Eduardo D Sontag

List of Publications by Year
in descending order

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360 papers	24,920 citations	19657 61 h-index	9345 143 g-index
411 all docs	411 docs citations	411 times ranked	13651 citing authors

#	Article	IF	Citations
1	An explicit formula for minimizing the infected peak in an SIR epidemic model when using a fixed number of complete lockdowns. International Journal of Robust and Nonlinear Control, 2023, 33, 4708-4731.	3.7	6
2	Long-Term Regulation of Prolonged Epidemic Outbreaks in Large Populations via Adaptive Control: A Singular Perturbation Approach. , 2022, 6, 578-583.		14
3	A Robust Lyapunov Criterion for Nonoscillatory Behaviors in Biological Interaction Networks. IEEE Transactions on Automatic Control, 2022, 67, 3305-3320.	5.7	6
4	Internal Models in Control, Bioengineering, and Neuroscience. Annual Review of Control, Robotics, and Autonomous Systems, 2022, 5, 55-79.	11.8	15
5	Remarks on input to state stability of perturbed gradient flows, motivated by model-free feedback control learning. Systems and Control Letters, 2022, 161, 105138.	2.3	14
6	Erratum to the example in Section V of A contraction approach to the hierarchical analysis and design of networked systems. IEEE Transactions on Automatic Control, 2022, , 1-1.	5.7	0
7	A novel COVID-19 epidemiological model with explicit susceptible and asymptomatic isolation compartments reveals unexpected consequences of timing social distancing. Journal of Theoretical Biology, 2021, 510, 110539.	1.7	50
8	A mathematical model exhibiting the effect of DNA methylation on the stability boundary in cell-fate networks. Epigenetics, 2021, 16, 436-457.	2.7	13
9	Input-to-State Stability. , 2021, , 1021-1030.		0
10	Perfect adaptation of CD8 ⁺ T cell responses to constant antigen input over a wide range of affinities is overcome by costimulation. Science Signaling, 2021, 14, eaay9363.	3.6	19
11	Universal features of epidemic models under social distancing guidelines. Annual Reviews in Control, 2021, 51, 426-440.	7.9	25
12	Mediating Ribosomal Competition by Splitting Pools. , 2021, , .		1
13	Bilinear Dynamical Networks Under Malicious Attack: An Efficient Edge Protection Method. , 2021, , .		2
14	Derivation of stationary distributions of biochemical reaction networks via structure transformation. Communications Biology, 2021, 4, 620.	4.4	8
15	Comment on â€œIn vivo flow cytometry reveals a circadian rhythm of circulating tumor cellsâ€• Light: Science and Applications, 2021, 10, 188.	16.6	1
16	Maximizing average throughput in oscillatory biochemical synthesis systems: an optimal control approach. Royal Society Open Science, 2021, 8, 210878.	2.4	6
17	Mediating Ribosomal Competition by Splitting Pools. , 2021, 5, 1555-1560.		7
18	Scale-Invariance in Biological Sensing. , 2021, , 2025-2028.		0

