

# Mario di Bernardo

## List of Publications by Year in descending order

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294  
papers

9,505  
citations

46918

47  
h-index

49773

87  
g-index

314  
all docs

314  
docs citations

314  
times ranked

5795  
citing authors

#	ARTICLE	IF	CITATIONS
1	Embedded control of cell growth using tunable genetic systems. <i>International Journal of Robust and Nonlinear Control</i> , 2023, 33, 4893-4907.	2.1	1
2	Feedback Ratiometric Control of Two Microbial Populations in a Single Chemostat. , 2022, 6, 800-805.		7
3	Herding stochastic autonomous agents via local control rules and online target selection strategies. <i>Autonomous Robots</i> , 2022, 46, 469-481.	3.2	9
4	Multicellular PI Control for Gene Regulation in Microbial Consortia. , 2022, 6, 3373-3378.		6
5	Control-Based Continuation: A New Approach to Prototype Synthetic Gene Networks. <i>ACS Synthetic Biology</i> , 2022, 11, 2300-2313.	1.9	7
6	Ratiometric control of cell phenotypes in a monostrain microbial consortia. <i>Journal of the Royal Society Interface</i> , 2022, 19, .	1.5	11
7	Multicellular Feedback Control of a Genetic Toggle-Switch in Microbial Consortia. , 2021, 5, 151-156.		15
8	Distributed Discontinuous Coupling for Convergence in Heterogeneous Networks. , 2021, 5, 1037-1042.		7
9	Controlling Collective Behavior in Complex Systems. , 2021, , 441-450.		0
10	ChipSeg: An Automatic Tool to Segment Bacterial and Mammalian Cells Cultured in Microfluidic Devices. <i>ACS Omega</i> , 2021, 6, 2473-2476.	1.6	13
11	Reverse Engineering and Feedback Control of Gene Networks. , 2021, , 1873-1879.		1
12	Using Learning to Control Artificial Avatars in Human Motor Coordination Tasks. <i>IEEE Transactions on Robotics</i> , 2021, 37, 2067-2082.	7.3	5
13	Automatic synchronisation of the cell cycle in budding yeast through closed-loop feedback control. <i>Nature Communications</i> , 2021, 12, 2452.	5.8	13
14	Cheetah: A Computational Toolkit for Cybergenetic Control. <i>ACS Synthetic Biology</i> , 2021, 10, 979-989.	1.9	23
15	Convergence and synchronization in networks of piecewise-smooth systems via distributed discontinuous coupling. <i>Automatica</i> , 2021, 129, 109596.	3.0	14
16	Dynamic Input Deep Learning Control of Artificial Avatars in a Multi-Agent Joint Motor Task. <i>Frontiers in Robotics and AI</i> , 2021, 8, 665301.	2.0	1
17	Spontaneous emergence of leadership patterns drives synchronization in complex human networks. <i>Scientific Reports</i> , 2021, 11, 18379.	1.6	11
18	Control engineering meets synthetic biology: Foundations and applications. <i>Current Opinion in Systems Biology</i> , 2021, 28, 100397.	1.3	14

