

Richard M Murray

List of Publications by Year in descending order

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268
papers

22,704
citations

36203

51
h-index

14156

128
g-index

329
all docs

329
docs citations

329
times ranked

13191
citing authors

#	ARTICLE	IF	CITATIONS
1	Consensus and Cooperation in Networked Multi-Agent Systems. Proceedings of the IEEE, 2007, 95, 215-233.	16.4	8,050
2	Recent Research in Cooperative Control of Multivehicle Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2007, 129, 571-583.	0.9	810
3	Distributed receding horizon control for multi-vehicle formation stabilization. Automatica, 2006, 42, 549-558.	3.0	628
4	Model reduction for compressible flows using POD and Galerkin projection. Physica D: Nonlinear Phenomena, 2004, 189, 115-129.	1.3	589
5	Nonholonomic mechanical systems with symmetry. Archive for Rational Mechanics and Analysis, 1996, 136, 21-99.	1.1	504
6	On a stochastic sensor selection algorithm with applications in sensor scheduling and sensor coverage. Automatica, 2006, 42, 251-260.	3.0	414
7	DISTRIBUTED COOPERATIVE CONTROL OF MULTIPLE VEHICLE FORMATIONS USING STRUCTURAL POTENTIAL FUNCTIONS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 495-500.	0.4	344
8	Linear DNA for Rapid Prototyping of Synthetic Biological Circuits in an <i>Escherichia coli</i> Based TX-TL Cell-Free System. ACS Synthetic Biology, 2014, 3, 387-397.	1.9	302
9	Privacy Preserving Average Consensus. IEEE Transactions on Automatic Control, 2017, 62, 753-765.	3.6	292
10	Protocols for Implementing an <i>Escherichia coli</i> Based TX-TL Cell-Free Expression System for Synthetic Biology. Journal of Visualized Experiments, 2013, , e50762.	0.2	280
11	Optimal LQG control across packet-dropping links. Systems and Control Letters, 2007, 56, 439-446.	1.3	253
12	Model predictive control with signal temporal logic specifications. , 2014, , .		251
13	Autonomous driving in urban environments: approaches, lessons and challenges. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 4649-4672.	1.6	238
14	Geometric phases and robotic locomotion. Journal of Field Robotics, 1995, 12, 417-431.	0.7	220
15	Rapid cell-free forward engineering of novel genetic ring oscillators. ELife, 2015, 4, e09771.	2.8	214
16	Regulatory activity revealed by dynamic correlations in gene expression noise. Nature Genetics, 2008, 40, 1493-1498.	9.4	210
17	Timing molecular motion and production with a synthetic transcriptional clock. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E784-93.	3.3	208
18	Receding Horizon Temporal Logic Planning. IEEE Transactions on Automatic Control, 2012, 57, 2817-2830.	3.6	199

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19	Kalman Filtering Over a Packet-Dropping Network: A Probabilistic Perspective. IEEE Transactions on Automatic Control, 2010, 55, 594-604.	3.6	178
20	Gene Circuit Performance Characterization and Resource Usage in a Cell-Free “Breadboard”, ACS Synthetic Biology, 2014, 3, 416-425.	1.9	174
21	Robot navigation in dense human crowds: Statistical models and experimental studies of human-robot cooperation. International Journal of Robotics Research, 2015, 34, 335-356.	5.8	172
22	Real-time trajectory generation for differentially flat systems. International Journal of Robust and Nonlinear Control, 1998, 8, 995-1020.	2.1	165
23	Rapidly Characterizing the Fast Dynamics of RNA Genetic Circuitry with Cell-Free Transcription-Translation (TX-TL) Systems. ACS Synthetic Biology, 2015, 4, 503-515.	1.9	154
24	A Contract-Based Methodology for Aircraft Electric Power System Design. IEEE Access, 2014, 2, 1-25.	2.6	147
25	Trajectory Planning of Differentially Flat Systems with Dynamics and Inequalities. Journal of Guidance, Control, and Dynamics, 2001, 24, 219-227.	1.6	141
26	Reactive synthesis from signal temporal logic specifications. , 2015, , .		140
27	TuLiP. , 2011, , .		132
28	Flying <i>Drosophila</i> stabilize their vision-based velocity controller by sensing wind with their antennae. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1182-91.	3.3	130
29	Nilpotent bases for a class of nonintegrable distributions with applications to trajectory generation for nonholonomic systems. Mathematics of Control, Signals, and Systems, 1994, 7, 58-75.	1.4	127
30	Biophysical Constraints Arising from Compositional Context in Synthetic Gene Networks. Cell Systems, 2017, 5, 11-24.e12.	2.9	120
31	Synthesis of Reactive Switching Protocols From Temporal Logic Specifications. IEEE Transactions on Automatic Control, 2013, 58, 1771-1785.	3.6	114
32	Decomposition of human motion into dynamics-based primitives with application to drawing tasks. Automatica, 2003, 39, 2085-2098.	3.0	113
33	Receding horizon control for temporal logic specifications. , 2010, , .		113
34	Characterizing and prototyping genetic networks with cell-free transcription-translation reactions. Methods, 2015, 86, 60-72.	1.9	112
35	Non-holonomic control systems: from steering to stabilization with sinusoids. International Journal of Control, 1995, 62, 849-870.	1.2	110
36	Population Diversification in a Yeast Metabolic Program Promotes Anticipation of Environmental Shifts. PLoS Biology, 2015, 13, e1002042.	2.6	110

