</i> , var. <i>Calcutta 4</i> . BMC Research Notes, 2010, 3, 148.	0.6	24
169	Joint estimation and localization in sensor networks. , 2014, , .		24
170	Minimal actuator placement with optimal control constraints. , 2015, , .		24
171	Near-optimal sensor scheduling for batch state estimation: Complexity, algorithms, and limits. , 2016, , .		24
172	Minimum number of sensors to ensure observability of physiological systems: A case study. , 2016, , .		24
173	Calibration-free network localization using non-line-of-sight ultra-wideband measurements. , 2017, , .		24
174	Robust Sampling for MITL Specifications. Lecture Notes in Computer Science, 2007, , 147-162.	1.0	24
175	Trajectory Based Verification Using Local Finite-Time Invariance. Lecture Notes in Computer Science, 2009, , 223-236.	1.0	24
176	Approximate equivalence and synchronization of metric transition systems. Systems and Control Letters, 2009, 58, 94-101.	1.3	23
177	Stability analysis of generalized epidemic models over directed networks. , 2014, , .		23
178	Periodic event-triggered average consensus over directed graphs. , 2015, , .		23
179	Scalable lazy SMT-based motion planning. , 2016, , .		23
180	Implan: Scalable Incremental Motion Planning for Multi-Robot Systems. , 2016, , .		23

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181	Resilient monotone submodular function maximization. , 2017, , .		23
182	An Optimization-Based Approach to Time-Critical Cooperative Surveillance and Coverage with UAVs. , 2008, , 491-500.		23
183	Time-triggered implementations of dynamic controllers. , 2006, , .		22
184	The Wireless Control Network: Synthesis and robustness. , 2010, , .		22
185	Self-triggered time-varying convex optimization. , 2016, , .		22
186	Closing the loop. , 2012, , .		21
187	Minimum cost constrained input-output and control configuration co-design problem: A structural systems approach. , 2015, , .		21
188	Taxi dispatch with real-time sensing data in metropolitan areas. , 2015, , .		21
189	The mean square error in Kalman filtering sensor selection is approximately supermodular. , 2017, , .		21
190	Selecting Sensors in Biological Fractional-Order Systems. IEEE Transactions on Control of Network Systems, 2018, 5, 709-721.	2.4	21
191	Decidable Controller Synthesis for Classes of Linear Systems. Lecture Notes in Computer Science, 2000, , 407-420.	1.0	21
192	Stabilization of non-holonomic vehicles under kinematic constraints. International Journal of Control, 1995, 61, 933-947.	1.2	20
193	UAV and UGV Collaboration for Active Ground Feature Search and Localization. , 2004, , .		20
194	Minimum number of probes for brain dynamics observability. , 2015, , .		20
195	State-based communication design for wireless control systems. , 2016, , .		20
196	Trade-offs between driving nodes and time-to-control in complex networks. Scientific Reports, 2017, 7, 39978.	1.6	20
197	Probabilistic Verification and Reachability Analysis of Neural Networks via Semidefinite Programming. , 2019, , .		20
198	Composing Abstractions of Hybrid Systems. Lecture Notes in Computer Science, 2002, , 436-450.	1.0	20

