

# Joost-Pieter Katoen

## List of Publications by Year in descending order

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274  
papers

7,036  
citations

101384

36  
h-index

110170

64  
g-index

290  
all docs

290  
docs citations

290  
times ranked

1782  
citing authors

#	ARTICLE	IF	CITATIONS
1	The probabilistic model checker Storm. International Journal on Software Tools for Technology Transfer, 2022, 24, 589-610.	1.7	55
2	Synthesizing optimal bias in randomized self-stabilization. Distributed Computing, 2022, 35, 37-57.	0.7	1
3	Convex Optimization for Parameter Synthesis in MDPs. IEEE Transactions on Automatic Control, 2022, 67, 6333-6348.	3.6	9
4	Gradient-Descent for Randomized Controllers Under Partial Observability. Lecture Notes in Computer Science, 2022, , 127-150.	1.0	5
5	Model Checking Temporal Properties of Recursive Probabilistic Programs. Lecture Notes in Computer Science, 2022, , 449-469.	1.0	2
6	DFT modeling approach for operational risk assessment of railway infrastructure. International Journal on Software Tools for Technology Transfer, 2022, 24, 331-350.	1.7	6
7	Under-Approximating Expected Total Rewards in POMDPs. Lecture Notes in Computer Science, 2022, , 22-40.	1.0	3
8	Weighted programming: a programming paradigm for specifying mathematical models. , 2022, 6, 1-30.		7
9	Strategy Synthesis for POMDPs in Robot Planning via Game-Based Abstractions. IEEE Transactions on Automatic Control, 2021, 66, 1040-1054.	3.6	6
10	Fine-Tuning the Odds in Bayesian Networks. Lecture Notes in Computer Science, 2021, , 268-283.	1.0	4
11	Inductive Synthesis for Probabilistic Programs Reaches New Horizons. Lecture Notes in Computer Science, 2021, , 191-209.	1.0	8
12	Finding Provably Optimal Markov Chains. Lecture Notes in Computer Science, 2021, , 173-190.	1.0	8
13	Synthesizing Invariant Barrier Certificates via Difference-of-Convex Programming. Lecture Notes in Computer Science, 2021, , 443-466.	1.0	2
14	Multi-objective Optimization of Long-run Average and Total Rewards. Lecture Notes in Computer Science, 2021, , 230-249.	1.0	2
15	PAYNT: A Tool for Inductive Synthesis of Probabilistic Programs. Lecture Notes in Computer Science, 2021, , 856-869.	1.0	4
16	A pre-expectation calculus for probabilistic sensitivity. , 2021, 5, 1-28.		11
17	Scalable Reliability Analysis by Lazy Verification. Lecture Notes in Computer Science, 2021, , 180-197.	1.0	2
18	Generating Functions for Probabilistic Programs. Lecture Notes in Computer Science, 2021, , 231-248.	1.0	1

#	ARTICLE	IF	CITATIONS
19	Counterexample-guided inductive synthesis for probabilistic systems. Formal Aspects of Computing, 2021, 33, 637-667.	1.4	4
20	Model Checking the Multi-Formalism Language FIGARO. , 2021, , .		1
21	The complexity of reachability in parametric Markov decision processes. Journal of Computer and System Sciences, 2021, 119, 183-210.	0.9	11
22	Automated Termination Analysis of Polynomial Probabilistic Programs. Lecture Notes in Computer Science, 2021, , 491-518.	1.0	14
23	Relatively complete verification of probabilistic programs: an expressive language for expectation-based reasoning. , 2021, 5, 1-30.		12
24	Latticed k-Induction with an Application to Probabilistic Programs. Lecture Notes in Computer Science, 2021, , 524-549.	1.0	12
25	The Probabilistic Termination Tool Amber. Lecture Notes in Computer Science, 2021, , 667-675.	1.0	4
26	Synergising Reliability Modelling Languages: BDMPs and Repairable DFTs. , 2021, , .		1
27	IC3 software model checking. International Journal on Software Tools for Technology Transfer, 2020, 22, 135-161.	1.7	5
28	Parametric Markov chains: PCTL complexity and fraction-free Gaussian elimination. Information and Computation, 2020, 272, 104504.	0.5	21
29	Multi-cost Bounded Tradeoff Analysis in MDP. Journal of Automated Reasoning, 2020, 64, 1483-1522.	1.1	9
30	Explaining Boolean-Logic Driven Markov Processes using GSPNs. , 2020, , .		4
31	Scenario-Based Verification of Uncertain MDPs. Lecture Notes in Computer Science, 2020, 12078, 287-305.	1.0	11
32	Simple Strategies in Multi-Objective MDPs. Lecture Notes in Computer Science, 2020, , 346-364.	1.0	13
33	Interpretation-Based Violation Witness Validation for C: NITWIT. Lecture Notes in Computer Science, 2020, , 40-57.	1.0	13
34	Stochastic Games with Lexicographic Reachability-Safety Objectives. Lecture Notes in Computer Science, 2020, , 398-420.	1.0	7
35	PrIC3: Property Directed Reachability for MDPs. Lecture Notes in Computer Science, 2020, , 512-538.	1.0	9
36	A Compositional Semantics for Repairable BDMPs. Lecture Notes in Computer Science, 2020, , 82-98.	1.0	4