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37	Variational principles for constrained systems: Theory and experiment. International Journal of Non-Linear Mechanics, 1995, 30, 793-815.	1.4	108
38	Robot navigation in dense human crowds: the case for cooperation. , 2013, , .		102
39	Receding horizon temporal logic planning for dynamical systems. , 2009, , .		97
40	Linear models for control of cavity flow oscillations. Journal of Fluid Mechanics, 2006, 547, 317.	1.4	96
41	Quantized Consensus by Means of Gossip Algorithm. IEEE Transactions on Automatic Control, 2012, 57, 19-32.	3.6	95
42	Asynchronous Distributed Averaging on Communication Networks. IEEE/ACM Transactions on Networking, 2007, 15, 512-520.	2.6	93
43	Robust control of uncertain Markov Decision Processes with temporal logic specifications. , 2012, , .		89
44	Alice: An information-rich autonomous vehicle for high-speed desert navigation. Journal of Field Robotics, 2006, 23, 777-810.	3.2	88
45	A population-based temporal logic gate for timing and recording chemical events. Molecular Systems Biology, 2016, 12, 869.	3.2	88
46	Multi-Hop Relay Protocols for Fast Consensus Seeking. , 2006, , .		86
47	Kalman filtering over a packet-delaying network: A probabilistic approach. Automatica, 2009, 45, 2134-2140.	3.0	84
48	The Swarm at the Edge of the Cloud. IEEE Design and Test, 2014, 31, 8-20.	1.1	83
49	Engineering Transcriptional Regulator Effector Specificity Using Computational Design and <i>In Vitro</i> Rapid Prototyping: Developing a Vanillin Sensor. ACS Synthetic Biology, 2016, 5, 287-295.	1.9	82
50	State estimation over packet dropping networks using multiple description coding. Automatica, 2006, 42, 1441-1452.	3.0	81
51	Probabilistic performance of state estimation across a lossy network. Automatica, 2008, 44, 3046-3053.	3.0	80
52	Synthetic circuit for exact adaptation and fold-change detection. Nucleic Acids Research, 2014, 42, 6078-6089.	6.5	80
53	Design and Implementation of a Biomolecular Concentration Tracker. ACS Synthetic Biology, 2015, 4, 150-161.	1.9	80
54	Decentralized Multi-Agent Optimization via Dual Decomposition. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 11245-11251.	0.4	78

