Osman Hasan

List of Publications by Year
in descending order

234 papers	2,158 citations	430843 18 h-index	414395 32 g-index
249 all docs	249 docs citations	249 times ranked	1322 citing authors

#	Article	IF	Citations
1	RRT*-SMART: A Rapid Convergence Implementation of RRT*. International Journal of Advanced Robotic Systems, 2013, 10, 299.	2.1	137
2	Probabilistic Error Modeling for Approximate Adders. IEEE Transactions on Computers, 2017, 66, 515-530.	3.4	81
3	Reliability modeling and analysis of communication networks. Journal of Network and Computer Applications, 2017, 78, 191-215.	9.1	80
4	RRT<sup>&#x2217;</sup>-Smart: Rapid convergence implementation of RRT<sup>&#x2217;</sup> towards optimal solution. , 2012, , .		79
5	Wearable technologies for hand joints monitoring for rehabilitation: A survey. Microelectronics Journal, 2019, 88, 173-183.	2.0	66
6	Formal Verification Methods. Advances in Information Quality and Management, 2014, , 7162-7170.	0.2	54
7	<italic>IoTRiskAnalyzer</italic>: A Probabilistic Model Checking Based Framework for Formal Risk Analytics of the Internet of Things. IEEE Access, 2017, 5, 5494-5505.	4.2	49
8	On the Formalization of the Lebesgue Integration Theory in HOL. Lecture Notes in Computer Science, 2010, , 387-402.	1.3	48
9	Applying Formal Methods to Networking: Theory, Techniques, and Applications. IEEE Communications Surveys and Tutorials, 2015, 17, 256-291.	39.4	40
10	Probabilistic Error Analysis of Approximate Recursive Multipliers. IEEE Transactions on Computers, 2017, 66, 1982-1990.	3.4	40
11	Chronic kidney disease diagnosis using decision tree algorithms. BMC Nephrology, 2021, 22, 273.	1.8	38
12	Survey of fall detection and daily activity monitoring techniques. , 2010, , .		33
13	Formal Verification of Cyber-Physical Systems: Coping with Continuous Elements. Lecture Notes in Computer Science, 2013, , 358-371.	1.3	33
14	QuAd. , 2017, , .		33
15	Statistical Error Analysis for Low Power Approximate Adders. , 2017, , .		32
16	An area-efficient consolidated configurable error correction for approximate hardware accelerators. , 2016, , .		30
17	Formal Reliability Analysis Using Theorem Proving. IEEE Transactions on Computers, 2010, 59, 579-592.	3.4	26
18	Power profiling of microcontroller's instruction set for runtime hardware Trojans detection without golden circuit models. , 2017, , .		25

#	Article	IF	Citations
19	Comparative Study of Approximate Multipliers. , 2018, , .		25
20	Formalization of Laplace Transform Using the Multivariable Calculus Theory of HOL-Light. Lecture Notes in Computer Science, 2013, , 744-758.	1.3	25
21	Input-Conscious Approximate Multiply-Accumulate (MAC) Unit for Energy-Efficiency. IEEE Access, 2019, 7, 147129-147142.	4.2	22
22	Al-Zahrawi: A Telesurgical Robotic System for Minimal Invasive Surgery. IEEE Systems Journal, 2016, 10, 1035-1045.	4.6	21
23	Formalization of Reliability Block Diagrams in Higher-order Logic. Journal of Applied Logic, 2016, 18, 19-41.	1.1	20
24	Formal Reasoning about Expectation Properties for Continuous Random Variables. Lecture Notes in Computer Science, 2009, , 435-450.	1.3	18
25	Performance Analysis and Functional Verification of the Stop-and-Wait Protocol in HOL. Journal of Automated Reasoning, 2009, 42, 1-33.	1.4	18
26	Runtime hardware Trojan monitors through modeling burst mode communication using formal verification. The Integration VLSI Journal, 2018, 61, 62-76.	2.1	18
27	Adaptive Potential guided directional-RRT*. , 2013, , .		17
28	Towards the Formal Reliability Analysis of Oil and Gas Pipelines. Lecture Notes in Computer Science, 2014, , 30-44.	1.3	17
29	Adaptive Approximate Computing in Arithmetic Datapaths. IEEE Design and Test, 2018, 35, 65-74.	1.2	17
30	Formalization of Continuous Probability Distributions. Lecture Notes in Computer Science, 2007, , 3-18.	1.3	17
31	Machine-Learning-Based Self-Tunable Design of Approximate Computing. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 800-813.	3.1	16
32	Using Theorem Proving to Verify Expectation and Variance for Discrete Random Variables. Journal of Automated Reasoning, 2008, 41, 295-323.	1.4	15
33	Towards Formal Fault Tree Analysis Using Theorem Proving. Lecture Notes in Computer Science, 2015, , 39-54.	1.3	15
34	Formal Analysis of a Scheduling Algorithm for Wireless Sensor Networks. Lecture Notes in Computer Science, 2011, , 388-403.	1.3	15
35	Continual Learning for Real-World Autonomous Systems: Algorithms, Challenges and Frameworks. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 105, 1.	3.4	15
36	Formal Analysis of Optical Systems. Mathematics in Computer Science, 2014, 8, 39-70.	0.4	14