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19	Reverse Engineering and Feedback Control of Gene Networks. , 2021, , 1-7.		0
20	Human-inspired strategies to solve complex joint tasks in multi agent systems. IFAC-PapersOnLine, 2021, 54, 105-110.	0.5	4
21	Modeling Frequency Reduction in Human Groups Performing a Joint Oscillatory Task. Frontiers in Psychology, 2021, 12, 753758.	1.1	3
22	Intermittent non-pharmaceutical strategies to mitigate the COVID-19 epidemic in a network model of Italy via constrained optimization. , 2021, , .		0
23	Decentralized Gain Adaptation for Optimal Pinning Controllability of Complex Networks. , 2020, 4, 253-258.		8
24	Model-Based Feedback Control of Live Zebrafish Behavior via Interaction With a Robotic Replica. IEEE Transactions on Robotics, 2020, 36, 28-41.	7.3	14
25	Synchronization in Multiplex Networks of Chua's Circuits: Theory and Experiments. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 927-938.	3.5	17
26	<i>In Vivo</i> Feedback Control of an Antithetic Molecular-Titration Motif in <i>Escherichia coli</i> Using Microfluidics. ACS Synthetic Biology, 2020, 9, 2617-2624.	1.9	37
27	A network model of Italy shows that intermittent regional strategies can alleviate the COVID-19 epidemic. Nature Communications, 2020, 11, 5106.	5.8	122
28	Moving in unison after perceptual interruption. Scientific Reports, 2020, 10, 18032.	1.6	15
29	Nonverbal leadership emergence in walking groups. Scientific Reports, 2020, 10, 18948.	1.6	12
30	Self-adaptive biosystems through tunable genetic parts and circuits. Current Opinion in Systems Biology, 2020, 24, 78-85.	1.3	17
31	Tunable genetic devices through simultaneous control of transcription and translation. Nature Communications, 2020, 11, 2095.	5.8	29
32	Balancing Cell Populations Endowed with a Synthetic Toggle Switch <i>via</i> Adaptive Pulsatile Feedback Control. ACS Synthetic Biology, 2020, 9, 793-803.	1.9	23
33	Controlling Collective Behavior in Complex Systems. , 2020, , 1-10.		2
34	A strategy for multicellular feedback control in mammalian cells. , 2019, , .		1
35	On distributed coordination in networks of cyber-physical systems. Chaos, 2019, 29, 053126.	1.0	4
36	Analysis and Control of Genetic Toggle Switches Subject to Periodic Multi-Input Stimulation. , 2019, 3, 278-283.		22

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37	Ratiometric control for differentiation of cell populations endowed with synthetic toggle switches. , 2019, , .		16
38	Feedback control promotes synchronisation of the cell-cycle across a population of yeast cells. , 2019, , .		4
39	Towards feedback control of the cell-cycle across a population of yeast cells. , 2019, , .		5
40	In-silico feedback control of a MIMO synthetic Toggle Switch via Pulse-Width Modulation. , 2019, , .		11
41	Control of Painlevé Paradox in a Robotic System. , 2019, , .		0
42	A low-cost, open-source Turbidostat design for in-vivo control experiments in Synthetic Biology. IFAC-PapersOnLine, 2019, 52, 244-248.	0.5	4
43	Pinning Controllability of Complex Network Systems With Noise. IEEE Transactions on Control of Network Systems, 2019, 6, 874-883.	2.4	25
44	Data-driven modelling of social forces and collective behaviour in zebrafish. Journal of Theoretical Biology, 2018, 443, 39-51.	0.8	50
45	Organization of feed-forward loop motifs reveals architectural principles in natural and engineered networks. Science Advances, 2018, 4, eaap9751.	4.7	40
46	Design and Validation of a Virtual Player for Studying Interpersonal Coordination in the Mirror Game. IEEE Transactions on Cybernetics, 2018, 48, 1018-1029.	6.2	18
47	Improved Control Strategies for Atomic Force Microscopes in Intermittent Contact Mode. IEEE Transactions on Control Systems Technology, 2018, 26, 1673-1684.	3.2	2
48	Self-Organization of Weighted Networks for Optimal Synchronizability. IEEE Transactions on Control of Network Systems, 2018, 5, 1541-1550.	2.4	22
49	Cloud-Supported Self-Triggered Control for Multi-Agent Circumnavigation. , 2018, , .		0
50	Emergence of leadership in complex networks and human groups. , 2018, , .		2
51	Controlling the collective behaviour of networks of heterogenous Kuramoto oscillators with phase lags. , 2018, , .		2
52	An interactive control architecture for interpersonal coordination in mirror game. Control Engineering Practice, 2018, 80, 36-48.	3.2	4
53	Generation and classification of individual behaviours for virtual players control in motor coordination tasks. , 2018, , .		2
54	Enhancing pinning controllability of complex networks of coupled maps. , 2018, , .		0