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55	Synergistic dual positive feedback loops established by molecular sequestration generate robust bimodal response. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E3324-33.	3.3	76
56	To Drop or Not to Drop: Design Principles for Kalman Filtering Over Wireless Fading Channels. <i>IEEE Transactions on Automatic Control</i> , 2009, 54, 376-381.	3.6	75
57	Control Theory for Synthetic Biology: Recent Advances in System Characterization, Control Design, and Controller Implementation for Synthetic Biology. <i>IEEE Control Systems</i> , 2018, 38, 32-62.	1.0	75
58	Optimization-based trajectory generation with linear temporal logic specifications. , 2014, , .		73
59	Future systems and control research in synthetic biology. <i>Annual Reviews in Control</i> , 2018, 45, 5-17.	4.4	65
60	Nonlinear control of mechanical systems: A Lagrangian perspective. <i>Annual Reviews in Control</i> , 1997, 21, 31-42.	4.4	63
61	Modelling efficient pisciform swimming for control. , 2000, 10, 217-241.		62
62	Communication and sensing tradeoffs in cooperative mobile networks. <i>Asian Journal of Control</i> , 2008, 10, 156-170.	1.9	59
63	Reduction and identification methods for Markovian control systems, with application to thin film deposition. <i>International Journal of Robust and Nonlinear Control</i> , 2004, 14, 113-132.	2.1	56
64	Negative Autoregulation Matches Production and Demand in Synthetic Transcriptional Networks. <i>ACS Synthetic Biology</i> , 2014, 3, 589-599.	1.9	54
65	Hard Limits and Performance Tradeoffs in a Class of Antithetic Integral Feedback Networks. <i>Cell Systems</i> , 2019, 9, 49-63.e16.	2.9	54
66	Discriminating External and Internal Causes for Heading Changes in Freely Flying <i>Drosophila</i> . <i>PLoS Computational Biology</i> , 2013, 9, e1002891.	1.5	52
67	Controlling biological networks by time-delayed signals. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 439-454.	1.6	49
68	A survey of good practice in control education. <i>European Journal of Engineering Education</i> , 2018, 43, 801-823.	1.5	46
69	Control design for hybrid systems with TuLiP: The Temporal Logic Planning toolbox. , 2016, , .		44
70	Cell-free extract based optimization of biomolecular circuits with droplet microfluidics. <i>Lab on A Chip</i> , 2017, 17, 3037-3042.	3.1	41
71	Backtracking temporal logic synthesis for uncertain environments. , 2012, , .		40
72	Nonlinear Control of Mechanical Systems: A Lagrangian Perspective. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1995, 28, 349-360.	0.4	38

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73	Synthesis of Control Protocols for Autonomous Systems. Unmanned Systems, 2013, 01, 21-39.	2.7	38
74	Automaton-guided controller synthesis for nonlinear systems with temporal logic. , 2013, , .		38
75	Verifying Cyber-Physical Interactions in Safety-Critical Systems. IEEE Security and Privacy, 2013, 11, 28-37.	1.5	37
76	Efficient reactive controller synthesis for a fragment of linear temporal logic. , 2013, , .		37
77	Design of a Toolbox of RNA Thermometers. ACS Synthetic Biology, 2017, 6, 1461-1470.	1.9	36
78	Dynamics and stability of a class of low Reynolds number swimmers near a wall. Physical Review E, 2009, 79, 045302.	0.8	35
79	Dynamical models for control of cavity oscillations. , 2001, , .		34
80	On quantized consensus by means of gossip algorithm - Part II: Convergence time. , 2009, , .		34
81	Framework for Low-Observable Trajectory Generation in Presence of Multiple Radars. Journal of Guidance, Control, and Dynamics, 2008, 31, 1740-1749.	1.6	33
82	Population regulation in microbial consortia using dual feedback control. , 2017, , .		33
83	Cell-Free and <i>In Vivo</i> Characterization of Lux, Las, and Rpa Quorum Activation Systems in <i>E. Coli</i> . ACS Synthetic Biology, 2018, 7, 752-755.	1.9	33
84	On synthesizing robust discrete controllers under modeling uncertainty. , 2012, , .		32
85	On the robustness of distributed algorithms. , 2006, , .		31
86	REAL-TIME CONSTRAINED TRAJECTORY GENERATION APPLIED TO A FLIGHT CONTROL EXPERIMENT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 175-180.	0.4	30
87	Robust Model Predictive Control for Signal Temporal Logic Synthesis. IFAC-PapersOnLine, 2015, 48, 323-328.	0.5	30
88	Single Day Construction of Multigene Circuits with 3G Assembly. ACS Synthetic Biology, 2018, 7, 1477-1480.	1.9	30
89	Construction of Incoherent Feedforward Loop Circuits in a Cell-Free System and in Cells. ACS Synthetic Biology, 2019, 8, 606-610.	1.9	30
90	On quantized consensus by means of gossip algorithm - Part I: Convergence proof. , 2009, , .		29

