Nir Piterman

List of Publications by Year
in descending order

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91	2,717	377584 21	263392 45
papers	citations	h-index	g-index

96	96	96	2304
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Control and Discovery of Environment Behaviour. IEEE Transactions on Software Engineering, 2022, 48, 1965-1978.	4.3	1
2	Synthesis of Run-To-Completion Controllers for Discrete Event Systems. , 2021, , .		0
3	Modelling and verification of reconfigurable multi-agent systems. Autonomous Agents and Multi-Agent Systems, 2021, 35, 47.	1.3	7
4	Incorporating Monitors in Reactive Synthesis Without Paying the Price. Lecture Notes in Computer Science, 2021, , 337-353.	1.0	3
5	Heterogeneity of Myc expression in breast cancer exposes pharmacological vulnerabilities revealed through executable mechanistic modeling. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22399-22408.	3.3	15
6	Using State Space Exploration to Determine How Gene Regulatory Networks Constrain Mutation Order in Cancer Evolution. Computational Biology, 2019, , 133-153.	0.1	7
7	Environmentally-Friendly GR(1) Synthesis. Lecture Notes in Computer Science, 2019, , 229-246.	1.0	18
8	Temporal Logic and Fair Discrete Systems. , 2018, , 27-73.		15
9	SCNS: a graphical tool for reconstructing executable regulatory networks from single-cell genomic data. BMC Systems Biology, 2018, 12, 59.	3.0	58
10	A toolbox for discrete modelling of cell signalling dynamics. Integrative Biology (United Kingdom), 2018, 10, 370-382.	0.6	6
11	Interaction Models and Automated Control under Partial Observable Environments. IEEE Transactions on Software Engineering, 2017, 43, 19-33.	4.3	10
12	Verifying Increasingly Expressive Temporal Logics for Infinite-State Systems. Journal of the ACM, 2017, 64, 1-39.	1.8	10
13	OBLIGATION BLACKWELL GAMES AND P-AUTOMATA. Journal of Symbolic Logic, 2017, 82, 420-452.	0.4	0
14	Advances in verification presented in TACASâ€™13. International Journal on Software Tools for Technology Transfer, 2017, 19, 511-515.	1.7	0
15	Bringing LTL Model Checking to Biologists. Lecture Notes in Computer Science, 2017, , 1-13.	1.0	5
16	Equivalence of Probabilistic $$mu $$-Calculus and p-Automata. Lecture Notes in Computer Science, 2017, , 64-75.	1.0	0
17	BTR: training asynchronous Boolean models using single-cell expression data. BMC Bioinformatics, 2016, 17, 355.	1.2	63
18	Static Analysis of Parity Games: Alternating Reachability Under Parity. Lecture Notes in Computer Science, 2016, , 159-177.	1.0	3

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19	Finding Recurrent Sets with Backward Analysis and Trace Partitioning. Lecture Notes in Computer Science, 2016, , 17-35.	1.0	7
20	T2: Temporal Property Verification. Lecture Notes in Computer Science, 2016, , 387-393.	1.0	42
21	Safety Verification of Piecewise-Deterministic Markov Processes. , 2016, , .		6
22	The Rabin index of parity games: Its complexity and approximation. Information and Computation, 2015, 245, 36-53.	0.5	2
23	Emergent Stem Cell Homeostasis in the C.Âelegans Germline Is Revealed by Hybrid Modeling. Biophysical Journal, 2015, 109, 428-438.	0.2	12
24	A Recursive Probabilistic Temporal Logic. Lecture Notes in Computer Science, 2015, , 336-348.	1.0	1
25	Decoding the regulatory network of early blood development from single-cell gene expression measurements. Nature Biotechnology, 2015, 33, 269-276.	9.4	352
26	Drug Target Optimization in Chronic Myeloid Leukemia Using Innovative Computational Platform. Scientific Reports, 2015, 5, 8190.	1.6	13
27	Timing Semantics for Abstraction and Execution of Synthesized High-Level Robot Control. IEEE Transactions on Robotics, 2015, 31, 591-604.	7.3	12
28	On Automation of CTL* Verification for Infinite-State Systems. Lecture Notes in Computer Science, 2015, , 13-29.	1.0	24
29	Fairness for Infinite-State Systems. Lecture Notes in Computer Science, 2015, , 384-398.	1.0	10
30	A Forward Analysis for Recurrent Sets. Lecture Notes in Computer Science, 2015, , 293-311.	1.0	3
31	A Modelling Framework for Cyber-Physical System Resilience. Lecture Notes in Computer Science, 2015, , 67-82.	1.0	1
32	Toward Synthesizing Executable Models in Biology. Frontiers in Bioengineering and Biotechnology, 2014, 2, 75.	2.0	5
33	Faster temporal reasoning for infinite-state programs. , 2014, , .		6
34	Controllability in Partial and Uncertain Environments. , 2014, , .		3
35	Model Checking in Biology. , 2014, , 255-279.		5
36	Controller synthesis: From modelling to enactment. , 2013, , .		20