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199	A dynamical systems approach to weighted graph matching. <i>Automatica</i> , 2008, 44, 2817-2824.	3.0	19
200	Automatically synthesizing a planning and control subsystem for the DARPA urban challenge. , 2008, , .		19
201	Scalable scheduling algorithms for wireless networked control systems. , 2009, , .		19
202	Optimal power management in wireless control systems. , 2013, , .		19
203	Abstractions of Hamiltonian control systems. <i>Automatica</i> , 2003, 39, 2025-2033.	3.0	18
204	From nonlinear to hamiltonian via feedback. <i>IEEE Transactions on Automatic Control</i> , 2003, 48, 1439-1442.	3.6	18
205	Hypothesis testing framework for active object detection. , 2013, , .		18
206	Diffusing Private Data Over Networks. <i>IEEE Transactions on Control of Network Systems</i> , 2018, 5, 1027-1037.	2.4	18
207	Reactive Semantic Planning in Unexplored Semantic Environments Using Deep Perceptual Feedback. <i>IEEE Robotics and Automation Letters</i> , 2020, 5, 4455-4462.	3.3	18
208	Decidability of Motion Planning with Differential Constraints. <i>Proceedings - IEEE International Conference on Robotics and Automation</i> , 2007, , .	0.0	17
209	Biosensing and actuation for microbiorobots. , 2010, , .		17
210	Scalable scheduling of building control systems for peak demand reduction. , 2012, , .		17
211	Encrypted LQG using labeled homomorphic encryption. , 2019, , .		17
212	Learning in Wireless Control Systems Over Nonstationary Channels. <i>IEEE Transactions on Signal Processing</i> , 2019, 67, 1123-1137.	3.2	17
213	Reactive Temporal Logic Planning for Multiple Robots in Unknown Environments. , 2020, , .		17
214	Hybrid Systems with Finite Bisimulations. <i>Lecture Notes in Computer Science</i> , 1999, , 186-203.	1.0	17
215	Information Driven Coordinated Air-Ground Proactive Sensing. , 0, , .		16
216	Joint Metering and Conflict Resolution in Air Traffic Control. <i>Journal of Guidance, Control, and Dynamics</i> , 2011, 34, 1507-1518.	1.6	16

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217	Green scheduling: Scheduling of control systems for peak power reduction. , 2011, , .		16
218	Sequential composition of robust controller specifications. , 2012, , .		16
219	Differentially private Kalman filtering. , 2012, , .		16
220	Optimal temporal logic planning in probabilistic semantic maps. , 2016, , .		16
221	Structural minimum controllability problem for switched linear continuous-time systems. Automatica, 2017, 78, 216-222.	3.0	16
222	Consensus of Multiagent Systems Via Asynchronous Cloud Communication. IEEE Transactions on Control of Network Systems, 2020, 7, 627-637.	2.4	16
223	Model-based design for seizure control by stimulation. Journal of Neural Engineering, 2020, 17, 026009.	1.8	16
224	Latency-Reliability Tradeoffs for State Estimation. IEEE Transactions on Automatic Control, 2021, 66, 1009-1023.	3.6	16
225	Hierarchical Synthesis of Hybrid Controllers from Temporal Logic Specifications. , 2007, , 203-216.		16
226	Automatic synthesis of robot controllers for tasks with locative prepositions. , 2010, , .		15
227	Optimal resource allocation for competing epidemics over arbitrary networks. , 2015, , .		15
228	Multi-agent coordination with asynchronous cloud access. , 2016, , .		15
229	Resilient Active Information Gathering with Mobile Robots. , 2018, , .		15
230	Distributed Attack-Robust Submodular Maximization for Multi-Robot Planning. , 2020, , .		15
231	Approximate Supermodularity of Kalman Filter Sensor Selection. IEEE Transactions on Automatic Control, 2021, 66, 49-63.	3.6	15
232	Semi-decidable Synthesis for Triangular Hybrid Systems. Lecture Notes in Computer Science, 2001, , 487-500.	1.0	15
233	Time-Robust Control for STL Specifications. , 2021, , .		15
234	Perception-Based Temporal Logic Planning in Uncertain Semantic Maps. IEEE Transactions on Robotics, 2022, 38, 2536-2556.	7.3	15