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91	Computing augmented finite transition systems to synthesize switching protocols for polynomial switched systems. , 2013, , .		29
92	Estimation Over Wireless Sensor Networks: Tradeoff between Communication, Computation and Estimation Qualities. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 605-611.	0.4	28
93	Distributed power allocation for vehicle management systems. , 2011, , .		28
94	Synthesis of correct-by-construction control protocols for hybrid systems using partial state information. , 2014, , .		28
95	Quantifying resource competition and its effects in the TX-TL system. , 2016, , .		28
96	Discrete state estimators for systems on a lattice. Automatica, 2006, 42, 271-285.	3.0	27
97	Distributed Synthesis of Control Protocols for Smart Camera Networks. , 2011, , .		27
98	A robust model predictive control algorithm augmented with a reactive safety mode. Automatica, 2013, 49, 1251-1260.	3.0	27
99	Online Control Customization via Optimization-Based Control. , 2004, , 149-174.		26
100	Convergence Rates for Nonholonomic Systems in Power Form. , 1993, , .		26
101	A scalable formulation for engineering combination therapies for evolutionary dynamics of disease. , 2014, , .		25
102	Dynamics and Stability of Low-Reynolds-Number Swimming Near a Wall. SIAM Journal on Applied Dynamical Systems, 2011, 10, 1013-1041.	0.7	24
103	Industrial Cyber-Physical Systems â€“ iCyPhy. , 2014, , 21-37.		23
104	Synthetic mammalian signaling circuits for robust cell population control. Cell, 2022, 185, 967-979.e12.	13.5	23
105	Towards formal synthesis of reactive controllers for dexterous robotic manipulation. , 2012, , .		21
106	Privacy preserving average consensus. , 2014, , .		21
107	An in silico modeling toolbox for rapid prototyping of circuits in a biomolecular “breadboard” system. , 2013, , .		20
108	Biomolecular resource utilization in elementary cell-free gene circuits. , 2013, , .		20

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109	Using Hierarchical Decomposition to Speed Up Average Consensus. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 612-618.	0.4	19
110	A method for cost-effective and rapid characterization of engineered T7-based transcription factors by cell-free protein synthesis reveals insights into the regulation of T7 RNA polymerase-driven expression. Archives of Biochemistry and Biophysics, 2019, 674, 108045.	1.4	19
111	Bifurcation control of rotating stall with actuator magnitude and rate limits: Part I—model reduction and qualitative dynamics. Automatica, 2002, 38, 597-610.	3.0	18
112	Limits on the network sensitivity function for homogeneous multi-agent systems on a graph. , 2010, , .		18
113	A hovercraft robot that uses insect-inspired visual autocorrelation for motion control in a corridor. , 2011, , .		18
114	Formal Synthesis of Embedded Control Software: Application to Vehicle Management Systems. , 2011, , .		18
115	A case study on reactive protocols for aircraft electric power distribution. , 2012, , .		18
116	Patching task-level robot controllers based on a local μ-calculus formula. , 2013, , .		18
117	Optimal Control with Weighted Average Costs and Temporal Logic Specifications. , 0, , .		18
118	Effective Sensor Scheduling Schemes in a Sensor Network by Employing Feedback in the Communication Loop. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	17
119	Nonlinear lateral control strategy for nonholonomic vehicles. , 2008, , .		17
120	Compositional stability analysis based on dual decomposition. , 2009, , .		17
121	Optimal Control of Nonlinear Systems with Temporal Logic Specifications. Springer Tracts in Advanced Robotics, 2016, , 21-37.	0.3	17
122	Estimation schemes for networked control systems using UDP-like communication. , 2007, , .		16
123	Real-valued average consensus over noisy quantized channels. , 2009, , .		16
124	Collaborative system identification via parameter consensus. , 2014, , .		16
125	An analytical approach to bistable biological circuit discrimination using real algebraic geometry. Journal of the Royal Society Interface, 2015, 12, 20150288.	1.5	16
126	Automata theory meets approximate dynamic programming: Optimal control with temporal logic constraints. , 2016, , .		16

