David Parker

List of Publications by Citations

Source: https://exaly.com/author-pdf/7890425/david-parker-publications-by-citations.pdf
Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

97 papers	4,079 citations	32 h-index	62 g-index
97 ext. papers	4,561 ext. citations	1.4 avg, IF	5.65 L-index

#	Paper	IF	Citations
97	PRISM 4.0: Verification of Probabilistic Real-Time Systems. *Lecture Notes in Computer Science*, **2011**, 585-591	0.9	953
96	PRISM: A Tool for Automatic Verification of Probabilistic Systems. *Lecture Notes in Computer Science*, **2006**, 441-444	0.9	289
95	PRISM: Probabilistic Symbolic Model Checker. *Lecture Notes in Computer Science*, **2002**, 200-204	0.9	223
94	Probabilistic symbolic model checking with PRISM: a hybrid approach. *International Journal on Software Tools for Technology Transfer*, **2004**, 6, 128-142	1.3	189
93	Automated Verification Techniques for Probabilistic Systems. *Lecture Notes in Computer Science*, **2011**, 53-113	0.9	140
92	Numerical vs. statistical probabilistic model checking. *International Journal on Software Tools for Technology Transfer*, **2006**, 8, 216-228	1.3	117
91	Performance analysis of probabilistic timed automata using digital clocks. *Formal Methods in System Design*, **2006**, 29, 33-78	1.4	111
90	Probabilistic model checking of complex biological pathways. *Theoretical Computer Science*, **2008**, 391, 239-257	1.1	110
89	Engineering failure analysis and design optimisation with HiP-HOPS. *Engineering Failure Analysis*, **2011**, 18, 590-608	3.2	97
88	Verification of Markov Decision Processes Using Learning Algorithms. *Lecture Notes in Computer Science*, **2014**, 98-114	0.9	91
87	Automatic verification of competitive stochastic systems. *Formal Methods in System Design*, **2013**, 43, 61-92	1.4	69
86	The PRISM Benchmark Suite **2012**,		69
85	Model checking for probabilistic timed automata. *Formal Methods in System Design*, **2013**, 43, 164-190	1.4	66
84	A game-based abstraction-refinement framework for Markov decision processes. *Formal Methods in System Design*, **2010**, 36, 246-280	1.4	62
83	Quantitative Analysis With the Probabilistic Model Checker PRISM. *Electronic Notes in Theoretical Computer Science*, **2006**, 153, 5-31	0.7	60
82	Assume-Guarantee Verification for Probabilistic Systems. *Lecture Notes in Computer Science*, **2010**, 23-37	0.9	59
81	Design and analysis of DNA strand displacement devices using probabilistic model checking. *Journal of the Royal Society Interface*, **2012**, 9, 1470-85	4.1	58

80	PRISM-games: A Model Checker for Stochastic Multi-Player Games. *Lecture Notes in Computer Science*, **2013**, 185-191	0.9	57
79	Symmetry Reduction for Probabilistic Model Checking. *Lecture Notes in Computer Science*, **2006**, 234-248	0.9	56
78	A formal analysis of bluetooth device discovery. *International Journal on Software Tools for Technology Transfer*, **2006**, 8, 621-632	1.3	55
77	Quantitative Multi-objective Verification for Probabilistic Systems. *Lecture Notes in Computer Science*, **2011**, 112-127	0.9	52
76	Symbolic Model Checking of Probabilistic Processes Using MTBDDs and the Kronecker Representation. *Lecture Notes in Computer Science*, **2000**, 395-410	0.9	52
75	The Hanoi Omega-Automata Format. *Lecture Notes in Computer Science*, **2015**, 479-486	0.9	46
74	On the use of MTBDDs for performability analysis and verification of stochastic systems. *The Journal of Logic and Algebraic Programming*, **2003**, 56, 23-67		44
73	Pareto Curves for Probabilistic Model Checking. *Lecture Notes in Computer Science*, **2012**, 317-332	0.9	44
72	Using probabilistic model checking for dynamic power management. *Formal Aspects of Computing*, **2005**, 17, 160-176	1.2	38
71	Incremental quantitative verification for Markov decision processes **2011**,		36
70	Controller dependability analysis by probabilistic model checking. *Control Engineering Practice*, **2007**, 15, 1427-1434	3.9	34
69	Ensuring the Reliability of Your Model Checker: Interval Iteration for Markov Decision Processes. *Lecture Notes in Computer Science*, **2017**, 160-180	0.9	34
68	The Quantitative Verification Benchmark Set. *Lecture Notes in Computer Science*, **2019**, 344-350	0.9	32
67	Abstraction Refinement for Probabilistic Software. *Lecture Notes in Computer Science*, **2008**, 182-197	0.9	32
66	Stochastic Games for Verification of Probabilistic Timed Automata. *Lecture Notes in Computer Science*, **2009**, 212-227	0.9	32
65	Symbolic Representations and Analysis of Large Probabilistic Systems. *Lecture Notes in Computer Science*, **2004**, 296-338	0.9	31
64	Verification and control of partially observable probabilistic systems. *Real-Time Systems*, **2017**, 53, 354-402	1.3	27
63	Advances and challenges of probabilistic model checking **2010**,		27