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37	Formal Reasoning About Finite-State Discrete-Time Markov Chains in HOL. Journal of Computer Science and Technology, 2013, 28, 217-231.	1.5	13
38	Formal reliability analysis of a typical FHIR standard based e-Health system using PRISM. , 2014, , .		13
39	Stunting diagnostic and awareness: impact assessment study of sociodemographic factors of stunting among school-going children of Pakistan. BMC Pediatrics, 2020, 20, 232.	1.7	13
40	Formal Analysis of Optical Waveguides in HOL. Lecture Notes in Computer Science, 2009, , 228-243.	1.3	13
41	An approach for lifetime reliability analysis using theorem proving. Journal of Computer and System Sciences, 2014, 80, 323-345.	1.2	12
42	Using Machine Learning for Quality Configurable Approximate Computing. , 2019, , .		12
43	Formal comparison of LEACH and its extensions. Computer Standards and Interfaces, 2019, 62, 119-127.	5.4	12
44	MacLeR: Machine Learning-Based Runtime Hardware Trojan Detection in Resource-Constrained IoT Edge Devices. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 3748-3761.	2.7	12
45	Verification of Probabilistic Properties in HOL Using the Cumulative Distribution Function. Lecture Notes in Computer Science, 2007, , 333-352.	1.3	12
46	Theorem proving based Formal Verification of Distributed Dynamic Thermal Management schemes. Journal of Parallel and Distributed Computing, 2017, 100, 157-171.	4.1	11
47	Statistical model checking of relief supply location and distribution in natural disaster management. International Journal of Disaster Risk Reduction, 2018, 31, 1043-1053.	3.9	11
48	Formal Probabilistic Analysis of Low Latency Approximate Adders. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 177-189.	2.7	11
49	FANNet: Formal Analysis of Noise Tolerance, Training Bias and Input Sensitivity in Neural Networks. , 2020, , .		11
50	Formal Reliability Analysis of Protective Relays in Power Distribution Systems. Lecture Notes in Computer Science, 2013, , 169-183.	1.3	11
51	Automated formal synthesis of Wallace Tree multipliers. Midwest Symposium on Circuits and Systems, 2007, , .	1.0	10
52	Formalization of the Standard Uniform random variable. Theoretical Computer Science, 2007, 382, 71-83.	0.9	10
53	Probabilistic Analysis of Wireless Systems Using Theorem Proving. Electronic Notes in Theoretical Computer Science, 2009, 242, 43-58.	0.9	10
54	Formal reliability analysis of combinational circuits using theorem proving. Journal of Applied Logic, 2011, 9, 41-60.	1.1	10

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55	Formal Analysis of Steady State Errors in Feedback Control Systems Using HOL-Light. , 2013, , .		10
56	Hardware Trojan detection in soft error tolerant macro synchronous micro asynchronous (MSMA) pipeline. , 2014, , .		10
57	Reliability block diagrams based analysis: A survey. AIP Conference Proceedings, 2015, , .	0.4	10
58	Formal reliability analysis of protective systems in smart grids. , 2016, , .		10
59	Formalization of Finite-State Discrete-Time Markov Chains in HOL. Lecture Notes in Computer Science, 2011, , 90-104.	1.3	10
60	Performance Analysis of ARQ Protocols using a Theorem Prover. , 2008, , .		9
61	On the Formalization of Gamma Function in HOL. Journal of Automated Reasoning, 2014, 53, 407-429.	1.4	9
62	Low Power Soft Error Tolerant Macro Synchronous Micro Asynchronous (MSMA) Pipeline. , 2014, , .		9
63	Triangular geometry based optimal motion planning using RRT*-motion planner. , 2014, , .		9
64	Formalization of Fault Trees in Higher-Order Logic: A Deep Embedding Approach. Lecture Notes in Computer Science, 2016, , 264-279.	1.3	9
65	Formal Verification of Platoon Control Strategies. Lecture Notes in Computer Science, 2018, , 223-238.	1.3	9
66	Self-compensating accelerators for efficient approximate computing. Microelectronics Journal, 2019, 88, 9-17.	2.0	9
67	PEMACx: A Probabilistic Error Analysis Methodology for Adders with Cascaded Approximate Units. , 2020, , .		9
68	Formal reliability and failure analysis of ethernet based communication networks in a smart grid substation. Formal Aspects of Computing, 2020, 32, 71-111.	1.8	9
69	Formal Probabilistic Analysis of Cyber-Physical Transportation Systems. Lecture Notes in Computer Science, 2012, , 419-434.	1.3	9
70	Verification of Expectation Properties for Discrete Random Variables in HOL. Lecture Notes in Computer Science, 2007, , 119-134.	1.3	8
71	Formal verification of tail distribution bounds in the HOL theorem prover. Mathematical Methods in the Applied Sciences, 2009, 32, 480-504.	2.3	8
72	Reasoning about conditional probabilities in a higher-order-logic theorem prover. Journal of Applied Logic, 2011, 9, 23-40.	1.1	8