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37	Probabilistic Model Checking of AODV. Lecture Notes in Computer Science, 2020, , 54-73.	1.0	1
38	Bayesian Inference by Symbolic Model Checking. Lecture Notes in Computer Science, 2020, , 115-133.	1.0	4
39	Termination Analysis of Probabilistic Programs with Martingales. , 2020, , 221-258.		8
40	Aiming low is harder: induction for lower bounds in probabilistic program verification. , 2020, 4, 1-28.		21
41	On the hardness of analyzing probabilistic programs. Acta Informatica, 2019, 56, 255-285.	0.5	23
42	Quantitative separation logic: a logic for reasoning about probabilistic pointer programs. , 2019, 3, 1-29.		24
43	Safety analysis for vehicle guidance systems with dynamic fault trees. Reliability Engineering and System Safety, 2019, 186, 37-50.	5.1	40
44	COMPASSÂ3.0. Lecture Notes in Computer Science, 2019, , 379-385.	1.0	10
45	Shepherding Hordes of Markov Chains. Lecture Notes in Computer Science, 2019, , 172-190.	1.0	18
46	A DFT Modeling Approach for Infrastructure Reliability Analysis of Railway Station Areas. Lecture Notes in Computer Science, 2019, , 40-58.	1.0	4
47	Counterexample-Driven Synthesis for Probabilistic Program Sketches. Lecture Notes in Computer Science, 2019, , 101-120.	1.0	15
48	Model Repair Revamped. Lecture Notes in Computer Science, 2019, , 107-125.	1.0	4
49	Are Parametric Markov Chains Monotonic?. Lecture Notes in Computer Science, 2019, , 479-496.	1.0	12
50	The 10,000 Facets of MDP Model Checking. Lecture Notes in Computer Science, 2019, , 420-451.	1.0	12
51	Conditioning in Probabilistic Programming. ACM Transactions on Programming Languages and Systems, 2018, 40, 1-50.	1.7	19
52	Fast Dynamic Fault Tree Analysis by Model Checking Techniques. IEEE Transactions on Industrial Informatics, 2018, 14, 370-379.	7.2	74
53	A new proof rule for almost-sure termination. , 2018, 2, 1-28.		46
54	Multi-cost Bounded Reachability in MDP. Lecture Notes in Computer Science, 2018, , 320-339.	1.0	18

#	ARTICLE	IF	CITATIONS
55	How long, O Bayesian network, will I sample thee?. Lecture Notes in Computer Science, 2018, , 186-213.	1.0	12
56	One Net Fits All. Lecture Notes in Computer Science, 2018, , 272-293.	1.0	7
57	Synthesis in pMDPs: A Tale of 1001 Parameters. Lecture Notes in Computer Science, 2018, , 160-176.	1.0	22
58	Improving Generalization in Software IC3. Lecture Notes in Computer Science, 2018, , 85-102.	1.0	4
59	Let this Graph Be Your Witness!. Lecture Notes in Computer Science, 2018, , 3-11.	1.0	3
60	Sound Value Iteration. Lecture Notes in Computer Science, 2018, , 643-661.	1.0	31
61	Monitoring CTMCs by Multi-clock Timed Automata. Lecture Notes in Computer Science, 2018, , 507-526.	1.0	3
62	Parameter-Independent Strategies for pMDPs via POMDPs. Lecture Notes in Computer Science, 2018, , 53-70.	1.0	8
63	Quantitative model-checking of controlled discrete-time Markov processes. Information and Computation, 2017, 253, 1-35.	0.5	16
64	Sequential Convex Programming for the Efficient Verification of Parametric MDPs. Lecture Notes in Computer Science, 2017, , 133-150.	1.0	22
65	Fault trees on a diet: automated reduction by graph rewriting. Formal Aspects of Computing, 2017, 29, 651-703.	1.4	9
66	Modal Stochastic Games. Lecture Notes in Computer Science, 2017, , 426-445.	1.0	1
67	A weakest pre-expectation semantics for mixed-sign expectations. , 2017, , .		13
68	Motion planning under partial observability using game-based abstraction. , 2017, , .		13
69	Automated Fine Tuning of Probabilistic Self-Stabilizing Algorithms. , 2017, , .		7
70	Synthesis and Verification of Self-aware Computing Systems. , 2017, , 337-373.		23
71	Markov Automata with Multiple Objectives. Lecture Notes in Computer Science, 2017, , 140-159.	1.0	17
72	A Storm is Coming: A Modern Probabilistic Model Checker. Lecture Notes in Computer Science, 2017, , 592-600.	1.0	244