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235	Special Section on Symbolic Methods for Complex Control Systems. IEEE Transactions on Automatic Control, 2006, 51, 921-923.	3.6	14
236	On the existence of compositional barrier certificates. , 2012, , .		14
237	Scheduling nonlinear sensors for stochastic process estimation. , 2017, , .		14
238	State estimation codes for perfect secrecy. , 2017, , .		14
239	Structural Target Controllability of Undirected Networks. , 2018, , .		14
240	R-Charon, a Modeling Language for Reconfigurable Hybrid Systems. Lecture Notes in Computer Science, 2006, , 392-406.	1.0	14
241	Hierarchical Control using Approximate Simulation Relations. , 2006, , .		13
242	Approximate equivalence and approximate synchronization of metric transition systems. , 2006, , .		13
243	Harnessing bacterial power in microscale actuation. , 2009, , .		13
244	Multi-vehicle path planning in dynamically changing environments. , 2009, , .		13
245	Event-based Green scheduling of radiant systems in buildings. , 2013, , .		13
246	Wireless Control for the IoT. , 2017, , .		13
247	Hierarchical data-driven vehicle dispatch and ride-sharing. , 2017, , .		13
248	Finite-dimensional control of linear discrete-time fractional-order systems. Automatica, 2020, 115, 108512.	3.0	13
249	Stochastic Motion Planning Under Partial Observability for Mobile Robots With Continuous Range Measurements. IEEE Transactions on Robotics, 2021, 37, 979-995.	7.3	13
250	Synergies in Feature Localization by Air-Ground Robot Teams. Springer Tracts in Advanced Robotics, 2006, , 352-361.	0.3	13
251	Distributed Hybrid Control for Multiple-Pursuer Multiple-Evader Games. , 2007, , 787-789.		13
252	Approximate timed abstractions of hybrid automata. , 2007, , .		12

#	ARTICLE	IF	CITATIONS
253	Probabilistic testing for stochastic hybrid systems. , 2008, , .		12
254	Resource constrained LQR control under fast sampling. , 2011, , .		12
255	Time-Triggered Implementations of Dynamic Controllers. Transactions on Embedded Computing Systems, 2012, 11, 1-24.	2.1	12
256	Minimal reachability problems. , 2015, , .		12
257	Control-Aware Random Access Communication. , 2016, , .		12
258	Differential privacy for dynamical sensitive data. , 2017, , .		12
259	Gradual Release of Sensitive Data under Differential Privacy. Journal of Privacy and Confidentiality, 2017, 7, .	1.1	12
260	Reachability computation for linear hybrid systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 2137-2142.	0.4	11
261	Dynamic Assignment in Distributed Motion Planning with Limited Information. Proceedings of the American Control Conference, 2007, , .	0.0	11
262	Cooperative coverage using receding horizon control. , 2007, , .		11
263	Distributed topology control of dynamic networks. , 2008, , .		11
264	Distributed control of mobility & routing in networks of robots. , 2011, , .		11
265	Controllability and fraction of leaders in infinite networks. , 2014, , .		11
266	Sensing-Constrained LQG Control. , 2018, , .		11
267	Analysis and Design of Actuation&#x2013;Sensing&#x2013;Communication Interconnection Structures Toward Secured/Resilient LTI Closed-Loop Systems. IEEE Transactions on Control of Network Systems, 2019, 6, 667-678.	2.4	11
268	Sampling-based planning for non-myopic multi-robot information gathering. Autonomous Robots, 2021, 45, 1029-1046.	3.2	11
269	Reactive and Risk-Aware Control for Signal Temporal Logic. IEEE Transactions on Automatic Control, 2022, 67, 5262-5277.	3.6	11
270	Bounded Model Checking of Hybrid Dynamical Systems. , 0, , .		10