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127	Bifurcation control of rotating stall with actuator magnitude and rate limits: Part II—control synthesis and comparison with experiments. <i>Automatica</i> , 2002, 38, 611-625.	3.0	15
128	A Multi-Model Approach to Identification of Biosynthetic Pathways. <i>Proceedings of the American Control Conference</i> , 2007, , .	0.0	15
129	Kalman filtering over a packet dropping network: A probabilistic approach. , 2008, , .		15
130	Verification of Periodically Controlled Hybrid Systems. <i>Transactions on Embedded Computing Systems</i> , 2012, 11, 1-24.	2.1	15
131	Reverse engineering combination therapies for evolutionary dynamics of disease: An ℌ<inf>∞</inf> approach. , 2013, , .		15
132	Biologically Inspired Feedback Design for Drosophila Flight. <i>Proceedings of the American Control Conference</i> , 2007, , .	0.0	14
133	Optimal control of non-deterministic systems for a computationally efficient fragment of temporal logic. , 2013, , .		14
134	A compositional approach to stochastic optimal control with co-safe temporal logic specifications. , 2014, , .		14
135	Random consensus protocol in large-scale networks. , 2007, , .		13
136	On-chip membrane protein cell-free expression enables development of a direct binding assay: A curious case of potassium channel KcsA-Kv1.3. <i>Analytical Biochemistry</i> , 2018, 556, 70-77.	1.1	13
137	A bio-plausible design for visual attitude stabilization. , 2009, , .		12
138	Kalman filtering over wireless fading channels—How to handle packet drop. <i>International Journal of Robust and Nonlinear Control</i> , 2009, 19, 1993-2015.	2.1	12
139	A bio-plausible design for visual pose stabilization. , 2010, , .		12
140	Quantifying crosstalk in biochemical systems. , 2012, , .		12
141	Just-in-time synthesis for reactive motion planning with temporal logic. , 2013, , .		12
142	Convex Optimal Uncertainty Quantification. <i>SIAM Journal on Optimization</i> , 2015, 25, 1368-1387.	1.2	12
143	Cross-entropy temporal logic motion planning. , 2015, , .		12
144	Stability of Systems with Stochastic Delays and Applications to Genetic Regulatory Networks. <i>SIAM Journal on Applied Dynamical Systems</i> , 2016, 15, 1844-1873.	0.7	12

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145	Guidelines for designing the antithetic feedback motif. <i>Physical Biology</i> , 2020, 17, 055002.	0.8	12
146	BioCRNpyler: Compiling chemical reaction networks from biomolecular parts in diverse contexts. <i>PLoS Computational Biology</i> , 2022, 18, e1009987.	1.5	12
147	A homotopy algorithm for approximating geometric distributions by integrable systems. <i>Systems and Control Letters</i> , 1996, 27, 285-291.	1.3	11
148	Estimation for Nonlinear Dynamical Systems over Packet-Dropping Networks. <i>Proceedings of the American Control Conference</i> , 2007, , .	0.0	11
149	Change sensor topology when needed: How to efficiently use system resources in control and estimation over wireless networks. , 2007, , .		11
150	Alice: An Information-Rich Autonomous Vehicle for High-Speed Desert Navigation. , 2007, , 437-482.		11
151	A Robust Model Predictive Control Algorithm with a Reactive Safety Mode. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008, 41, 13175-13181.	0.4	11
152	Designing robustness to temperature in a feedforward loop circuit. , 2014, , .		11
153	Methodology and Tools for Next Generation Cyber-Physical Systems: The iCyPhy Approach. <i>IncoSE International Symposium</i> , 2015, 25, 235-249.	0.2	11
154	Specification and Synthesis of Reactive Protocols for Aircraft Electric Power Distribution. <i>IEEE Transactions on Control of Network Systems</i> , 2015, 2, 193-203.	2.4	11
155	The Effects of Time-Varying Temperature on Delays in Genetic Networks. <i>SIAM Journal on Applied Dynamical Systems</i> , 2016, 15, 1734-1752.	0.7	11
156	Frequency-Weighted Model Reduction with Applications to Structured Models. <i>Proceedings of the American Control Conference</i> , 2007, , .	0.0	10
157	Learning diffeomorphism models of robotic sensorimotor cascades. , 2012, , .		10
158	Reactive controllers for differentially flat systems with temporal logic constraints. , 2012, , .		10
159	Pre-orders for reasoning about stability properties with respect to input of hybrid systems. , 2013, , .		10
160	Guiding Ethical Principles in Engineering Biology Research. <i>ACS Synthetic Biology</i> , 2021, 10, 907-910.	1.9	10
161	Characterizing the Effects of Air Injection on Compressor Performance for Use in Active Control of Rotating Stall. , 1997, , .		9
162	On Sensor Coverage by Mobile Sensors. , 2006, , .		9