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73	Model-Based Safety Analysis for Vehicle Guidance Systems. Lecture Notes in Computer Science, 2017, , 3-19.	1.0	8
74	Boosting Fault Tree Analysis by Formal Methods. Lecture Notes in Computer Science, 2017, , 368-389.	1.0	5
75	Formal Methods for Aerospace Systems. , 2017, , 133-159.		9
76	The Probabilistic Model Checking Landscape. , 2016, , .		88
77	Probabilistic Model Checking for Uncertain Scenario-Aware Data Flow. ACM Transactions on Design Automation of Electronic Systems, 2016, 22, 1-27.	1.9	3
78	Reasoning about Recursive Probabilistic Programs. , 2016, , .		54
79	Uncovering Dynamic Fault Trees. , 2016, , .		28
80	Model-Checking Assisted Protocol Design for Ultra-reliable Low-Latency Wireless Networks. , 2016, , .		9
81	Advancing Dynamic Fault Tree Analysis - Get Succinct State Spaces Fast and Synthesise Failure Rates. Lecture Notes in Computer Science, 2016, , 253-265.	1.0	12
82	Confluence reduction for Markov automata. Theoretical Computer Science, 2016, 655, 193-219.	0.5	7
83	Efficient GPU algorithms for parallel decomposition of graphs into strongly connected and maximal end components. Formal Methods in System Design, 2016, 48, 274-300.	0.9	28
84	Inferring Covariances for Probabilistic Programs. Lecture Notes in Computer Science, 2016, , 191-206.	1.0	6
85	Parameter Synthesis for Markov Models: Faster Than Ever. Lecture Notes in Computer Science, 2016, , 50-67.	1.0	61
86	Bounded Model Checking for Probabilistic Programs. Lecture Notes in Computer Science, 2016, , 68-85.	1.0	17
87	Weakest Precondition Reasoning for Expected Runâ€Times of Probabilistic Programs. Lecture Notes in Computer Science, 2016, , 364-389.	1.0	64
88	Safety-Constrained Reinforcement Learning for MDPs. Lecture Notes in Computer Science, 2016, , 130-146.	1.0	44
89	Performance Evaluation of Concurrent Data Structures. Lecture Notes in Computer Science, 2016, , 38-49.	1.0	2
90	Conditioning in Probabilistic Programming. Electronic Notes in Theoretical Computer Science, 2015, 319, 199-216.	0.9	9

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91	Juggernaut: using graph grammars for abstracting unbounded heap structures. Formal Methods in System Design, 2015, 47, 159-203.	0.9	3
92	A Statistical Approach for Timed Reachability in AADL Models. , 2015, , .		6
93	Probabilistic Programming: A True Verification Challenge. Lecture Notes in Computer Science, 2015, , 1-3.	1.0	1
94	Understanding Probabilistic Programs. Lecture Notes in Computer Science, 2015, , 15-32.	1.0	13
95	Verifying pointer programs using graph grammars. Science of Computer Programming, 2015, 97, 157-162.	1.5	3
96	Modelling and statistical model checking of a microgrid. International Journal on Software Tools for Technology Transfer, 2015, 17, 537-554.	1.7	2
97	A Greedy Approach for the Efficient Repair of Stochastic Models. Lecture Notes in Computer Science, 2015, , 295-309.	1.0	33
98	Counterexamples for Expected Rewards. Lecture Notes in Computer Science, 2015, , 435-452.	1.0	4
99	PROPhESY: A PRObabilistic ParamETER SYnthesis Tool. Lecture Notes in Computer Science, 2015, , 214-231.	1.0	78
100	Multi-objective Parameter Synthesis in Probabilistic Hybrid Systems. Lecture Notes in Computer Science, 2015, , 93-107.	1.0	6
101	Fault Trees on a Diet. Lecture Notes in Computer Science, 2015, , 3-18.	1.0	9
102	On the Hardness of Almost-“Sure Termination. Lecture Notes in Computer Science, 2015, , 307-318.	1.0	31
103	Zero-reachability in probabilistic multi-counter automata. , 2014, , .		12
104	Layered Reduction for Abstract Probabilistic Automata. , 2014, , .		3
105	Exponentially timed SADF. , 2014, , .		6
106	Probably safe or live. , 2014, , .		8
107	Symbolic counterexample generation for large discrete-time Markov chains. Science of Computer Programming, 2014, 91, 90-114.	1.5	16
108	Software Engineering and Formal Methods. Lecture Notes in Computer Science, 2014, , .	1.0	0