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19	Integrating transcriptomics and bulk time course data into a mathematical framework to describe and predict therapeutic resistance in cancer. Physical Biology, 2021, 18, 016001.	1.8	17
20	A synthetic distributed genetic multi-bit counter. IScience, 2021, 24, 103526.	4.1	6
21	Mathematical Models of Protease-Based Enzymatic Biosensors. ACS Synthetic Biology, 2020, 9, 198-208.	3.8	10
22	Short-Term Circulating Tumor Cell Dynamics in Mouse Xenograft Models and Implications for Liquid Biopsy. Frontiers in Oncology, 2020, 10, 601085.	2.8	25
23	Delicate Balances in Cancer Chemotherapy: Modeling Immune Recruitment and Emergence of Systemic Drug Resistance. Frontiers in Immunology, 2020, 11, 1376.	4.8	23
24	Mathematical Details on a Cancer Resistance Model. Frontiers in Bioengineering and Biotechnology, 2020, 8, 501.	4.1	17
25	Distributed Implementation of Boolean Functions by Transcriptional Synthetic Circuits. ACS Synthetic Biology, 2020, 9, 2172-2187.	3.8	18
26	A computational framework for a Lyapunov-enabled analysis of biochemical reaction networks. PLoS Computational Biology, 2020, 16, e1007681.	3.2	14
27	First special section on systems and control research efforts against COVID-19 and future pandemics. Annual Reviews in Control, 2020, 50, 343-344.	7.9	11
28	Input-to-State Stability. , 2020, , 1-9.		1
29	Scale-Invariance in Biological Sensing. , 2020, , 1-4.		0
30	No Switching Policy Is Optimal for a Positive Linear System With a Bottleneck Entrance. , 2019, 3, 889-894.		7
31	Multi-modality in gene regulatory networks with slow promoter kinetics. PLoS Computational Biology, 2019, 15, e1006784.	3.2	29
32	Immunobiochemical Reconstruction of Influenza Lung Infectionâ€"Melanoma Skin Cancer Interactions. Frontiers in Immunology, 2019, 10, 4.	4.8	11
33	Mathematical Approach to Differentiate Spontaneous and Induced Evolution to Drug Resistance During Cancer Treatment. JCO Clinical Cancer Informatics, 2019, 3, 1-20.	2.1	52
34	Some Remarks on Robust Gene Regulation in a Biomolecular Integral Controller. , 2019, , .		3
35	Stochastic analysis of genetic feedback controllers to reprogram a pluripotency gene regulatory network. , 2019, 2019, 5089-5096.		3
36	Inferring reaction network structure from single-cell, multiplex data, using toric systems theory. PLoS Computational Biology, 2019, 15, e1007311.	3.2	15

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37	In vitro implementation of robust gene regulation in a synthetic biomolecular integral controller. Nature Communications, 2019, 10, 5760.	12.8	54
38	Revisiting totally positive differential systems: A tutorial and new results. Automatica, 2019, 101, 1-14.	5.0	37
39	Inferring reaction network structure from single-cell, multiplex data, using toric systems theory. , 2019, 15, e1007311.		0
40	Inferring reaction network structure from single-cell, multiplex data, using toric systems theory. , 2019, 15, e1007311.		0
41	Inferring reaction network structure from single-cell, multiplex data, using toric systems theory. , 2019, 15, e1007311.		0
42	Inferring reaction network structure from single-cell, multiplex data, using toric systems theory. , 2019, 15, e1007311.		0
43	Subharmonics and Chaos in Simple Periodically Forced Biomolecular Models. Biophysical Journal, 2018, 114, 1232-1240.	0.5	8
44	Engineered promoters enable constant gene expression at any copy number in bacteria. Nature Biotechnology, 2018, 36, 352-358.	17.5	144
45	Controllability Analysis and Control Synthesis for the Ribosome Flow Model. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2018, 15, 1351-1364.	3.0	11
46	Control Structures of Drug Resistance in Cancer Chemotherapy. , 2018, , .		3
47	Stochastic multistationarity in a model of the hematopoietic stem cell differentiation network. , 2018, 2018, 1886-1892.		2
48	Control-theoretic methods for biological networks. , 2018, , .		9
49	Internal Models in Control, Biology and Neuroscience. , 2018, , .		24
50	Analysis of Nonlinear Tridiagonal Cooperative Systems using Totally Positive Linear Differential Systems. , 2018, , .		1
51	Future systems and control research in synthetic biology. Annual Reviews in Control, 2018, 45, 5-17.	7.9	65
52	Examples of Computation of Exact Moment Dynamics for Chemical Reaction Networks. Lecture Notes in Control and Information Sciences - Proceedings, 2018, , 295-312.	0.1	0
53	A Dynamic Model of Immune Responses to Antigen Presentation Predicts Different Regions of Tumor or Pathogen Elimination. Cell Systems, 2017, 4, 231-241.e11.	6.2	59
54	An Ex Vivo Platform for the Prediction of Clinical Response in Multiple Myeloma. Cancer Research, 2017, 77, 3336-3351.	0.9	53

