

Boyan Yordanov

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4382630/publications.pdf>

Version: 2024-02-01

40
papers

913
citations

623734

14
h-index

501196

28
g-index

45
all docs

45
docs citations

45
times ranked

1042
citing authors

#	ARTICLE	IF	CITATIONS
1	Predicting DNA hybridization kinetics from sequence. <i>Nature Chemistry</i> , 2018, 10, 91-98.	13.6	146
2	Robustness analysis and tuning of synthetic gene networks. <i>Bioinformatics</i> , 2007, 23, 2415-2422.	4.1	125
3	Temporal Logic Control of Discrete-Time Piecewise Affine Systems. <i>IEEE Transactions on Automatic Control</i> , 2012, 57, 1491-1504.	5.7	94
4	Computational Design of Nucleic Acid Feedback Control Circuits. <i>ACS Synthetic Biology</i> , 2014, 3, 600-616.	3.8	92
5	Orthogonal intercellular signaling for programmed spatial behavior. <i>Molecular Systems Biology</i> , 2016, 12, 849.	7.2	67
6	A method to identify and analyze biological programs through automated reasoning. <i>Npj Systems Biology and Applications</i> , 2016, 2, .	3.0	42
7	Formal Analysis of Discrete-Time Piecewise Affine Systems. <i>IEEE Transactions on Automatic Control</i> , 2010, 55, 2834-2840.	5.7	34
8	The Sequence-Dependent Unfolding Pathway Plays a Critical Role in the Amyloidogenicity of Transthyretin. <i>Biochemistry</i> , 2006, 45, 11992-12002.	2.5	28
9	A deep learning model for predicting next-generation sequencing depth from DNA sequence. <i>Nature Communications</i> , 2021, 12, 4387.	12.8	26
10	A Computational Method for Automated Characterization of Genetic Components. <i>ACS Synthetic Biology</i> , 2014, 3, 578-588.	3.8	23
11	SMT-Based Analysis of Biological Computation. <i>Lecture Notes in Computer Science</i> , 2013, , 78-92.	1.3	22
12	Formal analysis of piecewise affine systems through formula-guided refinement. <i>Automatica</i> , 2013, 49, 261-266.	5.0	21
13	A symbolic approach to controlling piecewise affine systems. , 2010, , .		19
14	Peptide Plane Can Flip in Two Opposite Directions:Â Implication in Amyloid Formation of Transthyretin. <i>Journal of Physical Chemistry B</i> , 2006, 110, 5829-5833.	2.6	18
15	Automated Synthesis and Analysis of Switching Gene Regulatory Networks. <i>BioSystems</i> , 2016, 146, 26-34.	2.0	16
16	Formal analysis of piecewise affine systems through formula-guided refinement. , 2010, , .		10
17	Functional Analysis of Large-Scale DNA Strand Displacement Circuits. <i>Lecture Notes in Computer Science</i> , 2013, , 189-203.	1.3	10
18	Parameter Synthesis for Piecewise Affine Systems from Temporal Logic Specifications. <i>Lecture Notes in Computer Science</i> , 2008, , 542-555.	1.3	10

#	ARTICLE	IF	CITATIONS
19	Model checking discrete-time Piecewise Affine systems: Application to gene networks. , 2007, , .		10
20	Synthesizing and tuning stochastic chemical reaction networks with specified behaviours. Journal of the Royal Society Interface, 2018, 15, 20180283.	3.4	9
21	Discovering Essential Multiple Gene Effects Through Large Scale Optimization: An Application to Human Cancer Metabolism. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021, 18, 2339-2352.	3.0	9
22	Symbolic Approximation of the Bounded Reachability Probability in Large Markov Chains. Lecture Notes in Computer Science, 2014, , 388-403.	1.3	8
23	Temporal logic control of discrete-time piecewise affine systems. , 2009, , .		7
24	Formal Analysis of Network Motifs Links Structure to Function in Biological Programs. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021, 18, 261-271.	3.0	7
25	Formal analysis of Piecewise Affine systems under parameter uncertainty with application to gene networks. , 2008, , .		6
26	A formal verification approach to the design of synthetic gene networks. , 2011, , .		6
27	Synthesizing and Tuning Chemical Reaction Networks with Specified Behaviours. Lecture Notes in Computer Science, 2015, , 16-33.	1.3	5
28	Experimentally driven verification of synthetic biological circuits. , 2012, , .		4
29	Switching Gene Regulatory Networks. Lecture Notes in Computer Science, 2015, , 131-144.	1.3	3
30	Automated Reasoning for the Synthesis and Analysis of Biological Programs. Computational Biology, 2019, , 37-62.	0.2	3
31	Discrete-Time Dynamical Systems. Studies in Systems, Decision and Control, 2017, , 111-118.	1.0	3
32	Experimental Biological Protocols with Formal Semantics. Lecture Notes in Computer Science, 2018, , 165-182.	1.3	2
33	Programming Languages for Circuit Design. Methods in Molecular Biology, 2015, 1244, 81-104.	0.9	2
34	Finite Temporal Logic Control. Studies in Systems, Decision and Control, 2017, , 81-108.	1.0	1
35	Largest Satisfying Region. Studies in Systems, Decision and Control, 2017, , 119-139.	1.0	1
36	Largest Finite Satisfying Region. Studies in Systems, Decision and Control, 2017, , 47-79.	1.0	0

#	ARTICLE	IF	CITATIONS
37	Language Guided Controller Synthesis. Studies in Systems, Decision and Control, 2017, , 205-230.	1.0	0
38	Temporal Logic Control. Studies in Systems, Decision and Control, 2017, , 163-183.	1.0	0
39	Optimal Temporal Logic Control. Studies in Systems, Decision and Control, 2017, , 231-256.	1.0	0
40	Fast Enumeration of Non-isomorphic Chemical Reaction Networks. Lecture Notes in Computer Science, 2019, , 224-247.	1.3	0