62	The 2019 Comparison of Tools for the Analysis of Quantitative Formal Models. *Lecture Notes in Computer Science*, **2019**, 69-92	0.9	27
61	Numerical vs. Statistical Probabilistic Model Checking: An Empirical Study. *Lecture Notes in Computer Science*, **2004**, 46-60	0.9	26
60	PRISM-games: verification and strategy synthesis for stochastic multi-player games with multiple objectives. *International Journal on Software Tools for Technology Transfer*, **2018**, 20, 195-210	1.3	25
59	Probabilistic verification of Herman self-stabilisation algorithm. *Formal Aspects of Computing*, **2012**, 24, 661-670	1.2	24
58	Compositional probabilistic verification through multi-objective model checking. *Information and Computation*, **2013**, 232, 38-65	0.8	22
57	Compositional Verification of Probabilistic Systems Using Learning **2010**,		22
56	Probabilistic planning with formal performance guarantees for mobile service robots. *International Journal of Robotics Research*, **2019**, 38, 1098-1123	5.7	21
55	A Symbolic Out-of-Core Solution Method for Markov Models. *Electronic Notes in Theoretical Computer Science*, **2002**, 68, 589-604	0.7	21
54	Performance modelling and verification of cloud-based auto-scaling policies. *Future Generation Computer Systems*, **2018**, 87, 629-638	7.5	19
53	PRISM-games 3.0: Stochastic Game Verification with Concurrency, Equilibria and Time. *Lecture Notes in Computer Science*, **2020**, 475-487	0.9	19
52	PRISM-Games 2.0: A Tool for Multi-objective Strategy Synthesis for Stochastic Games. *Lecture Notes in Computer Science*, **2016**, 560-566	0.9	18
51	Probabilistic Mobile Ambients. *Theoretical Computer Science*, **2009**, 410, 1272-1303	1.1	17
50	Learning-Based Compositional Verification for Synchronous Probabilistic Systems. *Lecture Notes in Computer Science*, **2011**, 511-521	0.9	17
49	**2013**,		16
48	Model Checking Probabilistic and Stochastic Extensions of the Calculus. *IEEE Transactions on Software Engineering*, **2009**, 35, 209-223	3.5	16
47	Automated Learning of Probabilistic Assumptions for Compositional Reasoning. *Lecture Notes in Computer Science*, **2011**, 2-17	0.9	14
46	Verifying Team Formation Protocols with Probabilistic Model Checking. *Lecture Notes in Computer Science*, **2011**, 190-207	0.9	14
45	Automatic Verification of Competitive Stochastic Systems. *Lecture Notes in Computer Science*, **2012**, 315-330	3.9	14

44	Game-Based Probabilistic Predicate Abstraction in PRISM. *Electronic Notes in Theoretical Computer Science*, **2008**, 220, 5-21	0.7	13
43	Simulation and Verification for Computational Modelling of Signalling Pathways **2006**,		13
42	Game-based Abstraction and Controller Synthesis for Probabilistic Hybrid Systems **2011**,		12
41	SMT-Based Bisimulation Minimisation of Markov Models. *Lecture Notes in Computer Science*, **2013**, 28-47	0.9	12
40	Language-Level Symmetry Reduction for Probabilistic Model Checking **2009**,		11
39	Model checking the probabilistic pi-calculus **2007**,		9
38	Equilibria-Based Probabilistic Model Checking for Concurrent Stochastic Games. *Lecture Notes in Computer Science*, **2019**, 298-315	0.9	9
37	On Correctness, Precision, and Performance in Quantitative Verification. *Lecture Notes in Computer Science*, **2021**, 216-241	0.9	9
36	Automated Verification of Concurrent Stochastic Games. *Lecture Notes in Computer Science*, **2018**, 223-239	0.9	8
35	Quantitative Verification Techniques for Biological Processes. *Natural Computing Series*, **2009**, 391-409	2.5	8
34	Performance Modelling and Verification of Cloud-Based Auto-Scaling Policies **2017**,		7
33	Permissive Controller Synthesis for Probabilistic Systems. *Logical Methods in Computer Science*, **2015**, 11,		7
32	Strategic Analysis of Trust Models for User-Centric Networks. *Electronic Proceedings in Theoretical Computer Science, EPTCS*,112, 53-59		7
31	Verification and Control of Turn-Based Probabilistic Real-Time Games. *Lecture Notes in Computer Science*, **2019**, 379-396	0.9	7
30	Formal Quantitative Analysis of Reaction Networks Using Chemical Organisation Theory. *Lecture Notes in Computer Science*, **2016**, 232-251	0.9	7
29	Bisimulation for Demonic Schedulers. *Lecture Notes in Computer Science*, **2009**, 318-332	0.9	7
28	Automatic verification of concurrent stochastic systems. *Formal Methods in System Design*,1	1.4	7
27	Verification of Real-Time Probabilistic Systems249-288		7

