# Boudewijn R Haverkort

List of Publications by Year
in descending order

| | | | |
|---|---|---|---|
| 119 papers | 2,454 citations | 361413<br>20 h-index | 265206<br>42 g-index |
| 128 all docs | 128 docs citations | 128 times ranked | 1100 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | A Tool for Requirements Analysis of Safety-Critical Cyber-Physical Systems. Lecture Notes in Computer Science, 2020, , 242-258. | 1.3 | 0 |
| 2 | Machine Learning Data Center Workloads Using Generative Adversarial Networks. Performance Evaluation Review, 2020, 48, 21-23. | 0.6 | 0 |
| 3 | Combining Energy Saving Techniques in Data Centres using Model-Based Analysis. , 2018, , . | | 0 |
| 4 | Evaluation of Advanced Data Centre Power Management Strategies. Electronic Notes in Theoretical Computer Science, 2018, 337, 173-191. | 0.9 | 6 |
| 5 | An integrated testbed for locally monitoring SCADA systems in smart grids. Energy Informatics, 2018, 1, . | 2.3 | 13 |
| 6 | Fitting Realistic Data Centre Workloads. , 2018, , . | | 2 |
| 7 | Mastering operational limitations of LEO satellites â€" The GomX-3 approach. Acta Astronautica, 2018, 151, 726-735. | 3.2 | 11 |
| 8 | Designing Cyber-Physical Systems with aDSL: a Domain-Specific Language and Tool Support. , 2018, , . | | 5 |
| 9 | A Domain-Specific Language and Toolchain for Performance Evaluation Based on Measurements. Lecture Notes in Computer Science, 2018, , 295-301. | 1.3 | 1 |
| 10 | A Tool for Generating Automata of IEC60870-5-104 Implementations. Lecture Notes in Computer Science, 2018, , 307-311. | 1.3 | 0 |
| 11 | Smart Industry: How ICT Will Change the Game!. IEEE Internet Computing, 2017, 21, 8-10. | 3.3 | 54 |
| 12 | Battery Aging, Battery Charging and the Kinetic Battery Model: A First Exploration. Lecture Notes in Computer Science, 2017, , 88-103. | 1.3 | 7 |
| 13 | Specification of Data Centre Power Management Strategies. , 2017, , . | | 3 |
| 14 | Context-aware local Intrusion Detection in SCADA systems: A testbed and two showcases. , 2017, , . | | 10 |
| 15 | iDSL: Automated Performance Evaluation of Service-Oriented Systems. Lecture Notes in Computer Science, 2017, , 214-236. | 1.3 | 4 |
| 16 | Does Your Domestic Photovoltaic Energy System Survive Grid Outages?. Energies, 2016, 9, 736. | 3.1 | 16 |
| 17 | What's under the hood? Improving SCADA security with process awareness. , 2016, , . | | 13 |
| 18 | Assessing the cost of energy independence. , 2016, , . | | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Fitting a code-red virus spread model: An account of putting theory into practice. , 2016, , . | | 2 |
| 20 | Survivability analysis of a sewage treatment facility using hybrid Petri nets. Performance Evaluation, 2016, 97, 36-56. | 1.2 | 12 |
| 21 | Improving SCADA security of a local process with a power grid model. , 2016, , . | | 9 |
| 22 | Efficiently Computing Latency Distributions by Combined Performance Evaluation Techniques. , 2016, , . | | 4 |
| 23 | Development of a Smart Grid Simulation Environment. Electronic Notes in Theoretical Computer Science, 2015, 318, 19-29. | 0.9 | 4 |
| 24 | On hypothesis testing for statistical model checking. International Journal on Software Tools for Technology Transfer, 2015, 17, 377-395. | 1.9 | 21 |
| 25 | Energy Resilience Modelling for Smart Houses. , 2015, , . | | 21 |
| 26 | Survivability Evaluation of Gas, Water and Electricity Infrastructures. Electronic Notes in Theoretical Computer Science, 2015, 310, 5-25. | 0.9 | 17 |
| 27 | Stochastic Petri Net Models for the Analysis of Trade-Offs in Data Centres with Power Management. Lecture Notes in Computer Science, 2015, , 52-67. | 1.3 | 4 |
| 28 | A Score Function for Optimizing the Cycle-Life of Battery-Powered Embedded Systems. Lecture Notes in Computer Science, 2015, , 305-320. | 1.3 | 11 |
| 29 | Hybrid Petri nets with multiple stochastic transition firings. , 2015, , . | | 5 |
| 30 | Computing Response Time Distributions Using Iterative Probabilistic Model Checking. Lecture Notes in Computer Science, 2015, , 208-224. | 1.3 | 8 |