#	ARTICLE	IF	CITATIONS
271	APPROXIMATE SIMULATION RELATIONS FOR HYBRID SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 106-111.	0.4	10
272	Nonholonomic source seeking in switching random fields. , 2010, , .		10
273	Distributed resource allocation for control of spreading processes. , 2015, , .		10
274	Robust estimation using context-aware filtering. , 2015, , .		10
275	Automatic verification of linear controller software. , 2015, , .		10
276	A general class of spreading processes with non-Markovian dynamics. , 2015, , .		10
277	Self-triggered pursuit of a single evader. , 2015, , .		10
278	Coordination of multi-agent systems via asynchronous cloud communication. , 2016, , .		10
279	Optimal Temporal Logic Planning for Multi-Robot Systems in Uncertain Semantic Maps. , 2019, , .		10
280	Resilient Parameter-Invariant Control with Application to Vehicle Cruise Control. Lecture Notes in Control and Information Sciences, 2013, , 197-216.	0.6	10
281	Hierarchical trajectory generation for a class of nonlinear systems. , 0, , .		9
282	A Dynamical Systems Approach to Weighted Graph Matching. , 2006, , .		9
283	Verification of temporal properties on hybrid automata by simulation relations. , 2007, , .		9
284	Approximate hierarchies of linear control systems. , 2007, , .		9
285	Robust stability of multi-hop control networks. , 2009, , .		9
286	Geometric programming and mechanism design for air traffic conflict resolution. , 2010, , .		9
287	Towards synthesis of platform-aware attack-resilient control systems. , 2013, , .		9
288	Real-time privacy-preserving model-based estimation of traffic flows. , 2014, , .		9

#	ARTICLE	IF	CITATIONS
289	Differentially private distributed protocol for electric vehicle charging. , 2014, , .		9
290	Privacy preserving cloud-based quadratic optimization. , 2017, , .		9
291	An Information Matrix Approach for State Secrecy. , 2018, , .		9
292	Learning Q-network for Active Information Acquisition. , 2019, , .		9
293	Data-driven Distributionally Robust Optimization For Vehicle Balancing of Mobility-on-Demand Systems. ACM Transactions on Cyber-Physical Systems, 2021, 5, 1-27.	1.9	9
294	Subanalytic stratifications and bisimulations. Lecture Notes in Computer Science, 1998, , 205-220.	1.0	9
295	Active Deformable Part Models Inference. Lecture Notes in Computer Science, 2014, , 281-296.	1.0	9
296	Secure Multi-party Computation for Cloud-Based Control. , 2020, , 179-207.		9
297	Cyclic directed formations of multi-agent systems. , 2001, , .		9
298	STL Robustness Risk over Discrete-Time Stochastic Processes. , 2021, , .		9
299	Experimental Robotics. Springer Tracts in Advanced Robotics, 2009, , .	0.3	8
300	Distributed control of the Laplacian spectral moments of a network. , 2010, , .		8
301	On the Feasibility of Linear Discrete-Time Systems of the Green Scheduling Problem. , 2011, , .		8
302	Robust taxi dispatch under model uncertainties. , 2015, , .		8
303	Control with random access wireless sensors. , 2015, , .		8
304	Event-based information-theoretic privacy: A case study of smart meters. , 2016, , .		8
305	Network design for controllability metrics. , 2017, , .		8
306	Model-Free Learning of Optimal Ergodic Policies in Wireless Systems. IEEE Transactions on Signal Processing, 2020, 68, 6272-6286.	3.2	8

#	ARTICLE	IF	CITATIONS
307	Statistical learning for analysis of networked control systems over unknown channels. Automatica, 2021, 125, 109386.	3.0	8
308	Fair Robust Assignment Using Redundancy. IEEE Robotics and Automation Letters, 2021, 6, 4217-4224.	3.3	8
309	Robustness analysis for the certification of digital controller implementations. , 2010, , .		8
310	Scalable Reinforcement Learning Policies for Multi-Agent Control. , 2021, , .		8
311	Greedy control for hybrid pursuit games. , 2001, , .		7
312	Quantifying the Gap between Embedded Control Models and Time-Triggered Implementations. , 0, , .		7
313	Approximate Reduction of Dynamical Systems. , 2006, , .		7
314	Metabolic networks analysis using convex optimization. , 2008, , .		7
315	Sensor-based robot deployment algorithms. , 2010, , .		7
316	Green scheduling for radiant systems in buildings. , 2012, , .		7
317	Privacy-preserving release of aggregate dynamic models. , 2013, , .		7
318	Bio-inspired strategy for control of viral spreading in networks. , 2013, , .		7
319	Distributed leader selection. , 2015, , .		7
320	Maximum Information Bounds for Planning Active Sensing Trajectories. , 2019, , .		7
321	Better Safe Than Sorry: Risk-Aware Nonlinear Bayesian Estimation. , 2020, , .		7
322	On the Structural Target Controllability of Undirected Networks. IEEE Transactions on Automatic Control, 2021, 66, 4836-4843.	3.6	7
323	Private Weighted Sum Aggregation. IEEE Transactions on Control of Network Systems, 2022, 9, 219-230.	2.4	7
324	Hybrid Abstractions that Preserve Timed Languages. Lecture Notes in Computer Science, 2001, , 501-514.	1.0	7