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55	Stabilizing Quorum-Sensing Networks via Noise. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 647-651.	2.2	3
56	Synchronization of Networks of Piecewise-Smooth Systems. , 2018, 2, 653-658.		9
57	Distributed optimisation and control of graph Laplacian eigenvalues for robust consensus via an adaptive multilayer strategy. International Journal of Robust and Nonlinear Control, 2017, 27, 1499-1525.	2.1	13
58	Exploiting Nodes Symmetries to Control Synchronization and Consensus Patterns in Multiagent Systems. , 2017, 1, 364-369.		19
59	BSim 2.0: An Advanced Agent-Based Cell Simulator. ACS Synthetic Biology, 2017, 6, 1969-1972.	1.9	43
60	Unravelling socio-motor biomarkers in schizophrenia. NPJ Schizophrenia, 2017, 3, 8.	2.0	32
61	<i>In-Silico</i> Analysis and Implementation of a Multicellular Feedback Control Strategy in a Synthetic Bacterial Consortium. ACS Synthetic Biology, 2017, 6, 507-517.	1.9	54
62	Pinning Controllability of Complex Stochastic Networks. IFAC-PapersOnLine, 2017, 50, 8327-8332.	0.5	9
63	Observer design for piecewise smooth and switched systems via contraction theory * *Corresponding author Mario di Bernardo.. IFAC-PapersOnLine, 2017, 50, 2959-2964.	0.5	2
64	Reconstructing the structure of directed and weighted networks of nonlinear oscillators. Physical Review E, 2017, 95, 042302.	0.8	20
65	An Orthogonal Multi-input Integration System to Control Gene Expression in <i>Escherichia coli</i> . ACS Synthetic Biology, 2017, 6, 1816-1824.	1.9	52
66	Interaction patterns and individual dynamics shape the way we move in synchrony. Scientific Reports, 2017, 7, 6846.	1.6	44
67	Decision landscapes: visualizing mouse-tracking data. Royal Society Open Science, 2017, 4, 170482.	1.1	22
68	Influence of facial feedback during a cooperative human-robot task in schizophrenia. Scientific Reports, 2017, 7, 15023.	1.6	17
69	Dynamic Cell Mapping Algorithm for Computing Basins of Attraction in Planar Filippov Systems. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1730041.	0.7	6
70	Tracking a mobile target by multi-robot circumnavigation using bearing measurements. , 2017, , .		15
71	A Novel Computer-Based Set-Up to Study Movement Coordination in Human Ensembles. Frontiers in Psychology, 2017, 8, 967.	1.1	17
72	To Pass or Not to Pass: Modeling the Movement and Affordance Dynamics of a Pick and Place Task. Frontiers in Psychology, 2017, 8, 1061.	1.1	13

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73	A modular intersection controller with adaptive stage selection and duration algorithms. , 2017, , .		0
74	Comparison of different cryogenic control strategies via simulation applied to a superconducting magnet test bench at CERN. IOP Conference Series: Materials Science and Engineering, 2017, 278, 012080.	0.3	0
75	Design of a multicellular feedback control strategy in a synthetic bacterial consortium. , 2016, , .		9
76	Guest Editorial Special Section on the 2015 IEEE International Symposium on Circuits and Systems (ISCAS 2015). IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 565-566.	3.5	0
77	Self-tuning proportional integral control for consensus in heterogeneous multi-agent systems. European Journal of Applied Mathematics, 2016, 27, 923-940.	1.4	7
78	Distributed adaptive optimization and control of network structures. , 2016, , .		4
79	Synchronization and local convergence analysis of networks with dynamic diffusive coupling. Chaos, 2016, 26, 116308.	1.0	6
80	Switching control for incremental stabilization of nonlinear systems via contraction theory. , 2016, , .		5
81	Entrainment and synchronization in networks of Rayleighâ€“van der Pol oscillators with diffusive and Hakenâ€“Kelsoâ€“Bunz couplings. Biological Cybernetics, 2016, 110, 151-169.	0.6	22
82	Modelling and Control for Bounded Synchronization in Multi-Terminal VSC-HVDC Transmission Networks. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 916-925.	3.5	16
83	Entrainment and Control of Bacterial Populations: An <i>in Silico</i> Study over a Spatially Extended Agent Based Model. ACS Synthetic Biology, 2016, 5, 639-653.	1.9	6
84	Contraction and incremental stability of switched CarathÃ©odory systems using multiple norms. Automatica, 2016, 70, 1-8.	3.0	14
85	Distributed model based event-triggered control for synchronization of multi-agent systems. Automatica, 2016, 73, 1-7.	3.0	98
86	â€“Advances in applied nonlinear mathematicsâ€™: a special issue in honour of John Hogan's 60th birthday. IMA Journal of Applied Mathematics, 2016, 81, 629-630.	0.8	0
87	Contraction analysis of switched systems via regularization. Automatica, 2016, 73, 279-288.	3.0	32
88	Comparing different control approaches to implement a human-like virtual player in the mirror game. , 2016, , .		10
89	Modular experimental setup for real-time analysis of emergent behavior in networks of Chua's circuits. International Journal of Circuit Theory and Applications, 2016, 44, 1551-1571.	1.3	12
90	<i>In Vivo</i> Real-Time Control of Gene Expression: A Comparative Analysis of Feedback Control Strategies in Yeast. ACS Synthetic Biology, 2016, 5, 154-162.	1.9	76