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55	Zeros of nonlinear systems with input invariances. Automatica, 2017, 81, 46-55.	5.0	4
56	Prof. Rudolf Emil Kalman [Obituary]. IEEE Control Systems, 2017, 37, 151-152.	0.8	3
57	Rudolf Kalman: Scientist, Leader, and Mentor [Historical Perspectives]. IEEE Control Systems, 2017, 37, 161-162.	0.8	0
58	A Tribute to Rudolf Kalman: His Research, Life, and Influence [Historical Perspectives]. IEEE Control Systems, 2017, 37, 153-153.	0.8	0
59	Solving Immunology?. Trends in Immunology, 2017, 38, 116-127.	6.8	45
60	Evaluating optimal therapy robustness by virtual expansion of a sample population, with a case study in cancer immunotherapy. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6277-E6286.	7.1	39
61	Logarithmic sensing in Bacillus subtilis aerotaxis. Npj Systems Biology and Applications, 2017, 3, 16036.	3.0	29
62	Computationâ€Guided Design of a Stimulusâ€Responsive Multienzyme Supramolecular Assembly. ChemBioChem, 2017, 18, 2000-2006.	2.6	9
63	Multiple steady states and the form of response functions to antigen in a model for the initiation of T-cell activation. Royal Society Open Science, 2017, 4, 170821.	2.4	11
64	Oscillatory stimuli differentiate adapting circuit topologies. Nature Methods, 2017, 14, 1010-1016.	19.0	44
65	Translation inhibition and resource balance in the TX-TL cell-free gene expression system. Synthetic Biology, 2017, 2, ysx005.	2.2	26
66	Checkable Conditions for Contraction After Small Transients in Time and Amplitude. Lecture Notes in Control and Information Sciences, 2017, , 279-305.	1.0	10
67	Dynamic compensation, parameter identifiability, and equivariances. PLoS Computational Biology, 2017, 13, e1005447.	3.2	23
68	Reduction of multiscale stochastic biochemical reaction networks using exact moment derivation. PLoS Computational Biology, 2017, 13, e1005571.	3.2	28
69	Non-monotonic Response to Monotonic Stimulus: Regulation of Glyoxylate Shunt Gene-Expression Dynamics in Mycobacterium tuberculosis. PLoS Computational Biology, 2016, 12, e1004741.	3.2	30
70	Some remarks on a model for immune signal detection and feedback. , 2016, , .		1
71	In-vivo identification and control of aerotaxis in Bacillus subtilis. , 2016, , .		1
72	Controlling the ribosomal density profile in mRNA translation. , 2016, , .		1

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73	Exploring the impact of resource limitations on gene network reconstruction. , 2016, , .		2
74	Some remarks on spatial uniformity of solutions of reactionâ€“diffusion PDEs. Nonlinear Analysis: Theory, Methods & Applications, 2016, 147, 125-144.	1.1	10
75	Obituary for Professor Rudolf Emil Kalman. Automatica, 2016, 74, 370-371.	5.0	0
76	Scale-invariant systems realize nonlinear differential operators. , 2016, , .		7
77	A model for competition for ribosomes in the cell. Journal of the Royal Society Interface, 2016, 13, 20151062.	3.4	94
78	Contraction after small transients. Automatica, 2016, 67, 178-184.	5.0	31
79	Quorum-Sensing Synchronization of Synthetic Toggle Switches: A Design Based on Monotone Dynamical Systems Theory. PLoS Computational Biology, 2016, 12, e1004881.	3.2	25
80	Fundamental limitation of the instantaneous approximation in foldâ€change detection models. IET Systems Biology, 2015, 9, 1-15.	1.5	13
81	A contraction approach to input tracking via high gain feedback. , 2015, , .		4
82	Exact Moment Dynamics for Feedforward Nonlinear Chemical Reaction Networks. IEEE Life Sciences Letters, 2015, 1, 26-29.	1.2	16
83	Silence on the relevant literature and errors in implementation. Nature Biotechnology, 2015, 33, 336-339.	17.5	14
84	Discriminating direct and indirect connectivities in biological networks. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12893-12898.	7.1	26
85	A Small-Gain Theorem for Random Dynamical Systems with Inputs and Outputs. SIAM Journal on Control and Optimization, 2015, 53, 2657-2695.	2.1	6
86	Input-to-State Stability. , 2015, , 575-584.		3
87	Synchronization of Diffusively-Connected Nonlinear Systems: Results Based on Contractions with Respect to General Norms. IEEE Transactions on Network Science and Engineering, 2014, 1, 91-106.	6.4	26
88	Quantifying the effect of interconnections on the steady states of biomolecular networks. , 2014, , .		1
89	Scale-invariance in singularly perturbed systems. , 2014, , .		2
90	Remarks on diffusive-link synchronization using non-Hilbert logarithmic norms. , 2014, , .		2