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109	Minimal counterexamples for linear-time probabilistic verification. Theoretical Computer Science, 2014, 549, 61-100.	0.5	20
110	Spacecraft early design validation using formal methods. Reliability Engineering and System Safety, 2014, 132, 20-35.	5.1	49
111	Operational versus weakest pre-expectation semantics for the probabilistic guarded command language. Performance Evaluation, 2014, 73, 110-132.	0.9	48
112	Counterexample Generation for Discrete-Time Markov Models: An Introductory Survey. Lecture Notes in Computer Science, 2014, , 65-121.	1.0	32
113	Layered Reduction for Modal Specification Theories. Lecture Notes in Computer Science, 2014, , 329-347.	1.0	2
114	GPU-Based Graph Decomposition into Strongly Connected and Maximal End Components. Lecture Notes in Computer Science, 2014, , 310-326.	1.0	13
115	Accelerating Parametric Probabilistic Verification. Lecture Notes in Computer Science, 2014, , 404-420.	1.0	40
116	Fast Debugging of PRISM Models. Lecture Notes in Computer Science, 2014, , 146-162.	1.0	18
117	Tight Game Abstractions of Probabilistic Automata. Lecture Notes in Computer Science, 2014, , 576-591.	1.0	1
118	Parametric LTL on Markov Chains. Lecture Notes in Computer Science, 2014, , 207-221.	1.0	4
119	Performance Analysis of Computing Servers "A Case Study Exploiting a New GSPN Semantics. Lecture Notes in Computer Science, 2014, , 57-72.	1.0	1
120	A compositional modelling and analysis framework for stochastic hybrid systems. Formal Methods in System Design, 2013, 43, 191-232.	0.9	98
121	Abstract Probabilistic Automata. Information and Computation, 2013, 232, 66-116.	0.5	16
122	Quantitative automata-based controller synthesis for non-autonomous stochastic hybrid systems. , 2013, , .		34
123	Model checking for performability. Mathematical Structures in Computer Science, 2013, 23, 751-795.	0.5	22
124	Model-Based Energy Optimization of Automotive Control Systems. , 2013, , .		5
125	SMT-Based Bisimulation Minimisation of Markov Models. Lecture Notes in Computer Science, 2013, , 28-47.	1.0	16
126	A Semantics for Every GSPN. Lecture Notes in Computer Science, 2013, , 90-109.	1.0	47



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127	Prinsysâ€™ On a Quest for Probabilistic Loop Invariants. Lecture Notes in Computer Science, 2013, , 193-208.	1.0	19
128	High-Level Counterexamples for Probabilistic Automata. Lecture Notes in Computer Science, 2013, , 39-54.	1.0	16
129	Modelling, Reduction and Analysis of Markov Automata. Lecture Notes in Computer Science, 2013, , 55-71.	1.0	31
130	Concurrency Meets Probability: Theory and Practice. Lecture Notes in Computer Science, 2013, , 44-45.	1.0	0
131	Symbolic Counterexample Generation for Discrete-Time Markov Chains. Lecture Notes in Computer Science, 2013, , 134-151.	1.0	5
132	Robust PCTL model checking. , 2012, , .		18
133	Model checking of Scenario-Aware Dataflow with CADP. , 2012, , .		10
134	Operational Versus Weakest Precondition Semantics for the Probabilistic Guarded Command Language. , 2012, , .		5
135	Formal correctness, safety, dependability, and performance analysis of a satellite. , 2012, , .		43
136	GSPNs Revisited: Simple Semantics and New Analysis Algorithms. , 2012, , .		11
137	Layered reasoning for randomized distributed algorithms. Formal Aspects of Computing, 2012, 24, 477-496.	1.4	7
138	A linear process-algebraic format with data for probabilistic automata. Theoretical Computer Science, 2012, 413, 36-57.	0.5	11
139	Three-valued abstraction for probabilistic systems. The Journal of Logic and Algebraic Programming, 2012, 81, 356-389.	1.4	29
140	Minimal Critical Subsystems for Discrete-Time Markov Models. Lecture Notes in Computer Science, 2012, , 299-314.	1.0	29
141	Quantitative Timed Analysis of Interactive Markov Chains. Lecture Notes in Computer Science, 2012, , 8-23.	1.0	35
142	Weighted Lumpability on Markov Chains. Lecture Notes in Computer Science, 2012, , 322-339.	1.0	13
143	Efficient Modelling and Generation of Markov Automata. Lecture Notes in Computer Science, 2012, , 364-379.	1.0	32
144	The COMICS Tool â€™ Computing Minimal Counterexamples for DTMCs. Lecture Notes in Computer Science, 2012, , 349-353.	1.0	12