| 31 | iDSL: Automated Performance Prediction and Analysis of Medical Imaging Systems. Lecture Notes in Computer Science, 2015, , 227-242. | 1.3 | 8 |
| 32 | Performance of LTE for Smart Grid Communications. Lecture Notes in Computer Science, 2014, , 225-239. | 1.3 | 19 |
| 33 | Analysis of a sewage treatment facility using hybrid Petri nets. , 2014, , . | | 7 |
| 34 | Fluid Survival Tool: A Model Checker for Hybrid Petri Nets. Lecture Notes in Computer Science, 2014, , 255-259. | 1.3 | 6 |
| 35 | Survivability Evaluation of Fluid Critical Infrastructures Using Hybrid Petri Nets. , 2013, , . | | 16 |
| 36 | Model checking for performability. Mathematical Structures in Computer Science, 2013, 23, 751-795. | 0.6 | 22 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 37 | The Dependable Systems-of-Systems Design Challenge. IEEE Security and Privacy, 2013, 11, 62-65. | 1.2 | 1 |
| 38 | A logic for model-checking mean-field models. , 2013, , . | | 13 |
| 39 | Automated Rare Event Simulation for Stochastic Petri Nets. Lecture Notes in Computer Science, 2013, , 372-388. | 1.3 | 11 |
| 40 | Performance Evaluation for Collision Prevention Based on a Domain Specific Language. Lecture Notes in Computer Science, 2013, , 276-287. | 1.3 | 9 |
| 41 | Rare event simulation for highly dependable systems with fast repairs. Performance Evaluation, 2012, 69, 336-355. | 1.2 | 8 |
| 42 | Region-Based Analysis of Hybrid Petri Nets with a Single General One-Shot Transition. Lecture Notes in Computer Science, 2012, , 139-154. | 1.3 | 15 |
| 43 | Simulative and Analytical Evaluation for ASD-Based Embedded Software. Lecture Notes in Computer Science, 2012, , 166-181. | 1.3 | 1 |
| 44 | Lifetime Improvement by Battery Scheduling. Lecture Notes in Computer Science, 2012, , 106-120. | 1.3 | 0 |
| 45 | Time-bounded reachability in tree-structured QBDs by abstraction. Performance Evaluation, 2011, 68, 105-125. | 1.2 | 6 |
| 46 | Mean-field framework for performance evaluation of push–pull gossip protocols. Performance Evaluation, 2011, 68, 157-179. | 1.2 | 25 |
| 47 | Comparison of the Mean-Field Approach and Simulation in a Peer-to-Peer Botnet Case Study. Lecture Notes in Computer Science, 2011, , 133-147. | 1.3 | 15 |
| 48 | An Adaptive Resource Control Mechanism in Multi-hop Ad-Hoc Networks. Lecture Notes in Computer Science, 2011, , 309-322. | 1.3 | 0 |
| 49 | Performance evaluation and model checking join forces. Communications of the ACM, 2010, 53, 76-85. | 4.5 | 64 |
| 50 | Performability assessment by model checking of Markov reward models. Formal Methods in System Design, 2010, 36, 1-36. | 0.8 | 21 |
| 51 | A Massively Scalable Architecture For Instant Messaging &amp; Presence. Electronic Notes in Theoretical Computer Science, 2010, 261, 109-130. | 0.9 | 4 |
| 52 | Computing Optimal Schedules of Battery Usage in Embedded Systems. IEEE Transactions on Industrial Informatics, 2010, 6, 276-286. | 11.3 | 31 |
| 53 | Rare Event Simulation for Highly Dependable Systems with Fast Repairs. , 2010, , . | | 6 |
| 54 | Automating the Mean-Field Method for Large Dynamic Gossip Networks. , 2010, , . | | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Setting the Parameters Right for Two-Hop IEEE 802.11e Ad Hoc Networks. Lecture Notes in Computer Science, 2010, , 168-182. | 1.3 | 1 |
| 56 | Adaptive resource control in 2-hop ad-hoc networks. , 2009, , . | | 2 |
| 57 | Mean-Field Analysis for the Evaluation of Gossip Protocols. , 2009, , . | | 19 |
| 58 | Time-Bounded Reachability in Tree-Structured QBDs by Abstraction. , 2009, , . | | 1 |
| 59 | Maximizing system lifetime by battery scheduling. , 2009, , . | | 27 |
| 60 | Distributed Markovian Bisimulation Reduction aimed at CSL Model Checking. Electronic Notes in Theoretical Computer Science, 2008, 220, 35-50. | 0.9 | 9 |
| 61 | Arcade - A Formal, Extensible, Model-Based Dependability Evaluation Framework. , 2008, , . | | 11 |