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163	Robust Model Predictive Control with a Safety Mode: Applied to Small-Body Proximity Operations. , 2008, , .		9
164	Resource competition as a source of non-minimum phase behavior in transcription-translation systems. , 2013, , .		9
165	Modeling the effects of compositional context on promoter activity in an E. coli extract based transcription-translation system. , 2014, , .		9
166	A multi-paradigm language for reactive synthesis. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 202, 73-97.	0.8	9
167	Safety verification of a fault tolerant reconfigurable autonomous goal-based robotic control system. , 2007, , .		8
168	Design, modeling and synthesis of an in vitro transcription rate regulatory circuit. , 2008, , .		8
169	Flight Dynamics and Control of Evasive Maneuvers: The Fruit Fly's Takeoff. IEEE Transactions on Biomedical Engineering, 2009, 56, 2295-2298.	2.5	8
170	Temperature dependence of biomolecular circuit designs. , 2013, , .		8
171	Efficient control synthesis for augmented finite transition systems with an application to switching protocols. , 2014, , .		8
172	Global network identification from reconstructed dynamical structure subnetworks: Applications to biochemical reaction networks. , 2015, , .		8
173	A risk-aware architecture for resilient spacecraft operations. , 2015, , .		8
174	Periodically Controlled Hybrid Systems. Lecture Notes in Computer Science, 2009, , 396-410.	1.0	8
175	Flat systems: open problems, infinite dimensional extension, symmetries and catalog. , 2001, , 33-57.		7
176	Feedback stabilization of bifurcations in multivariable nonlinear systemsâ€”Part II: Hopf bifurcations. International Journal of Robust and Nonlinear Control, 2007, 17, 295-326.	2.1	7
177	Optimal sensor hop selection: Sensor energy minimization and network lifetime maximization with guaranteed system performance. , 2008, , .		7
178	A real-time helicopter testbed for insect-inspired visual flight control. , 2009, , .		7
179	Design of insulating devices for in vitro synthetic circuits. , 2009, , .		7
180	Bootstrapping bilinear models of robotic sensorimotor cascades. , 2011, , .		7