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91	Dynamic similarity promotes interpersonal coordination in joint action. <i>Journal of the Royal Society Interface</i> , 2016, 13, 20151093.	1.5	76
92	Extended hybrid model reference adaptive control of piecewise affine systems. <i>Nonlinear Analysis: Hybrid Systems</i> , 2016, 21, 11-21.	2.1	39
93	Multiplex PI control for consensus in networks of heterogeneous linear agents. <i>Automatica</i> , 2016, 67, 310-320.	3.0	85
94	Convergence, Consensus and Synchronization of Complex Networks via Contraction Theory. <i>Understanding Complex Systems</i> , 2016, , 313-339.	0.3	14
95	Design of a Virtual Player for Joint Improvisation with Humans in the Mirror Game. <i>PLoS ONE</i> , 2016, 11, e0154361.	1.1	23
96	An Evolutionary Strategy For Adaptive Network Control and Synchronization and its Applications. <i>IFAC-PapersOnLine</i> , 2015, 48, 193-198.	0.5	1
97	Heterogeneity induces emergent functional networks for synchronization. <i>Physical Review E</i> , 2015, 91, 062913.	0.8	19
98	Third-order consensus in vehicles platoon with heterogeneous time-varying delays. <i>IFAC-PapersOnLine</i> , 2015, 48, 358-363.	0.5	18
99	Leadership emergence in a data-driven model of zebrafish shoals with speed modulation. <i>European Physical Journal: Special Topics</i> , 2015, 224, 3343-3360.	1.2	21
100	Switched adaptive strategies for contraction and incremental stability of Carathéodory systems using multiple norms. , 2015, , .		1
101	Editorial: Cooperative Multi-Agent Systems with Engineering Applications. <i>IET Control Theory and Applications</i> , 2015, 9, 309-311.	1.2	9
102	Guest Editorial & Special Section on the 2014 IEEE International Symposium on Circuits and Systems (ISCAS 2014). <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2015, 62, 1217-1219.	3.5	0
103	A model predictive approach to control the motion of a virtual player in the mirror game. , 2015, , .		12
104	Multilayer proportional-integral consensus of heterogeneous multi-agent systems. , 2015, , .		4
105	A parametric investigation on the effects of inertia on the stability of power systems. , 2015, , .		2
106	Distributed Consensus Strategy for Platooning of Vehicles in the Presence of Time-Varying Heterogeneous Communication Delays. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2015, 16, 102-112.	4.7	368
107	Distributed PID Control for Consensus of Homogeneous and Heterogeneous Networks. <i>IEEE Transactions on Control of Network Systems</i> , 2015, 2, 154-163.	2.4	84
108	Event-Triggered Pinning Control of Switching Networks. <i>IEEE Transactions on Control of Network Systems</i> , 2015, 2, 204-213.	2.4	147