#	ARTICLE	IF	CITATIONS
325	Distributed Attack-Robust Submodular Maximization for Multirobot Planning. IEEE Transactions on Robotics, 2022, 38, 3097-3112.	7.3	7
326	Temporal Robustness of Stochastic Signals. , 2022, , .		7
327	SmartATMS. , 1997, , .		6
328	Discrete abstraction of stochastic nonlinear systems: A bisimulation function approach. , 2010, , .		6
329	Reputation-based networked control with data-corrupting channels. , 2011, , .		6
330	From Reactive to Cognitive Agents: Extending Reinforcement Learning to Generate Symbolic Knowledge Bases. , 2013, , .		6
331	A sublinear algorithm for barrier-certificate-based data-driven model validation of dynamical systems. , 2015, , .		6
332	A column generation approach for optimized routing and coordination of a UAV fleet. , 2016, , .		6
333	Location-dependent privacy. , 2016, , .		6
334	Spectral control of cortical activity. , 2017, , .		6
335	Inference, prediction and control of networked epidemics. , 2017, , .		6
336	Resilient Active Information Acquisition With Teams of Robots. IEEE Transactions on Robotics, 2022, 38, 244-261.	7.3	6
337	Robust and Adaptive Sequential Submodular Optimization. IEEE Transactions on Automatic Control, 2022, 67, 89-104.	3.6	6
338	Reactive Planning for Mobile Manipulation Tasks in Unexplored Semantic Environments. , 2021, , .		6
339	Finite state abstraction of a stochastic model of the lactose regulation system of Escherichia coli. , 2006, , .		5
340	Sensor-Based Dynamic Assignment in Distributed Motion Planning. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	5
341	Stable multi-particle systems and application in multi-vehicle path planning and coverage. , 2007, , .		5
342	Opportunistic scheduling of control tasks over shared wireless channels. , 2014, , .		5

#	ARTICLE	IF	CITATIONS
343	Team-triggered coordination of robotic networks for optimal deployment. , 2015, , .		5
344	An approximately truthful mechanism for electric vehicle charging via joint differential privacy. , 2015, , .		5
345	Decentralized observability with limited communication between sensors. , 2016, , .		5
346	Structural analysis and design of dynamic-flow networks: Implications in the brain dynamics. , 2016, , .		5
347	Resilient Monotone Sequential Maximization. , 2018, , .		5
348	Sample Complexity of Networked Control Systems Over Unknown Channels. , 2018, , .		5
349	A Chebyshev-Accelerated Primal-Dual Method for Distributed Optimization. , 2018, , .		5
350	Learning in Non-Stationary Wireless Control Systems via Newton's Method. , 2018, , .		5
351	Network Design for Controllability Metrics. IEEE Transactions on Control of Network Systems, 2020, 7, 1404-1415.	2.4	5
352	Controlling biological systems: the lactose regulation system of Escherichia coli. Proceedings of the American Control Conference, 2007, , .	0.0	4
353	Galvanotactic Control of Self-Powered Microstructures. , 2008, , .		4
354	Path planning for multiple robots: An alternative duality approach. , 2010, , .		4
355	Network synthesis for dynamical system stabilization. , 2011, , .		4
356	Adaptive communication-constrained deployment of mobile robotic networks. , 2012, , .		4
357	Decentralized Channel Access for Wireless Control Systems—This work was supported in part by NSF CNS-0931239, and by TerraSwarm, one of six centers of STARnet, a Semiconductor Research Corporation program sponsored by MARCO and DARPA.. IFAC-PapersOnLine, 2015, 48, 209-214.	0.5	4
358	Optimal resource allocation for containing epidemics on time-varying networks. , 2015, , .		4
359	Static output feedback: On essential feasible information patterns. , 2015, , .		4
360	Continuous Estimation Using Context-Dependent Discrete Measurements. IEEE Transactions on Automatic Control, 2019, 64, 238-253.	3.6	4