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181	Motion planning in observations space with learned diffeomorphism models. , 2013, , .		7
182	Exact stability analysis of discrete-time linear systems with stochastic delays. , 2014, , .		7
183	Analysis of primitive genetic interactions for the design of a genetic signal differentiator. Synthetic Biology, 2019, 4, ysz015.	1.2	7
184	Data-driven network models for genetic circuits from time-series data with incomplete measurements. Journal of the Royal Society Interface, 2021, 18, 20210413.	1.5	7
185	Robustness guarantees for structured model reduction of dynamical systems with applications to biomolecular models. International Journal of Robust and Nonlinear Control, 2023, 33, 5058-5086.	2.1	7
186	Design and performance of in vitro transcription rate regulatory circuits. , 2008, , .		6
187	Bootstrapping sensorimotor cascades: A group-theoretic perspective. , 2011, , .		6
188	Dynamic state estimation in distributed aircraft electric control systems via adaptive submodularity. , 2013, , .		6
189	Multi-dimensional state estimation in adversarial environment. , 2015, , .		6
190	Symbolic construction of GR(1) contracts for systems with full information. , 2016, , .		6
191	The Resilient Spacecraft Executive: An Architecture for Risk-Aware Operations in Uncertain Environments. , 2016, , .		6
192	A MATLAB toolbox for modeling genetic circuits in cell-free systems. Synthetic Biology, 2021, 6, ysab007.	1.2	6
193	Bleed Valve Rate Requirements Evaluation in Rotating Stall Control on Axial Compressors. Journal of Propulsion and Power, 2000, 16, 781-791.	1.3	5
194	Effective transition rates for epitaxial growth using fast modulation. Physical Review B, 2004, 70, .	1.1	5
195	Kalman Filtering with Uncertain Process and Measurement Noise Covariances with Application to State Estimation in Sensor Networks. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	5
196	Feedback stabilization of bifurcations in multivariable nonlinear systems. Part I: equilibrium bifurcations. International Journal of Robust and Nonlinear Control, 2007, 17, 265-293.	2.1	5
197	Analysis and design of a synthetic transcriptional network for exact adaptation. , 2011, , .		5
198	An iterative abstraction algorithm for reactive correct-by-construction controller synthesis. , 2015, , .		5

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199	A stochastic framework for the design of transient and steady state behavior of biochemical reaction networks. , 2015, , .		5
200	Optimal Experiment Design and Leveraging Competition for Shared Resources in Cell-Free Extracts. , 2018, , .		5
201	Layering Assume-Guarantee Contracts for Hierarchical System Design. Proceedings of the IEEE, 2018, 106, 1616-1654.	16.4	5
202	Synthetic logic circuits using RNA aptamer against T7 RNA polymerase. Biotechnology Journal, 2022, 17, e2000449.	1.8	5
203	Nonlinear Control of Mechanical Systems: A Lagrangian Perspective. , 1995, , 349-360.		4
204	Effects of magnitude saturation in control of bifurcations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 2667-2672.	0.4	4
205	Control over a packet dropping network with norm bounded uncertainties. Asian Journal of Control, 2008, 10, 14-23.	1.9	4
206	Quantized consensus via adaptive stochastic gossip algorithm. , 2009, , .		4
207	Uncertain semantics, representation nuisances, and necessary invariance properties of bootstrapping agents. , 2011, , .		4
208	An aircraft electric power testbed for validating automatically synthesized reactive control protocols. , 2013, , .		4
209	Modeling environmental disturbances with the chemical master equation. , 2013, , .		4
210	Control Software Synthesis and Validation for a Vehicular Electric Power Distribution Testbed. Journal of Aerospace Information Systems, 2014, 11, 665-678.	1.0	4
211	Bootstrapping bilinear models of Simple Vehicles. International Journal of Robotics Research, 2015, 34, 1087-1113.	5.8	4
212	Assessment of Robustness to Temperature in a Negative Feedback Loop and a Feedforward Loop. ACS Synthetic Biology, 2020, 9, 1581-1590.	1.9	4
213	Existence of Cascade Discrete-Continuous State Estimators for Systems on a Partial Order. Lecture Notes in Computer Science, 2005, , 226-241.	1.0	4
214	Geometric control of particle manipulation in a two-dimensional fluid. , 2009, , .		3
215	Fault detection and isolation from uninterpreted data in robotic sensorimotor cascades. , 2012, , .		3
216	Convex optimal uncertainty quantification: Algorithms and a case study in energy storage placement for power grids. , 2013, , .		3

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217	Hot-swapping robot task goals in reactive formal synthesis. , 2014, , .		3
218	A state-space realization approach to set identification of biochemical kinetic parameters. , 2015, , .		3
219	Application of Correct-by-Construction Principles for a Resilient Risk-Aware Architecture. , 2015, , .		3
220	Interfacing TuLiP with the JPL statechart autocoder: Initial progress toward synthesis of flight software from formal specifications. , 2016, , .		3
221	Enhancing tolerance to unexpected jumps in GR(1) games. , 2017, , .		3
222	Time-Optimal Navigation in Uncertain Environments with High-Level Specifications. , 2021, , .		3
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