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145	Compositional Abstraction Techniques for Probabilistic Automata. Lecture Notes in Computer Science, 2012, , 325-341.	1.0	8
146	Quantitative Modelling and Analysis. Lecture Notes in Computer Science, 2012, , 290-292.	1.0	0
147	System-Software Co-Engineering: Dependability and Safety Perspective. , 2011, , .		5
148	New Results on Abstract Probabilistic Automata. , 2011, , .		17
149	Safety, Dependability and Performance Analysis of Extended AADL Models. Computer Journal, 2011, 54, 754-775.	1.5	171
150	Abstract Probabilistic Automata. Lecture Notes in Computer Science, 2011, , 324-339.	1.0	24
151	A two-step scheme for approximate model checking of stochastic hybrid systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 4519-4524.	0.4	3
152	The ins and outs of the probabilistic model checker MRMC. Performance Evaluation, 2011, 68, 90-104.	0.9	174
153	Time-bounded reachability in tree-structured QBDs by abstraction. Performance Evaluation, 2011, 68, 105-125.	0.9	6
154	Quantitative automata model checking of autonomous stochastic hybrid systems. , 2011, , .		24
155	Reachability probabilities in Markovian Timed Automata. , 2011, , .		6
156	Efficient CTMC Model Checking of Linear Real-Time Objectives. Lecture Notes in Computer Science, 2011, , 128-142.	1.0	24
157	A Local Greibach Normal Form for Hyperedge Replacement Grammars. Lecture Notes in Computer Science, 2011, , 323-335.	1.0	10
158	Analysing and Improving Energy Efficiency of Distributed Slotted Aloha. Lecture Notes in Computer Science, 2011, , 197-208.	1.0	4
159	SMA€”The Smyle Modeling Approach. Lecture Notes in Computer Science, 2011, , 103-117.	1.0	1
160	Observing Continuous-Time MDPs by 1-Clock Timed Automata. Lecture Notes in Computer Science, 2011, , 2-25.	1.0	7
161	Towards Trustworthy Aerospace Systems: An Experience Report. Lecture Notes in Computer Science, 2011, , 1-4.	1.0	2
162	Performance evaluation and model checking join forces. Communications of the ACM, 2010, 53, 76-85.	3.3	64

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163	Performability assessment by model checking of Markov reward models. Formal Methods in System Design, 2010, 36, 1-36.	0.9	21
164	Computing Optimal Schedules of Battery Usage in Embedded Systems. IEEE Transactions on Industrial Informatics, 2010, 6, 276-286.	7.2	31
165	Approximate Model Checking of Stochastic Hybrid Systems. European Journal of Control, 2010, 16, 624-641.	1.6	140
166	Learning Communicating Automata from MSCs. IEEE Transactions on Software Engineering, 2010, 36, 390-408.	4.3	16
167	DTMC Model Checking by SCC Reduction. , 2010, , .		20
168	A Linear Process-Algebraic Format for Probabilistic Systems with Data. , 2010, , .		4
169	Analyzing Energy Consumption in a Gossiping MAC Protocol. Lecture Notes in Computer Science, 2010, , 107-119.	1.0	4
170	Leader Election in Anonymous Radio Networks: Model Checking Energy Consumption. Lecture Notes in Computer Science, 2010, , 247-261.	1.0	3
171	libalf: The Automata Learning Framework. Lecture Notes in Computer Science, 2010, , 360-364.	1.0	57
172	A Model Checker for AADL. Lecture Notes in Computer Science, 2010, , 562-565.	1.0	19
173	Linear-Invariant Generation for Probabilistic Programs:. Lecture Notes in Computer Science, 2010, , 390-406.	1.0	52
174	The How and Why of Interactive Markov Chains. Lecture Notes in Computer Science, 2010, , 311-337.	1.0	28
175	Model Checking Markov Chains Using Krylov Subspace Methods: An Experience Report. Lecture Notes in Computer Science, 2010, , 115-130.	1.0	1
176	Simulation-Based CTMC Model Checking: An Empirical Evaluation. , 2009, , .		7
177	Verification and performance evaluation of aadl models. , 2009, , .		9
178	The Ins and Outs of the Probabilistic Model Checker MRMC. , 2009, , .		59
179	Time-Bounded Reachability in Tree-Structured QBDs by Abstraction. , 2009, , .		1
180	Codesign of dependable systems: A component-based modeling language. , 2009, , .		7