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91	On three generalizations of contraction. , 2014, , .		8
92	Contraction methods for nonlinear systems: A brief introduction and some open problems. , 2014, , .		91
93	Remarks on model-based estimation of nonhomogeneous Poisson processes and applications to biological systems. , 2014, , .		0
94	A small-gain result for orthant-monotone systems under mixed feedback. Systems and Control Letters, 2014, 68, 9-19.	2.3	21
95	A â€˜resource allocatorâ€™ for transcription based on a highly fragmented T7 <scp>RNA</scp> polymerase. Molecular Systems Biology, 2014, 10, 742.	7.2	156
96	Paradoxical Results in Perturbation-Based Signaling Network Reconstruction. Biophysical Journal, 2014, 106, 2720-2728.	0.5	23
97	A technique for determining the signs of sensitivities of steady states in chemical reaction networks. IET Systems Biology, 2014, 8, 251-267.	1.5	14
98	Entrainment to Periodic Initiation and Transition Rates in a Computational Model for Gene Translation. PLoS ONE, 2014, 9, e96039.	2.5	65
99	Response time re-scaling and Weber's law in adapting biological systems. , 2013, , .		0
100	Logarithmic Lipschitz norms and diffusion-induced instability. Nonlinear Analysis: Theory, Methods & Applications, 2013, 83, 31-49.	1.1	15
101	The Energy Costs of Insulators in Biochemical Networks. Biophysical Journal, 2013, 104, 1380-1390.	0.5	21
102	A Contraction Approach to the Hierarchical Analysis and Design of Networked Systems. IEEE Transactions on Automatic Control, 2013, 58, 1328-1331.	5.7	66
103	Reverse Engineering Validation using a Benchmark Synthetic Gene Circuit in Human Cells. ACS Synthetic Biology, 2013, 2, 255-262.	3.8	14
104	DevStaR: High-Throughput Quantification of C. elegans Developmental Stages. IEEE Transactions on Medical Imaging, 2013, 32, 1791-1803.	8.9	11
105	Transient dynamic phenotypes as criteria for model discrimination: fold-change detection in Rhodobacter sphaeroides chemotaxis. Journal of the Royal Society Interface, 2013, 10, 20120935.	3.4	15
106	Synthetic mammalian transgene negative autoregulation. Molecular Systems Biology, 2013, 9, 670.	7.2	36
107	Input to State Stability. , 2013, , 1-14.		1
108	Spatial uniformity in diffusively-coupled systems using weighted L² norm contractions. , 2013, , .		4

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109	A class of random control systems: Monotonicity and the convergent-input convergent-state property. , 2013, , .		1
110	Minimization of thermodynamic costs in cancer cell invasion. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1686-1691.	7.1	55
111	Random Dynamical Systems with Inputs. Lecture Notes in Mathematics, 2013, , 41-87.	0.2	2
112	A Characterization of Scale Invariant Responses in Enzymatic Networks. PLoS Computational Biology, 2012, 8, e1002748.	3.2	22
113	Modular Design of Artificial Tissue Homeostasis: Robust Control through Synthetic Cellular Heterogeneity. PLoS Computational Biology, 2012, 8, e1002579.	3.2	41
114	Remarks on the invalidation of biological models using monotone systems theory. , 2012, , .		9
115	A decomposition-based approach to stability analysis of large-scale stochastic systems. , 2012, , .		6
116	Fold-change detection as a chemotaxis model discrimination tool. , 2012, , .		1
117	Response to Comment on â€œâ€˜Load-Induced Modulation of Signal Transduction Networksâ€™: Reconciling Ultrasensitivity with Bifunctionality?â€• Science Signaling, 2012, 5, .	3.6	0
118	Stability certification of large scale stochastic systems using dissipativity. Automatica, 2012, 48, 2956-2964.	5.0	16
119	Exploring the scale invariance property in enzymatic networks. , 2012, , .		3
120	Mechanism-independent method for predicting response to multidrug combinations in bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12254-12259.	7.1	126
121	Acceptance Speech of Eduardo D. Sontag for the 2011 IEEE Control Systems Award [People in Control]. IEEE Control Systems, 2012, 32, 24-25.	0.8	0
122	Stability and Feedback Stabilization. , 2012, , 1639-1652.		6
123	Graph-Theoretic Analysis of Multistability and Monotonicity for Biochemical Reaction Networks. , 2011, , 63-72.		5
124	Symmetry Invariance for Adapting Biological Systems. SIAM Journal on Applied Dynamical Systems, 2011, 10, 857-886.	1.6	62
125	Persistence Results for Chemical Reaction Networks with Time-Dependent Kinetics and No Global Conservation Laws. SIAM Journal on Applied Mathematics, 2011, 71, 128-146.	1.8	45
126	Computationally efficient measure of topological redundancy of biological and social networks. Physical Review E, 2011, 84, 036117.	2.1	26