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37	Synthesizing nonanomalous event-based controllers for liveness goals. ACM Transactions on Software Engineering and Methodology, 2013, 22, 1-36.	4.8	48
38	Synthesis of biological models from mutation experiments. , 2013, , .		24
39	At the interface of biology and computation. , 2013, , .		5
40	Provably correct continuous control for high-level robot behaviors with actions of arbitrary execution durations. , 2013, , .		22
41	Fatal Attractors in Parity Games. Lecture Notes in Computer Science, 2013, , 34-49.	1.0	6
42	Synthesis of biological models from mutation experiments. ACM SIGPLAN Notices, 2013, 48, 469-482.	0.2	9
43	Synthesis from Temporal Specifications: New Applications in Robotics and Model-Driven Development. Lecture Notes in Computer Science, 2013, , 45-49.	1.0	0
44	Cellâ€cycle regulation of NOTCH signaling during C. elegans vulval development. Molecular Systems Biology, 2012, 8, 618.	3.2	39
45	p-Automata: New foundations for discrete-time probabilistic verification. Performance Evaluation, 2012, 69, 356-378.	0.9	4
46	Synthesis of Reactive(1) designs. Journal of Computer and System Sciences, 2012, 78, 911-938.	0.9	318
47	A Dynamic Physical Model of Cell Migration, Differentiation and Apoptosis in Caenorhabditis elegans. Advances in Experimental Medicine and Biology, 2012, 736, 211-233.	0.8	5
48	Effective Synthesis of Asynchronous Systems from GR(1) Specifications. Lecture Notes in Computer Science, 2012, , 283-298.	1.0	9
49	Predictive Modelling of Stem Cell Differentiation and Apoptosis in C. elegans. Lecture Notes in Computer Science, 2012, , 99-104.	1.0	2
50	Bma: Visual Tool for Modeling and Analyzing Biological Networks. Lecture Notes in Computer Science, 2012, , 686-692.	1.0	30
51	The Modal Transition System Control Problem. Lecture Notes in Computer Science, 2012, , 155-170.	1.0	11
52	Concurrent Small Progress Measures. Lecture Notes in Computer Science, 2012, , 130-144.	1.0	2
53	The Rabin Index of Parity Games. Lecture Notes in Computer Science, 2012, , 259-260.	1.0	1
54	p-Automata and Obligation Games. , 2011, , .		0