#	ARTICLE	IF	CITATIONS
181	Quantitative Model Checking of Continuous-Time Markov Chains Against Timed Automata Specifications. , 2009, , .		38
182	Maximizing system lifetime by battery scheduling. , 2009, , .		27
183	Counterexample Generation in Probabilistic Model Checking. IEEE Transactions on Software Engineering, 2009, 35, 241-257.	4.3	84
184	Delayed Nondeterminism in Continuous-Time Markov Decision Processes. Lecture Notes in Computer Science, 2009, , 364-379.	1.0	24
185	The COMPASS Approach: Correctness, Modelling and Performability of Aerospace Systems. Lecture Notes in Computer Science, 2009, , 173-186.	1.0	59
186	LTL Model Checking of Time-Inhomogeneous Markov Chains. Lecture Notes in Computer Science, 2009, , 104-119.	1.0	7
187	Regular Expressions for PCTL Counterexamples. , 2008, , .		15
188	Quantitative Evaluation in Embedded System Design: Trends in Modeling and Analysis Techniques. , 2008, , .		1
189	Perspectives in Probabilistic Verification. , 2008, , .		3
190	Time-Abstracting Bisimulation for Probabilistic Timed Automata. , 2008, , .		8
191	Approximate Parameter Synthesis for Probabilistic Time-Bounded Reachability. , 2008, , .		50
192	Symmetry reduction for stochastic hybrid systems. , 2008, , .		1
193	The Surprising Robustness of (Closed) Timed Automata against Clock-Drift. International Federation for Information Processing, 2008, , 537-553.	0.4	8
194	Smyle: A Tool for Synthesizing Distributed Models from Scenarios by Learning. Lecture Notes in Computer Science, 2008, , 162-166.	1.0	6
195	Abstraction for Stochastic Systems by Erlang's Method of Stages. Lecture Notes in Computer Science, 2008, , 279-294.	1.0	5
196	Compositional Modeling and Minimization of Time-Inhomogeneous Markov Chains. Lecture Notes in Computer Science, 2008, , 244-258.	1.0	9
197	Model checking mobile stochastic logic. Theoretical Computer Science, 2007, 382, 42-70.	0.5	58
198	Replaying Play In and Play Out: Synthesis of Design Models from Scenarios by Learning. Lecture Notes in Computer Science, 2007, , 435-450.	1.0	14