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127	Input symmetry invariance, and applications to biological systems. , 2011, , .		0
128	A small-gain result for orthant-monotone systems in feedback: The non sign-definite case. , 2011, , .		5
129	Load-Induced Modulation of Signal Transduction Networks. Science Signaling, 2011, 4, ra67.	3.6	64
130	Synthetic incoherent feedforward circuits show adaptation to the amount of their genetic template. Molecular Systems Biology, 2011, 7, 519.	7.2	150
131	Graph-theoretic characterizations of monotonicity of chemical networks in reaction coordinates. Journal of Mathematical Biology, 2010, 61, 581-616.	1.9	62
132	A symbolic computation approach to a problem involving multivariate Poisson distributions. Advances in Applied Mathematics, 2010, 44, 359-377.	0.7	56
133	Remarks on feedforward circuits, adaptation, and pulse memory. IET Systems Biology, 2010, 4, 39-51.	1.5	588
134	Conditions for global stability of monotone tridiagonal systems with negative feedback. Systems and Control Letters, 2010, 59, 130-138.	2.3	13
135	Fold-change detection and scalar symmetry of sensory input fields. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15995-16000.	7.1	203
136	Rapid and accurate developmental stage recognition of C. elegans from high-throughput image data. , 2010, 2010, 3089-3096.		10
137	Global Entrainment of Transcriptional Systems to Periodic Inputs. PLoS Computational Biology, 2010, 6, e1000739.	3.2	148
138	Stability of networked systems: A multi-scale approach using contraction. , 2010, , .		19
139	Synchronization of Interconnected Systems With Applications to Biochemical Networks: An Input-Output Approach. IEEE Transactions on Automatic Control, 2010, 55, 1367-1379.	5.7	182
140	Rudolf E. Kalman and His Students [Historical Perspectives]. IEEE Control Systems, 2010, 30, 87-88.	0.8	3
141	Remarks on structural identification, modularity, and retroactivity. , 2010, , .		1
142	Inference of Signal Transduction Networks from Double Causal Evidence. Methods in Molecular Biology, 2010, 673, 239-251.	0.9	5
143	Contractive Systems with Inputs. Lecture Notes in Control and Information Sciences, 2010, , 217-228.	1.0	65
144	On persistence of chemical reaction networks with time-dependent kinetics and no global conservation laws. , 2009, , .		1

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145	Shape, Size, and Robustness: Feasible Regions in the Parameter Space of Biochemical Networks. PLoS Computational Biology, 2009, 5, e1000256.	3.2	44
146	Problem 6.10 Smooth Lyapunov characterization of measurement to error stability. , 2009, , 239-244.		0
147	The p53HMM algorithm: using profile hidden markov models to detect p53-responsive genes. BMC Bioinformatics, 2009, 10, 111.	2.6	11
148	Chemical networks with inflows and outflows: A positive linear differential inclusions approach. Biotechnology Progress, 2009, 25, 632-642.	2.6	36
149	Modeling Proximal Tubule Cell Homeostasis: TrackingÂChangesÂinÂLuminalÂFlow. Bulletin of Mathematical Biology, 2009, 71, 1285-1322.	1.9	14
150	Geometry and topology of parameter space: investigating measures of robustness in regulatory networks. Journal of Mathematical Biology, 2009, 59, 315-358.	1.9	22
151	Attractors in coherent systems of differential equations. Journal of Differential Equations, 2009, 246, 3058-3076.	2.2	17
152	Engineering Principles in Bio-molecular Systems: From Retroactivity to Modularity. European Journal of Control, 2009, 15, 389-397.	2.6	22
153	Input Classes for Identifiability of Bilinear Systems. IEEE Transactions on Automatic Control, 2009, 54, 195-207.	5.7	25
154	Synthetic Biology: A Systems Engineering Perspective. , 2009, , 101-124.		8
155	Graphs and the Dynamics of Biochemical Networks. , 2009, , 125-144.		1
156	Stability and Feedback Stabilization. , 2009, , 8616-8630.		1
157	Engineering principles in bio-molecular systems: From retroactivity to modularity. , 2009, , .		1
158	Oscillations in I/O Monotone Systems Under Negative Feedback. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2009, , .	0.1	2
159	A Passivity-Based Approach to Stability of Spatially Distributed Systrems With a Cyclic Interconnection Structure. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2009, , .	0.1	0
160	On the number of steady states in a multiple futile cycle. Journal of Mathematical Biology, 2008, 57, 29-52.	1.9	97
161	Singularly Perturbed Monotone Systems andÂanÂApplication to Double Phosphorylation Cycles. Journal of Nonlinear Science, 2008, 18, 527-550.	2.1	25
162	Inferring (Biological) Signal Transduction Networks viaÂTransitive Reductions of Directed Graphs. Algorithmica, 2008, 51, 129-159.	1.3	20