| 62 | A Control-Theoretic Modeling Approach for Service Differentiation in Multi-hop Ad-hoc Networks. , 2008, , . | | 2 |
| 63 | The Performability Tool P'ility. , 2008, , . | | 2 |
| 64 | Fitting heavy-tailed HTTP traces with the new stratified EM-algorithm. , 2008, , . | | 6 |
| 65 | Quantitative Evaluation in Embedded System Design: Predicting Battery Lifetime in Mobile Devices. , 2008, , . | | 0 |
| 66 | Changes in the Web from 2000 to 2007. Lecture Notes in Computer Science, 2008, , 136-148. | 1.3 | 6 |
| 67 | MeanField analysis for the evaluation of gossip protocols. Performance Evaluation Review, 2008, 36, 31-39. | 0.6 | 14 |
| 68 | Bottleneck Analysis for Two-Hop IEEE 802.11e Ad Hoc Networks. , 2008, , 279-294. | | 5 |
| 69 | Formal analysis techniques for gossiping protocols. Operating Systems Review (ACM), 2007, 41, 28-36. | 1.9 | 25 |
| 70 | Model Checking Markov Chains with Actions and State Labels. IEEE Transactions on Software Engineering, 2007, 33, 209-224. | 5.6 | 44 |
| 71 | Computing Battery Lifetime Distributions. , 2007, , . | | 40 |
| 72 | Versatile stochastic models for networks with asymmetric TCP sources. Performance Evaluation, 2007, 64, 507-523. | 1.2 | 2 |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 73 | CSL model checking algorithms for QBDs. Theoretical Computer Science, 2007, 382, 24-41. | 0.9 | 19 |
| 74 | A Fixed-Point Algorithm for Closed Queueing Networks. Lecture Notes in Computer Science, 2007, , 154-170. | 1.3 | 3 |
| 75 | Faster SPDL Model Checking Through Property-Driven State Space Generation. Lecture Notes in Computer Science, 2007, , 80-96. | 1.3 | 0 |
| 76 | CSL Model Checking Algorithms for Infinite-State Structured Markov Chains. Lecture Notes in Computer Science, 2007, , 336-351. | 1.3 | 6 |
| 77 | Guest Editorial for the Special Issue on the 2005 IEEE/IFIP Conference on Dependable Systems and Networks, including the Dependable Computing and Communications and Performance and Dependability Symposia. IEEE Transactions on Dependable and Secure Computing, 2006, 3, 169-171. | 5.4 | 0 |
| 78 | Distributed disk-based algorithms for model checking very large Markov chains. Formal Methods in System Design, 2006, 29, 177-196. | 0.8 | 11 |
| 79 | Uniformization with representatives. , 2006, , . | | 3 |
| 80 | Efficient computation of time-bounded reachability probabilities in uniform continuous-time Markov decision processes. Theoretical Computer Science, 2005, 345, 2-26. | 0.9 | 100 |
| 81 | Sequential and distributed model checking of Petri nets. International Journal on Software Tools for Technology Transfer, 2005, 7, 43-60. | 1.9 | 27 |
| 82 | Model Checking Infinite-State Markov Chains. Lecture Notes in Computer Science, 2005, , 237-252. | 1.3 | 13 |
| 83 | Performance and verification. Performance Evaluation Review, 2005, 32, 3-3. | 0.6 | 2 |
| 84 | Model checking meets performance evaluation. Performance Evaluation Review, 2005, 32, 10-15. | 0.6 | 15 |
| 85 | The pseudo-self-similar traffic model: application and validation. Performance Evaluation, 2004, 56, 3-22. | 1.2 | 12 |
| 86 | Efficient Computation of Time-Bounded Reachability Probabilities in Uniform Continuous-Time Markov Decision Processes. Lecture Notes in Computer Science, 2004, , 61-76. | 1.3 | 9 |
| 87 | Fitting world-wide web request traces with the EM-algorithm. Performance Evaluation, 2003, 52, 175-191. | 1.2 | 90 |
| 88 | Model-checking algorithms for continuous-time markov chains. IEEE Transactions on Software Engineering, 2003, 29, 524-541. | 5.6 | 560 |
| 89 | A Class-Based Least-Recently Used Caching Algorithm for World-Wide Web Proxies. Lecture Notes in Computer Science, 2003, , 273-290. | 1.3 | 10 |
| 90 | <title>Weighted fair queueing scheduling for World Wide Web proxy servers</title>. , 2002, , . | | 2 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 91 | Introduction to the special section on petri nets and performance models. IEEE Transactions on Software Engineering, 2002, 28, 913-914. | 5.6 | 0 |