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109	Data-driven stochastic modelling of zebrafish locomotion. <i>Journal of Mathematical Biology</i> , 2015, 71, 1081-1105.	0.8	45
110	Convergence and synchronization in heterogeneous networks of smooth and piecewise smooth systems. <i>Automatica</i> , 2015, 56, 1-11.	3.0	58
111	Measuring Zebrafish Turning Rate. <i>Zebrafish</i> , 2015, 12, 250-254.	0.5	14
112	Design, Analysis, and Experimental Validation of a Distributed Protocol for Platooning in the Presence of Time-Varying Heterogeneous Delays. <i>IEEE Transactions on Control Systems Technology</i> , 2015, , 1-1.	3.2	78
113	Analytical Approximations of Critical Clearing Time for Parametric Analysis of Power System Transient Stability. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2015, 5, 465-476.	2.7	34
114	Consensus and synchronization of complex networks via proportional-integral coupling. , 2014, , .		13
115	Extended Cooperative Adaptive Cruise Control. , 2014, , .		20
116	In-Vivo Real-Time Control of Protein Expression from Endogenous and Synthetic Gene Networks. <i>PLoS Computational Biology</i> , 2014, 10, e1003625.	1.5	114
117	Incremental stability of bimodal Filippov systems in $\mathbb{R}^n$ . , 2014, , .		2
118	On convergence and robustness of the Extended Cooperative Cruise Control. , 2014, , .		6
119	Adaptive tracking control of a virtual player in the mirror game. , 2014, , .		12
120	Bounded synchronization in resistive multi-terminal VSC-HVDC transmission systems. , 2014, , .		0
121	[Message from the Vice President]. <i>IEEE Circuits and Systems Magazine</i> , 2014, 14, 4-4.	2.6	0
122	Correction to Section V-B of "Contraction Theory and the Master Stability Function: Linking Two Approaches to Study Synchronization in Complex Networks" [Feb 09 177-181]. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2014, 61, 915-915.	2.2	4
123	Contraction Analysis for a Class of NonDifferentiable Systems with Applications to Stability and Network Synchronization. <i>SIAM Journal on Control and Optimization</i> , 2014, 52, 3203-3227.	1.1	30
124	Pinning control design for bounded synchronization of complex networks of nonidentical systems. , 2014, , .		1
125	Adaptive pinning control: A review of the fully decentralized strategy and its extensions. <i>European Physical Journal: Special Topics</i> , 2014, 223, 2649-2664.	1.2	20
126	Event-triggered pinning control of complex networks with switching topologies. , 2014, , .		25



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127	Evolving dynamical networks. <i>Physica D: Nonlinear Phenomena</i> , 2014, 267, 1-6.	1.3	61
128	Traffic dynamics and vulnerability in hypercube communication networks. , 2014, , .		2
129	A novel cognitive architecture for a human-like virtual player in the mirror game. , 2014, , .		17
130	Adaptive weight selection for optimal consensus performance. , 2014, , .		8
131	Kinematic characteristics of motion in the mirror game. , 2014, , .		8
132	Experimental Characterization of Synchronization in Networks of Non Linear Oscillators with Dynamic Links. <i>IEICE Proceeding Series</i> , 2014, 1, 53-56.	0.0	1
133	Model reference adaptive control of discrete-time piecewise linear systems. <i>International Journal of Robust and Nonlinear Control</i> , 2013, 23, 709-730.	2.1	36
134	Adaptive Pinning Control of Networks of Circuits and Systems in Lur'e Form. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2013, 60, 3033-3042.	3.5	65
135	Hybrid Model Reference Adaptive Control of Piecewise Affine Systems. <i>IEEE Transactions on Automatic Control</i> , 2013, 58, 304-316.	3.6	88
136	A Contraction Approach to the Hierarchical Analysis and Design of Networked Systems. <i>IEEE Transactions on Automatic Control</i> , 2013, 58, 1328-1331.	3.6	66
137	Experimental validation of the discrete-time MCS adaptive strategy. <i>Control Engineering Practice</i> , 2013, 21, 847-859.	3.2	17
138	Modelling emergence of oscillations in communicating bacteria: a structured approach from one to many cells. <i>Journal of the Royal Society Interface</i> , 2013, 10, 20120612.	1.5	21
139	Consensus via adaptation of the network structure. , 2013, , .		2
140	Convergence and cluster synchronization in networks of discrete-time and asynchronous systems. , 2013, , .		4
141	Model reference adaptive control of a full-bridge buck inverter with minimal controller synthesis. , 2013, , .		4
142	Experiments on synchronization in networks of nonlinear oscillators with dynamic links. <i>Nonlinear Theory and Its Applications IEICE</i> , 2013, 4, 462-472.	0.4	5
143	An experimental approach to identify dynamical models of transcriptional regulation in living cells. <i>Chaos</i> , 2013, 23, 025106.	1.0	12
144	Distributed Model Based Event-Triggered Control for Synchronization of Multi-Agent Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 329-334.	0.4	12