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163	Translation-invariant monotone systems, and a global convergence result for enzymatic futile cycles. Nonlinear Analysis: Real World Applications, 2008, 9, 128-140.	1.7	53
164	Input to State Stability: Basic Concepts and Results. Lecture Notes in Mathematics, 2008, , 163-220.	0.2	581
165	Transcriptional control of human p53-regulated genes. Nature Reviews Molecular Cell Biology, 2008, 9, 402-412.	37.0	1,669
166	The Effect of Negative Feedback Loops on the Dynamics of Boolean Networks. Biophysical Journal, 2008, 95, 518-526.	0.5	49
167	A Passivity-Based Approach to Stability of Spatially Distributed Systems With a Cyclic Interconnection Structure. IEEE Transactions on Automatic Control, 2008, 53, 75-86.	5.7	38
168	Oscillations in I/O Monotone Systems Under Negative Feedback. IEEE Transactions on Automatic Control, 2008, 53, 166-176.	5.7	35
169	NET-SYNTHESIS: a software for synthesis, inference and simplification of signal transduction networks. Bioinformatics, 2008, 24, 293-295.	4.1	39
170	Passivity-based Stability of Interconnection Structures. Lecture Notes in Control and Information Sciences, 2008, , 195-204.	1.0	10
171	Global stability for monotone tridiagonal systems with negative feedback. , 2008, , .		3
172	Modular cell biology: retroactivity and insulation. Molecular Systems Biology, 2008, 4, 161.	7.2	454
173	An approximate internal model principle: Applications to nonlinear models of biological systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 15873-15878.	0.4	12
174	Stabilizing and Destabilizing Effects of Embedding 3-Node Subgraphs on the State Space of Boolean Networks. Lecture Notes in Computer Science, 2008, , 100-107.	1.3	1
175	Network reconstruction based on steady-state data. Essays in Biochemistry, 2008, 45, 161-176.	4.7	53
176	A passivity-based stability criterion for a class of biochemical reaction networks. Mathematical Biosciences and Engineering, 2008, 5, 1-19.	1.9	136
177	Uniformly Universal Inputs. , 2008, , 9-24.		1
178	Remarks on the stability of spatially distributed systems with a cyclic interconnection structure. Proceedings of the American Control Conference, 2007, , .	0.0	7
179	Computational Aspects of Feedback in Neural Circuits. PLoS Computational Biology, 2007, 3, e165.	3.2	182
180	Remarks on Input Classes for Identification of Bilinear Systems. Proceedings of the American Control Conference, 2007, , .	0.0	1