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199	motor:The modest Tool Environment. Lecture Notes in Computer Science, 2007, , 500-504.	1.0	10
200	Counterexamples in Probabilistic Model Checking. , 2007, , 72-86.		44
201	Bisimulation Minimisation Mostly Speeds Up Probabilistic Model Checking. , 2007, , 87-101.		76
202	Three-Valued Abstraction for Continuous-Time Markov Chains. , 2007, , 311-324.		56
203	Bisimulation and Logical Preservation for Continuous-Time Markov Decision Processes. Lecture Notes in Computer Science, 2007, , 412-427.	1.0	17
204	Providing Evidence of Likely Being on Time: Counterexample Generation for CTMC Model Checking. , 2007, , 331-346.		14
205	How Fast and Fat Is Your Probabilistic Model Checker? An Experimental Performance Comparison. , 2007, , 69-85.		37
206	Abstraction of Probabilistic Systems. Lecture Notes in Computer Science, 2007, , 1-3.	1.0	2
207	Safe On-The-Fly Steady-State Detection for Time-Bounded Reachability. , 2006, , .		6
208	MODEST: A Compositional Modeling Formalism for Hard and Softly Timed Systems. IEEE Transactions on Software Engineering, 2006, 32, 812-830.	4.3	112
209	Guest Editors' Introduction to the Special Section on the First International Conference on the Quantitative Evaluation of SysTems (QEST). IEEE Transactions on Software Engineering, 2006, 32, 529-530.	4.3	0
210	Towards a Logic for Performance and Mobility. Electronic Notes in Theoretical Computer Science, 2006, 153, 161-175.	0.9	5
211	Bisimulation and Simulation Relations for Markov Chains. Electronic Notes in Theoretical Computer Science, 2006, 162, 73-78.	0.9	8
212	Guest editorsâ€™ introduction: quantitative analysis of real-time embedded systems. International Journal on Software Tools for Technology Transfer, 2006, 8, 605-606.	1.7	0
213	YMCA. Electronic Notes in Theoretical Computer Science, 2006, 162, 107-112.	0.9	12
214	Probably on Time and within BudgetOn Reachability in Priced Probabilistic Timed Automata. , 2006, , .		5
215	Safety and Liveness in Concurrent Pointer Programs. Lecture Notes in Computer Science, 2006, , 280-312.	1.0	5
216	Efficient computation of time-bounded reachability probabilities in uniform continuous-time Markov decision processes. Theoretical Computer Science, 2005, 345, 2-26.	0.5	100

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217	Comparative branching-time semantics for Markov chains. Information and Computation, 2005, 200, 149-214.	0.5	128
218	A theory of stochastic systems part I: Stochastic automata. Information and Computation, 2005, 203, 1-38.	0.5	57
219	A theory of Stochastic systems. Part II: Process algebra. Information and Computation, 2005, 203, 39-74.	0.5	28
220	A Markov reward model checker. , 2005, , .		158
221	Model checking meets performance evaluation. Performance Evaluation Review, 2005, 32, 10-15.	0.4	15
222	Discrete-Time Rewards Model-Checked. Lecture Notes in Computer Science, 2004, , 88-104.	1.0	72
223	Guest editorsâ€™ introduction: Advancements and extensions of verification techniques. International Journal on Software Tools for Technology Transfer, 2004, 6, 99-101.	1.7	0
224	Probabilistic weak simulation is decidable in polynomial time. Information Processing Letters, 2004, 89, 123-130.	0.4	15
225	Efficient Computation of Time-Bounded Reachability Probabilities in Uniform Continuous-Time Markov Decision Processes. Lecture Notes in Computer Science, 2004, , 61-76.	1.0	9
226	Embedded Software Analysis with MOTOR. Lecture Notes in Computer Science, 2004, , 268-293.	1.0	3
227	A tool for model-checking Markov chains. International Journal on Software Tools for Technology Transfer, 2003, 4, 153-172.	1.7	61
228	Model-checking large structured Markov chains. The Journal of Logic and Algebraic Programming, 2003, 56, 69-97.	1.4	39
229	Model-checking algorithms for continuous-time markov chains. IEEE Transactions on Software Engineering, 2003, 29, 524-541.	4.3	560
230	A QoS-Oriented Extension of UML Statecharts. Lecture Notes in Computer Science, 2003, , 76-91.	1.0	20
231	The Modest Modeling Tool and Its Implementation. Lecture Notes in Computer Science, 2003, , 116-133.	1.0	11
232	Comparative Branching-Time Semantics for Markov Chains. Lecture Notes in Computer Science, 2003, , 492-507.	1.0	12
233	Process algebra for performance evaluation. Theoretical Computer Science, 2002, 274, 43-87.	0.5	189
234	A Probabilistic Extension of UML Statecharts. Lecture Notes in Computer Science, 2002, , 355-374.	1.0	25