26	GRIP: Generic Representatives in PRISM **2007**,		6
25	Software Adaptation for an Unmanned Undersea Vehicle. *IEEE Software*, **2019**, 36, 91-96	1.5	5
24	Synthesizing efficient systems in probabilistic environments. *Acta Informatica*, **2016**, 53, 425-457	0.9	5
23	A Framework for Verification of Software with Time and Probabilities. *Lecture Notes in Computer Science*, **2010**, 25-45	0.9	5
22	Probabilistic Guarantees for Safe Deep Reinforcement Learning. *Lecture Notes in Computer Science*, **2020**, 231-248	0.9	5
21	Multi-player Equilibria Verification for Concurrent Stochastic Games. *Lecture Notes in Computer Science*, **2020**, 74-95	0.9	5
20	Verification and Control of Partially Observable Probabilistic Real-Time Systems. *Lecture Notes in Computer Science*, **2015**, 240-255	0.9	5
19	Organisation-Oriented Coarse Graining and Refinement of Stochastic Reaction Networks. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, **2018**, 15, 1152-1166	3	4
18	Generating Compact MTBDD-Representations from Probmela Specifications. *Lecture Notes in Computer Science*, **2008**, 60-76	0.9	4
17	Fault diagnosis in labelled Petri nets: A Fourier–Motzkin based approach. *Automatica*, **2021**, 132, 109831	5.7	4
16	On Reduction Criteria for Probabilistic Reward Models. *Lecture Notes in Computer Science*, **2006**, 309-320	0.9	4
15	Multi-scale stochastic organization-oriented coarse-graining exemplified on the human mitotic checkpoint. *Scientific Reports*, **2019**, 9, 3902	4.9	3
14	Variability management in safety-critical systems design and dependability analysis. *Journal of Software: Evolution and Process*, **2019**, 31, e2202	1	3
13	Local abstraction refinement for probabilistic timed programs. *Theoretical Computer Science*, **2014**, 538, 37-53	1.1	3
12	Can aquatic flightless birds allocate Automotive Safety requirements? **2015**,		3
11	Symbolic Magnifying Lens Abstraction in Markov Decision Processes **2008**,		3
10	Symbolic Verification and Strategy Synthesis for Linearly-Priced Probabilistic Timed Automata. *Lecture Notes in Computer Science*, **2017**, 289-309	0.9	2
9	Quantitative Verification of Certificate Transparency Gossip Protocols **2020**,		2

8	ATEN: And/Or tree ensemble for inferring accurate Boolean network topology and dynamics. *Bioinformatics*, **2020**, 36, 578-585	7.2	1
7	Quantitative Verification of Numerical Stability for Kalman Filters. *Lecture Notes in Computer Science*, **2019**, 425-441	0.9	1
6	**2018**,		1
5	Verified Probabilistic Policies for Deep Reinforcement Learning. *Lecture Notes in Computer Science*, **2022**, 193-212	0.9	1
4	Online monitoring for diagnosis of violations of constraints in Petri net models. *IFAC-PapersOnLine*, **2019**, 52, 25-30	0.7	0
3	Automated Formal Analysis of Side-Channel Attacks on Probabilistic Systems. *Lecture Notes in Computer Science*, **2019**, 319-337	0.9	
2	Quantitative verification of Kalman filters. *Formal Aspects of Computing*, **2021**, 33, 669-693	1.2	
1	Correlated Equilibria and Fairness in Concurrent Stochastic Games. *Lecture Notes in Computer Science*, **2022**, 60-78	0.9	