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145	Adaptive control for state dependent switched systems in Brunovsky form. , 2013, , .		3
146	Incremental stability of planar Filippov systems. , 2013, , .		5
147	Experimental validation of pinning controllability in networked Chua's circuits. , 2012, , .		2
148	On adaptive bounded synchronization in Power Network models. , 2012, , .		6
149	Adaptive pinning control of complex networks of Lur'e systems. , 2012, , .		3
150	FROM COMPLETE TO INCOMPLETE CHATTERING: A NOVEL ROUTE TO CHAOS IN IMPACTING CAM-FOLLOWER SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250102.	0.7	10
151	Dear Members of the IEEE CAS Society [Message from the Vice President for Administration]. IEEE Circuits and Systems Magazine, 2012, 12, 4-4.	2.6	0
152	Model-Based Soft Landing Control of an Electromechanical Engine Valve Actuator. , 2012, , .		4
153	Using Aging to Visually Uncover Evolutionary Processes on Networks. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 1343-1352.	2.9	29
154	Realization of a fully configurable complex network of non linear Chua's oscillators. , 2012, , .		0
155	Synchronization of Networks of Non-Identical Chua's Circuits: Analysis and Experiments. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 1029-1041.	3.5	38
156	Distributed Adaptive Control of Synchronization in Complex Networks. IEEE Transactions on Automatic Control, 2012, 57, 2153-2158.	3.6	323
157	Energy-Based Key-On Control of a Double Magnet Electromechanical Valve Actuator. IEEE Transactions on Control Systems Technology, 2012, 20, 1133-1145.	3.2	16
158	Structural Stability of the Two-Fold Singularity. SIAM Journal on Applied Dynamical Systems, 2012, 11, 1215-1230.	0.7	16
159	Bifurcations of piecewise smooth flows: Perspectives, methodologies and open problems. Physica D: Nonlinear Phenomena, 2012, 241, 1845-1860.	1.3	92
160	Temperature dependence of ssrA-tag mediated protein degradation. Journal of Biological Engineering, 2012, 6, 10.	2.0	32
161	BSim: An Agent-Based Tool for Modeling Bacterial Populations in Systems and Synthetic Biology. PLoS ONE, 2012, 7, e42790.	1.1	116
162	Experimental implementation and validation of a novel minimal control synthesis adaptive controller for continuous bimodal piecewise affine systems. Control Engineering Practice, 2012, 20, 269-281.	3.2	17