| 92 | Sequential and Distributed Model Checking of Petri Net Specifications. Electronic Notes in Theoretical Computer Science, 2002, 68, 539-558. | 0.9 | 10 |
| 93 | Automated Performance and Dependability Evaluation Using Model Checking. Lecture Notes in Computer Science, 2002, , 261-289. | 1.3 | 19 |
| 94 | Enabling Network Caching of Dynamic Web Objects. Lecture Notes in Computer Science, 2002, , 329-338. | 1.3 | 2 |
| 95 | <title>Fitting World Wide Web request traces with the EM-algorithim</title>. , 2001, , . | | 7 |
| 96 | Markovian Models for Performance and Dependability Evaluation. Lecture Notes in Computer Science, 2001, , 38-83. | 1.3 | 30 |
| 97 | Performance evaluation of multicast communication in packet-switched networks. Performance Evaluation, 2000, 39, 61-80. | 1.2 | 3 |
| 98 | Model Checking Continuous-Time Markov Chains by Transient Analysis. Lecture Notes in Computer Science, 2000, , 358-372. | 1.3 | 90 |
| 99 | On the Logical Characterisation of Performability Properties. Lecture Notes in Computer Science, 2000, , 780-792. | 1.3 | 63 |
| 100 | FiFiQueues: Fixed-Point Analysis of Queueing Networks with Finite-Buffer Stations. Lecture Notes in Computer Science, 2000, , 324-327. | 1.3 | 4 |
| 101 | Performance evaluation of polling-based communication systems using SPNs. Lecture Notes in Computer Science, 1999, , 176-209. | 1.3 | 5 |
| 102 | Approximate analysis of networks of PH\|PH\|1\|K queues with customer losses: Test results. Annals of Operations Research, 1998, 79, 271-291. | 4.1 | 9 |
| 103 | <title>Analysis of windowing mechanisms with infinite-state stochastic petri nets</title>. , 1998, 3530, 178. | | 0 |
| 104 | Analysis of windowing mechanisms with infinite-state stochastic Petri nets. Performance Evaluation Review, 1998, 26, 38-46. | 0.6 | 2 |
| 105 | QNA-MC: A Performance Evaluation Tool for Communication Networks with Multicast Data Streams. Lecture Notes in Computer Science, 1998, , 63-74. | 1.3 | 1 |
| 106 | Quality of service management using generic modelling and monitoring techniques. Distributed Systems Engineering, 1997, 4, 28-37. | 0.6 | 7 |
| 107 | A mean-value analysis of slotted-ring network models. Telecommunication Systems, 1996, 6, 203-227. | 2.5 | 4 |
| 108 | Performability modelling tools and techniques. Performance Evaluation, 1996, 25, 17-40. | 1.2 | 45 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 109 | Probabilistic evaluation for the analytical solution of large Markov models: Algorithms and tool support. Microelectronics Reliability, 1996, 36, 733-755. | 1.7 | 13 |
| 110 | Design and evaluation of a connection management mechanism for an ATM-based connectionless service. Distributed Systems Engineering, 1996, 3, 53-67. | 0.6 | 4 |
| 111 | Approximate analysis of networks of PHÂ¦PH|1Â¦K queues: Theory & tool support. Lecture Notes in Computer Science, 1995, , 239-253. | 1.3 | 13 |
| 112 | Sensitivity and uncertainty analysis of Markov-reward models. IEEE Transactions on Reliability, 1995, 44, 147-154. | 4.6 | 40 |
| 113 | Techniques and tools for reliability and performance evaluation: Problems and perspectives. Lecture Notes in Computer Science, 1994, , 1-24. | 1.3 | 16 |
| 114 | Approximate performability and dependability analysis using generalized stochastic Petri nets. Performance Evaluation, 1993, 18, 61-78. | 1.2 | 26 |
| 115 | Specification techniques for Markov reward models. Discrete Event Dynamic Systems: Theory and Applications, 1993, 3, 219-247. | 1.5 | 42 |
| 116 | Composite performance and dependability analysis. Performance Evaluation, 1992, 14, 197-215. | 1.2 | 132 |
| 117 | Product forms for availability models. Applied Stochastic Models and Data Analysis, 1992, 8, 283-302. | 0.4 | 5 |
| 118 | Evaluating load balancing policies for performance and energy-efficiency. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 227, 98-117. | 0.8 | 2 |
| 119 | A Uniformization-Based Algorithm for Model Checking the CSL Until Operator on Labeled Queueing Networks. Lecture Notes in Computer Science, 0, , 188-202. | 1.3 | 1 |