#	ARTICLE	IF	CITATIONS
361	Source Seeking in Unknown Environments with Convex Obstacles. , 2021, , .		4
362	Non-Monotone Energy-Aware Information Gathering for Heterogeneous Robot Teams. , 2021, , .		4
363	Private Weighted Sum Aggregation for Distributed Control Systems. IFAC-PapersOnLine, 2020, 53, 11081-11088.	0.5	4
364	Distributed Sampling-based Planning for Non-Myopic Active Information Gathering. , 2021, , .		4
365	Online Learning-Based Trajectory Tracking for Underactuated Vehicles With Uncertain Dynamics. , 2022, 6, 2090-2095.		4
366	Robust Motion Planning in the Presence of Estimation Uncertainty. , 2021, , .		4
367	Straightening out rectangular differential inclusions. Systems and Control Letters, 1998, 35, 79-85.	1.3	3
368	FORMATION INPUT-TO-STATE STABILITY. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 371-376.	0.4	3
369	Coordinated perception by teams of aerial and ground robots. , 2004, 5609, 181.		3
370	Recycling controllers. , 2008, , .		3
371	Resource allocation for signal detection with active sensors. , 2009, , .		3
372	A duality approach to path planning for multiple robots. , 2010, , .		3
373	A framework for integrating mobility and routing in mobile communication networks. , 2011, , .		3
374	Opportunistic sensor scheduling in wireless control systems. , 2014, , .		3
375	Computation of privacy-preserving prices in smart grids. , 2014, , .		3
376	Diffusing private data over networks. , 2016, , .		3
377	Estimation of Blood Oxygen Content Using Context-Aware Filtering. , 2016, , .		3
378	A Robust Moment Closure for General Continuous-time Epidemic Processes. , 2018, , .		3

#	ARTICLE	IF	CITATIONS
379	Minimal Reachability is Hard To Approximate. IEEE Transactions on Automatic Control, 2018, , 1-1.	3.6	3
380	Control of Generalized Discrete-Time SIS Epidemics via Submodular Function Minimization. , 2019, 3, 314-319.		3
381	A Control-Theoretic Approach to Analysis and Parameter Selection of Douglasâ€Rachford Splitting. , 2020, 4, 199-204.		3
382	N-Dimensional Distributed Network Localization with Noisy Range Measurements and Arbitrary Anchor Placement. , 2019, , .		3
383	Unit &#x0026; dynamic typing in hybrid systems modeling with CHARON. , 2006, , .		2
384	Elastic multi-particle systems for bounded-curvature path planning. , 2008, , .		2
385	A distributed dynamical scheme for fastest mixing Markov chains. , 2009, , .		2
386	MTL robust testing and verification for LPV systems. , 2009, , .		2
387	Robot deployment with end-to-end communication constraints. , 2011, , .		2
388	Closing the loop: A simple distributed method for control over wireless networks. , 2012, , .		2
389	Power-aware communication for wireless sensor-actuator systems. , 2013, , .		2
390	Stabilizability over deterministic relay networks. , 2013, , .		2
391	Connectivity of Dynamic Graphs. , 2014, , 1-8.		2
392	Smart building. , 2015, , .		2
393	Multi-owner multi-user privacy. , 2016, , .		2
394	Discrete-time fractional-order multiple scenario-based sensor selection. , 2017, , .		2
395	Quantification on the efficiency gain of automated ridesharing services. , 2017, , .		2
396	Battery management for control systems with energy harvesting sensors. , 2017, , .		2