#	ARTICLE	IF	CITATIONS
235	Automated Performance and Dependability Evaluation Using Model Checking. Lecture Notes in Computer Science, 2002, , 261-289.	1.0	19
236	Model Checking Birth and Death. , 2002, , 435-447.		9
237	Performance Evaluation:= (Process Algebra + Model Checking) X Markov Chains. Lecture Notes in Computer Science, 2001, , 59-81.	1.0	9
238	Metric semantics for true concurrent real time. Theoretical Computer Science, 2001, 254, 501-542.	0.5	19
239	General Distributions in Process Algebra. Lecture Notes in Computer Science, 2001, , 375-429.	1.0	19
240	Faster and Symbolic CTMC Model Checking. Lecture Notes in Computer Science, 2001, , 23-38.	1.0	37
241	Beyond Memoryless Distributions: Model Checking Semi-Markov Chains. Lecture Notes in Computer Science, 2001, , 57-70.	1.0	23
242	MoDeST â€” A Modelling and Description Language for Stochastic Timed Systems. Lecture Notes in Computer Science, 2001, , 87-104.	1.0	27
243	First Passage Time Analysis of Stochastic Process Algebra Using Partial Orders. Lecture Notes in Computer Science, 2001, , 220-235.	1.0	5
244	Automated compositional Markov chain generation for a plain-old telephone system. Science of Computer Programming, 2000, 36, 97-127.	1.5	67
245	Pattern-matching algorithms based on term rewrite systems. Theoretical Computer Science, 2000, 238, 439-464.	0.5	1
246	Model Checking Continuous-Time Markov Chains by Transient Analysis. Lecture Notes in Computer Science, 2000, , 358-372.	1.0	90
247	Towards Model Checking Stochastic Process Algebra. Lecture Notes in Computer Science, 2000, , 420-439.	1.0	30
248	On the Logical Characterisation of Performability Properties. Lecture Notes in Computer Science, 2000, , 780-792.	1.0	63
249	A Markov Chain Model Checker. Lecture Notes in Computer Science, 2000, , 347-362.	1.0	56
250	On a Temporal Logic for Object-Based Systems. IFIP Advances in Information and Communication Technology, 2000, , 305-325.	0.5	27
251	Approximative Symbolic Model Checking of Continuous-Time Markov Chains. Lecture Notes in Computer Science, 1999, , 146-161.	1.0	111
252	On Generative Parallel Composition <sup>1</sup> <sup>1</sup> Supported by the NWO/SION project 612-33-006 and the System Validation Centre/CTIT.. Electronic Notes in Theoretical Computer Science, 1999, 22, 30-54.	0.9	27

#	ARTICLE	IF	CITATIONS
253	A Consistent Causality-Based View on a Timed Process Algebra Including Urgent Interactions. Formal Methods in System Design, 1998, 12, 189-216.	0.9	14
254	Partial order models for quantitative extensions of LOTOS. Computer Networks, 1998, 30, 925-950.	1.0	11
255	The bounded retransmission protocol must be on time!. Lecture Notes in Computer Science, 1997, , 416-431.	1.0	62
256	Causal ambiguity and partial orders in event structures. Lecture Notes in Computer Science, 1997, , 317-331.	1.0	22
257	Code generation = A* + BURS. Lecture Notes in Computer Science, 1996, , 160-176.	1.0	3
258	Design and analysis of dynamic leader election protocols in broadcast networks. Distributed Computing, 1996, 9, 157-171.	0.7	51
259	Systolic arrays for the recognition of permutation-invariant segments. Science of Computer Programming, 1996, 27, 119-137.	1.5	0
260	A design model for open distributed processing systems. Computer Networks, 1995, 27, 1263-1285.	1.0	20
261	Causal behaviours and nets. Lecture Notes in Computer Science, 1995, , 258-277.	1.0	5
262	Performance analysis and true concurrency semantics. Amast Series in Computing, 1995, , 309-337.	0.0	7
263	Bottom-up tree acceptors. Science of Computer Programming, 1989, 13, 51-72.	1.5	9
264	Model checking performability properties. , 0, , .		35
265	ETMCC: model checking performability properties of Markov chains. , 0, , .		9
266	On integrating the MOBIUS and MODEST modeling tools. , 0, , .		6
267	Model Checking Markov Reward Models with Impulse Rewards. , 0, , .		21
268	Are You Still There? â€” A Lightweight Algorithm to Monitor Node Presence in Self-Configuring Networks. , 0, , .		1
269	Markov automata with multiple objectives. Formal Methods in System Design, 0, , 1.	0.9	1
270	Analysis of Timed and Long-Run Objectives for Markov Automata. Logical Methods in Computer Science, 0, Volume 10, Issue 3, .	0.4	23



#	ARTICLE	IF	CITATIONS
271	High-level Counterexamples for Probabilistic Automata. Logical Methods in Computer Science, 0, Volume 11, Issue 1, .	0.4	10
272	Model Checking of Continuous-Time Markov Chains Against Timed Automata Specifications. Logical Methods in Computer Science, 0, Volume 7, Issue 1, .	0.4	31
273	Various Ways to Quantify BDMPs. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 316, 1-14.	0.8	3
274	Model Checking HML on Piecewise-Constant Inhomogeneous Markov Chains. Lecture Notes in Computer Science, 0, , 203-217.	1.0	5