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163	Evolving dynamical networks: A formalism for describing complex systems. <i>Complexity</i> , 2012, 17, 18-25.	0.9	34
164	Existence and stability of limit cycles in a delayed dry-friction oscillator. <i>Nonlinear Dynamics</i> , 2012, 67, 483-496.	2.7	6
165	Adaptation and Contraction Theory for the Synchronization of Complex Neural Networks. , 2012, , 9-32.		1
166	Canonical Forms of Generic Piecewise Linear Continuous Systems. <i>IEEE Transactions on Automatic Control</i> , 2011, 56, 1911-1915.	3.6	20
167	Design and Construction of a Versatile Synthetic Network for Bistable Gene Expression in Mammalian Systems. <i>Journal of Computational Biology</i> , 2011, 18, 195-203.	0.8	3
168	A Graphical Approach to Prove Contraction of Nonlinear Circuits and Systems. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2011, 58, 336-348.	3.5	30
169	On QUAD, Lipschitz, and Contracting Vector Fields for Consensus and Synchronization of Networks. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2011, 58, 576-583.	3.5	196
170	Contraction Theory for Systems Biology. , 2011, , 93-114.		4
171	A Multi-Functional Synthetic Gene Network: A Frequency Multiplier, Oscillator and Switch. <i>PLoS ONE</i> , 2011, 6, e16140.	1.1	26
172	Discrete-Time MRAC with Minimal Controller Synthesis of an Electronic Throttle Body. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011, 44, 5064-5069.	0.4	6
173	On Contraction of Piecewise Smooth Dynamical Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011, 44, 13299-13304.	0.4	7
174	Pinning control of complex networks via edge snapping. <i>Chaos</i> , 2011, 21, 033119.	1.0	64
175	Derivation, identification and validation of a computational model of a novel synthetic regulatory network in yeast. <i>Journal of Mathematical Biology</i> , 2011, 62, 685-706.	0.8	15
176	Modeling RNA interference in mammalian cells. <i>BMC Systems Biology</i> , 2011, 5, 19.	3.0	48
177	Analysis, design and implementation of a novel scheme for in-vivo control of synthetic gene regulatory networks. <i>Automatica</i> , 2011, 47, 1265-1270.	3.0	58
178	Synchronization of networked piecewise smooth systems. , 2011, , .		2
179	Two-fold singularity in nonsmooth electrical systems. , 2011, , .		13
180	Synchronization of networks of non-identical Chua circuits: Analysis and experiments. , 2011, , .		2

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181	Synchronization of bounded piecewise smooth systems. , 2011, , .		0
182	Evolution of Complex Networks via Edge Snapping. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 2132-2143.	3.5	116
183	Teixeira singularities in 3D switched feedback control systems. Systems and Control Letters, 2010, 59, 615-622.	1.3	34
184	Analysis and stability of consensus in networked control systems. Applied Mathematics and Computation, 2010, 217, 988-1000.	1.4	41
185	Hybrid optimal scheduling for intermittent androgen suppression of prostate cancer. Chaos, 2010, 20, 045125.	1.0	29
186	Evolving Topologies for Network Synchronization. , 2010, , .		1
187	Design and implementation of a feedback control strategy for IRMA, a novel synthetic gene regulatory network. , 2010, , .		3
188	Catastrophic sliding bifurcations and onset of oscillations in a superconducting resonator. Physical Review E, 2010, 81, 016213.	0.8	31
189	A comparative analysis of synthetic genetic oscillators. Journal of the Royal Society Interface, 2010, 7, 1503-1524.	1.5	180
190	Experimental validation of a novel adaptive controller for piecewise affine systems. , 2010, , .		2
191	Full Characterization of Act-and-wait Control for First-order Unstable Lag Processes. JVC/Journal of Vibration and Control, 2010, 16, 1209-1233.	1.5	24
192	TAILORING THE BIFURCATION DIAGRAM OF NONLINEAR DYNAMICAL SYSTEMS: AN OPTIMIZATION BASED APPROACH. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 1027-1040.	0.7	3
193	Dynamics of Symmetric Dynamical Systems with Delayed Switching. JVC/Journal of Vibration and Control, 2010, 16, 1111-1140.	1.5	18
194	Discontinuity-induced bifurcations of piecewise smooth dynamical systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 4915-4935.	1.6	40
195	Global Entrainment of Transcriptional Systems to Periodic Inputs. PLoS Computational Biology, 2010, 6, e1000739.	1.5	148
196	Stability of networked systems: A multi-scale approach using contraction. , 2010, , .		19
197	Discrete-time minimal control synthesis adaptive algorithm. International Journal of Control, 2010, 83, 2641-2657.	1.2	13
198	Synthesis and Experimental Validation of the Novel LQ-NEMCSI Adaptive Strategy on an Electronic Throttle Valve. IEEE Transactions on Control Systems Technology, 2010, , .	3.2	33

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199	Minimal Control Synthesis Adaptive Control of Continuous Bimodal Piecewise Affine Systems. SIAM Journal on Control and Optimization, 2010, 48, 4242-4261.	1.1	39
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