#	ARTICLE	IF	CITATIONS
397	Distributed leader selection in switching networks of high-order integrators. , 2017, , .		2
398	Learning Statistically Accurate Resource Allocations in Non-Stationary Wireless Systems. , 2018, , .		2
399	Tuning Communication Latency for Distributed Model Predictive Control. IFAC-PapersOnLine, 2019, 52, 279-284.	0.5	2
400	Resilient Structural Stabilizability of Undirected Networks. , 2019, , .		2
401	Scalable Active Information Acquisition for Multi-Robot Systems. , 2021, , .		2
402	Deep Reinforcement Learning for Active Target Tracking. , 2021, , .		2
403	Hybrid abstractions: A search and rescue case study. , 2001, , .		1
404	Flying hot potatoes [air traffic management]. , 0, , .		1
405	Hybrid model predictive control of induction of Escherichia coli. , 2007, , .		1
406	From discrete to continuous and back: Abstractions and mesoscopic phenomena in cells. , 2008, , .		1
407	Synthesis of platform-aware attack-resilient vehicular systems. , 2013, , .		1
408	Embedding the Concurrent Autonomous Agent into a Humanoid Robot**This work was supported by CAPES (Coordena��o de Aperfei�soamento de Pessoal de N�vel Superior, process number 9174-11-7), CNPq (Conselho Nacional de Desenvolvimento Cient�fico e Tecnol�gico) and FAPESB (Fundaa�o de Amparo � Tj ETQq0 0 0 rgBT /Overlo	0.5	1
409	Value of forecasts in planning under uncertainty. , 2015, , .		1
410	On the limited communication analysis and design for decentralized estimation. , 2017, , .		1
411	Approximate Simulation Relations for Hybrid Systems11This research is partially supported by the RA�gion Rh�ne-Alpes (Projet CalCel) and the NSF Presidential Early CAREER (PECASE) Grant 0132716.. , 2006, , 106-111.		1
412	Discrete Abstraction of Stochastic Nonlinear Systems. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2014, E97.A, 452-458.	0.2	1
413	Unit & Dynamic Typing in Hybrid Systems Modeling with CHARON. , 2006, , .		1
414	A Zeroth-Order Learning Algorithm for Ergodic Optimization of Wireless Systems with no Models and no Gradients. , 2020, , .		1



#	ARTICLE	IF	CITATIONS
415	Dynamic Graphs, Connectivity of. , 2020, , 1-5.		1
416	Robust Object-Level Semantic Visual SLAM Using Semantic Keypoints. , 2022, 2, 513-524.		1
417	Reactive Informative Planning for Mobile Manipulation Tasks under Sensing and Environmental Uncertainty. , 2022, , .		1
418	Multimodal Control of Constrained Nonlinear Systems. , 2004, , 325-344.		0
419	HMM-based characterization of channel behavior for networked control systems. , 2012, , .		0
420	Bacteria-Powered Microrobots. , 2012, , 249-275.		0
421	Stochastic Models and Control of Bacterial Bioactuators and Biomicrorobots. , 2012, , 115-144.		0
422	Networked realization of discrete-time controllers. , 2013, , .		0
423	Approximation of network linear operators using similarity shift filters. , 2016, , .		0
424	Scenario-Based Model Predictive Control for Energy Harvesting Actuators. , 2018, , .		0
425	Optimization of Switched Linear Systems Over Non-Stationary Wireless Channels. , 2018, , .		0
426	Dynamic Graphs, Connectivity of. , 2021, , 630-633.		0
427	Almost-Zero Duality Gaps in Model-Free Resource Allocation for Wireless Systems. , 2021, , .		0
428	Hybrid Systems Applications: An Oxymoron?. Lecture Notes in Computer Science, 2001, , 5-6.	1.0	0
429	Hybrid Control and Transport Using Bacteria-Driven Microbiorobots. , 2009, , .		0
430	Learning to Control over Unknown Wireless Channels. IFAC-PapersOnLine, 2020, 53, 2600-2605.	0.5	0