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73	Formal reliability analysis of Device Interoperability Middleware (DIM) based E-health system using PRISM. , 2015, , .		8
74	Triangular Geometrized Sampling Heuristics for Fast Optimal Motion Planning. International Journal of Advanced Robotic Systems, 2015, 12, 10.	2.1	8
75	Formal probabilistic analysis of detection properties in wireless sensor networks. Formal Aspects of Computing, 2015, 27, 79-102.	1.8	8
76	Formal reasoning about systems biology using theorem proving. PLoS ONE, 2017, 12, e0180179.	2.5	8
77	Formal Dynamic Fault Trees Analysis Using an Integration of Theorem Proving and Model Checking. Lecture Notes in Computer Science, 2018, , 139-156.	1.3	8
78	SecureSurgiNET: A framework for ensuring security in telesurgery. International Journal of Distributed Sensor Networks, 2019, 15, 155014771987381.	2.2	8
79	Formal Asymptotic Analysis of Online Scheduling Algorithms for Plug-In Electric Vehicles' Charging. Energies, 2019, 12, 19.	3.1	8
80	BioNetExplorer: Architecture-Space Exploration of Biosignal Processing Deep Neural Networks for Wearables. IEEE Internet of Things Journal, 2021, 8, 13251-13265.	8.7	8
81	Formal Dependability Modeling and Analysis: A Survey. Lecture Notes in Computer Science, 2016, , 132-147.	1.3	8
82	Formal Analysis of Linear Control Systems Using Theorem Proving. Lecture Notes in Computer Science, 2017, , 345-361.	1.3	8
83	Formal Probabilistic Analysis of Stuck-at Faults in Reconfigurable Memory Arrays. Lecture Notes in Computer Science, 2009, , 277-291.	1.3	8
84	Formal verification of distributed dynamic thermal management. , 2013, , .		7
85	Formalization of Measure Theory and Lebesgue Integration for Probabilistic Analysis in HOL. Transactions on Embedded Computing Systems, 2013, 12, 1-23.	2.9	7
86	Formal reliability analysis of wireless sensor network data transport protocols using HOL. , 2015, , .		7
87	On the Formalization of Fourier Transform in Higher-order Logic. Lecture Notes in Computer Science, 2016, , 483-490.	1.3	7
88	Formal Verification of Gate-Level Multiple Side Channel Parameters to Detect Hardware Trojans. Communications in Computer and Information Science, 2017, , 75-92.	0.5	7
89	A Library for Combinational Circuit Verification Using the HOL Theorem Prover. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 512-516.	2.7	7
90	McSeVIC: A Model Checking Based Framework for Security Vulnerability Analysis of Integrated Circuits. IEEE Access, 2018, 6, 32240-32257.	4.2	7

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91	Formal analysis of the continuous dynamics of cyber–physical systems using theorem proving. Journal of Systems Architecture, 2021, 112, 101850.	4.3	7
92	Formal Analysis of Memory Contention in a Multiprocessor System. Lecture Notes in Computer Science, 2013, , 195-210.	1.3	7
93	Formal analysis of a ZigBee-based routing protocol for smart grids using UPPAAL. , 2015, , .		6
94	Evaluation of anonymity and confidentiality protocols using theorem proving. Formal Methods in System Design, 2015, 47, 265-286.	0.8	6
95	Software testing: A survey and tutorial on white and black-box testing of C/C++ programs. , 2016, , .		6
96	Analyzing Vulnerability of Asynchronous Pipeline to Soft Errors: Leveraging Formal Verification. Journal of Electronic Testing: Theory and Applications (JETTA), 2016, 32, 569-586.	1.2	6
97	FAMe-TM: Formal analysis methodology for task migration algorithms in Many-Core systems. Science of Computer Programming, 2017, 133, 154-174.	1.9	6
98	ApproxCT: Approximate Clustering Techniques for Energy Efficient Computer Vision in Cyber-Physical Systems. , 2018, , .		6
99	Formal analysis of continuous-time systems using Fourier transform. Journal of Symbolic Computation, 2019, 90, 65-88.	0.8	6
100	A Methodology for the Formal Verification of Dynamic Fault Trees Using HOL Theorem Proving. IEEE Access, 2019, 7, 136176-136192.	4.2	6
101	SIMCom: Statistical sniffing of inter-module communications for runtime hardware trojan detection. Microprocessors and Microsystems, 2020, 77, 103122.	2.8	6
102	An evolutionary/heuristic-based proof searching framework for interactive theorem prover. Applied Soft Computing Journal, 2021, 104, 107200.	7.2	6
103	Formal Verification of Steady-State Errors in Unity-Feedback Control Systems. Lecture Notes in Computer Science, 2014, , 1-15.	1.3	6
104	Formally Analyzing Continuous Aspects ofÂCyber-Physical Systems Modeled by Homogeneous Linear Differential Equations. Lecture Notes in Computer Science, 2015, , 132-146.	1.3	6
105	Quantitative Analysis of Information Flow Using Theorem Proving. Lecture Notes in Computer Science, 2012, , 119-134.	1.3	6
106	Formal Reasoning about Classified Markov Chains in HOL. Lecture Notes in Computer Science, 2013, , 295-310.	1.3	6
107	Formal Kinematic Analysis of the Two-Link Planar Manipulator. Lecture Notes in Computer Science, 2013, , 347-362.	1.3	6
108	Design and Realization of a Robotic Manipulator for Minimally Invasive Surgery With Replaceable Surgical Tools. IEEE/ASME Transactions on Mechatronics, 2020, 25, 2754-2764.	5.8	6