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55	LTL generalized model checking revisited. International Journal on Software Tools for Technology Transfer, 2011, 13, 571-584.	1.7	11
56	Synthesis of live behaviour models for fallible domains. , 2011, , .		36
57	Proving Stabilization of Biological Systems. Lecture Notes in Computer Science, 2011, , 134-149.	1.0	25
58	Dynamic Reactive Modules. Lecture Notes in Computer Science, 2011, , 404-418.	1.0	9
59	The Only Way Is Up. Lecture Notes in Computer Science, 2011, , 3-11.	1.0	2
60	Strategy logic. Information and Computation, 2010, 208, 677-693.	0.5	124
61	PCTL model checking of Markov chains: Truth and falsity as winning strategies in games. Performance Evaluation, 2010, 67, 858-872.	0.9	13
62	The executable pathway to biological networks. Briefings in Functional Genomics, 2010, 9, 79-92.	1.3	21
63	Synthesis of live behaviour models. , 2010, , .		50
64	From Mtl to Deterministic Timed Automata. Lecture Notes in Computer Science, 2010, , 152-167.	1.0	22
65	p-Automata: New Foundations for Discrete-Time Probabilistic Verification. , 2010, , .		1
66	An Automata-Theoretic Approach to Infinite-State Systems. Lecture Notes in Computer Science, 2010, , 202-259.	1.0	13
67	Computational modeling of the EGFR network elucidates control mechanisms regulating signal dynamics. BMC Systems Biology, 2009, 3, 118.	3.0	30
68	From liveness to promptness. Formal Methods in System Design, 2009, 34, 83-103.	0.9	61
69	Three-Valued Abstractions of Markov Chains: Completeness for a Sizeable Fragment of PCTL. Lecture Notes in Computer Science, 2009, , 205-216.	1.0	4
70	Lower Bounds on Witnesses for Nonemptiness of Universal Co-BÃ¼chi Automata. Lecture Notes in Computer Science, 2009, , 182-196.	1.0	1
71	Hintikka Games for PCTL on Labeled Markov Chains. , 2008, , .		7
72	Bounded Asynchrony: Concurrency for Modeling Cell-Cell Interactions. , 2008, , 17-32.		24

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73	LTL Generalized Model Checking Revisited. Lecture Notes in Computer Science, 2008, , 89-104.	1.0	10
74	Predictive Modeling of Signaling Crosstalk during C. elegans Vulval Development. PLoS Computational Biology, 2007, 3, e92.	1.5	88
75	Automatic Hardware Synthesis from Specifications: A Case Study. , 2007, , .		53
76	Specify, Compile, Run: Hardware from PSL. Electronic Notes in Theoretical Computer Science, 2007, 190, 3-16.	0.9	85
77	Liveness with invisible ranking. International Journal on Software Tools for Technology Transfer, 2006, 8, 261-279.	1.7	17
78	Safraless Compositional Synthesis. Lecture Notes in Computer Science, 2006, , 31-44.	1.0	61
79	Minimizing Generalized BÃ¼chi Automata. Lecture Notes in Computer Science, 2006, , 45-58.	1.0	11
80	Solving Games Without Determinization. Lecture Notes in Computer Science, 2006, , 395-410.	1.0	51
81	SAT-based Induction for Temporal Safety Properties. Electronic Notes in Theoretical Computer Science, 2005, 119, 3-16.	0.9	19
82	Bridging the gap between fair simulation and trace inclusion. Information and Computation, 2005, 200, 35-61.	0.5	28
83	Synthesis of Reactive(1) Designs. Lecture Notes in Computer Science, 2005, , 364-380.	1.0	272
84	Computational insights into Caenorhabditis elegans vulval development. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 1951-1956.	3.3	86
85	Liveness with Invisible Ranking. Lecture Notes in Computer Science, 2004, , 223-238.	1.0	18
86	Global Model-Checking of Infinite-State Systems. Lecture Notes in Computer Science, 2004, , 387-400.	1.0	14
87	From bidirectionality to alternation. Theoretical Computer Science, 2003, 295, 295-321.	0.5	7
88	Bridging the Gap between Fair Simulation and Trace Inclusion. Lecture Notes in Computer Science, 2003, , 381-393.	1.0	12
89	Model Checking Linear Properties of Prefix-Recognizable Systems. Lecture Notes in Computer Science, 2002, , 371-385.	1.0	14
90	Fair Equivalence Relations. Lecture Notes in Computer Science, 2000, , 151-163.	1.0	2

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91	From Nondeterministic B"uchi and Streett Automata to Deterministic Parity Automata. Logical Methods in Computer Science, 0, Volume 3, Issue 3, .	0.4	98