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181	Further results on singularly perturbed monotone systems, with an application to double phosphorylation cycles. , 2007, , .		0
182	PETRI NETS TOOLS FOR THE ANALYSIS OF PERSISTENCE IN CHEMICAL NETWORKS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 721-726.	0.4	1
183	A Petri net approach to the study of persistence in chemical reaction networks. Mathematical Biosciences, 2007, 210, 598-618.	1.9	154
184	A passivity-based stability criterion for a class of interconnected systems and applications to biochemical reaction networks. , 2007, , .		10
185	A Novel Method for Signal Transduction Network Inference from Indirect Experimental Evidence. Journal of Computational Biology, 2007, 14, 927-949.	1.6	52
186	Systems biology and control — A tutorial. , 2007, , .		2
187	Intracellular Regulatory Networks are close to Monotone Systems. Nature Precedings, 2007, , .	0.1	1
188	Algorithmic and complexity results for decompositions of biological networks into monotone subsystems. BioSystems, 2007, 90, 161-178.	2.0	71
189	Randomized approximation algorithms for set multicover problems with applications to reverse engineering of protein and gene networks. Discrete Applied Mathematics, 2007, 155, 733-749.	0.9	35
190	Oscillations in multi-stable monotone systems with slowly varying feedback. Journal of Differential Equations, 2007, 239, 273-295.	2.2	24
191	Algorithmic Issues in Reverse Engineering of Protein and Gene Networks via the Modular Response Analysis Method. Annals of the New York Academy of Sciences, 2007, 1115, 132-141.	3.8	7
192	Monotone Chemical Reaction Networks. Journal of Mathematical Chemistry, 2007, 41, 295-314.	1.5	97
193	Monotone and near-monotone biochemical networks. Systems and Synthetic Biology, 2007, 1, 59-87.	1.0	167
194	Monotone and Near-Monotone Systems. , 2007, , 79-122.		3
195	A Petri Net Approach to Persistence Analysis in Chemical Reaction Networks. Lecture Notes in Control and Information Sciences, 2007, , 181-216.	1.0	23
196	A Novel Method for Signal Transduction Network Inference from Indirect Experimental Evidence. Lecture Notes in Computer Science, 2007, , 407-419.	1.3	1
197	Algorithmic and Complexity Results for Decompositions of Biological Networks into Monotone Subsystems. Lecture Notes in Computer Science, 2006, , 253-264.	1.3	13
198	Diagonal stability of a class of cyclic systems and its connection with the secant criterion. Automatica, 2006, 42, 1531-1537.	5.0	227

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199	Honey-pot constrained searching with local sensory information. Nonlinear Analysis: Theory, Methods & Applications, 2006, 65, 1773-1793.	1.1	30
200	Exact computation of amplification for a class of nonlinear systems arising from cellular signaling pathways. Automatica, 2006, 42, 1987-1992.	5.0	9
201	A cooperative system which does not satisfy the limit set dichotomy. Journal of Differential Equations, 2006, 224, 373-384.	2.2	6
202	Crowding effects promote coexistence in the chemostat. Journal of Mathematical Analysis and Applications, 2006, 319, 48-60.	1.0	26
203	Passivity gains and the â€œsecant conditionâ€•for stability. Systems and Control Letters, 2006, 55, 177-183.	2.3	57
204	Well-defined steady-state response does not imply CICS. Systems and Control Letters, 2006, 55, 707-710.	2.3	10
205	Global stability in a chemostat with multiple nutrients. Journal of Mathematical Biology, 2006, 52, 419-438.	1.9	16
206	Computational Complexities of Combinatorial Problems With Applications to Reverse Engineering of Biological Networks. , 2006, , 303-316.		2
207	Structure and timescale analysis in genetic regulatory networks. , 2006, , .		2
208	On the structural monotonicity of chemical reaction networks. , 2006, , .		20
209	A note on Monotone Systems with Positive Translation Invariance. , 2006, , .		3
210	A Remark on Singular Perturbations of Strongly Monotone Systems. , 2006, , .		9
211	Signal Detection and Approximate Adaptation Implies an Approximate Internal Model. , 2006, , .		3
212	COMPUTATION OF AMPLIFICATION FOR SYSTEMS ARISING FROM CELLULAR SIGNALING PATHWAYS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 7-12.	0.4	3
213	Robustness and fragility of Boolean models for genetic regulatory networks. Journal of Theoretical Biology, 2005, 235, 431-449.	1.7	295
214	Monotone systems under positive feedback: multistability and a reduction theorem. Systems and Control Letters, 2005, 54, 159-168.	2.3	52
215	Inference of signaling and gene regulatory networks by steady-state perturbation experiments: structure and accuracy. Journal of Theoretical Biology, 2005, 232, 427-441.	1.7	73
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