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109	EasyDetectDisease: An Android App for Early Symptom Detection and Prevention of Childhood Infectious Diseases. Interactive Journal of Medical Research, 2019, 8, e12664.	1.4	6
110	Formal Probabilistic Analysis of a Wireless Sensor Network for Forest Fire Detection. Electronic Proceedings in Theoretical Computer Science, EPTCS, 2013, 122, 1-9.	0.8	5
111	Formal Probabilistic Analysis of Distributed Dynamic Thermal Management. , 2015, , .		5
112	Framework for Formally Verifying Analog and Mixed-Signal Designs. , 2015, , 115-145.		5
113	SmartSIM â€•a virtual reality simulator for laparoscopy training using a generic physics engine. International Journal of Medical Robotics and Computer Assisted Surgery, 2017, 13, e1771.	2.3	5
114	A Utility Maximized Demand-Side Management for Autonomous Microgrid. , 2018, , .		5
115	Using gate-level side channel parameters for formally analyzing vulnerabilities in integrated circuits. Science of Computer Programming, 2019, 171, 42-66.	1.9	5
116	Probabilistic Error Analysis of Approximate Adders and Multipliers. , 2019, , 99-120.		5
117	Formal Verification of Robotic Cell Injection systems up to 4-DOF using HOL Light. Formal Aspects of Computing, 2020, 32, 229-250.	1.8	5
118	Formal Reliability Analysis of an Integrated Power Generation System Using Theorem Proving. IEEE Systems Journal, 2020, 14, 4820-4831.	4.6	5
119	On the Formal Analysis of HMM Using Theorem Proving. Lecture Notes in Computer Science, 2014, , 316-331.	1.3	5
120	Towards Probabilistic Formal Modeling of Robotic Cell Injection Systems. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 244, 271-282.	0.8	5
121	Formally Analyzing Expected Time Complexity of Algorithms Using Theorem Proving. Journal of Computer Science and Technology, 2010, 25, 1305-1320.	1.5	4
122	Towards the Formal Performance Analysis of Wireless Sensor Networks. , 2013, , .		4
123	Formal verification of circuit-switched Network on chip (NoC) architectures using SPIN. , 2014, , .		4
124	Towards Formal Reasoning about Molecular Pathways in HOL. , 2014, , .		4
125	Probabilistic Formal Verification Methodology for Decentralized Thermal Management in On-Chip Systems. , 2015, , .		4
126	Formal modeling and verification of integrated photonic systems. , 2015, , .		4

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127	Probabilistic Formal Verification of the SATS Concept of Operation. Lecture Notes in Computer Science, 2016, , 191-205.	1.3	4
128	Approximate Sphere Decoding Based Model Predictive Control of Cascaded H-Bridge Inverters. , 2019, , .		4
129	A Quality-assured Approximate Hardware Accelerators–based on Machine Learning and Dynamic Partial Reconfiguration. ACM Journal on Emerging Technologies in Computing Systems, 2021, 17, 1-19.	2.3	4
130	Formalization of Complex Vectors in Higher-Order Logic. Lecture Notes in Computer Science, 2014, , 123-137.	1.3	4
131	Proof searching in HOL4 with genetic algorithm. , 2020, , .		4
132	Formal Lifetime Reliability Analysis Using Continuous Random Variables. Lecture Notes in Computer Science, 2010, , 84-97.	1.3	4
133	A Framework for Formal Dynamic Dependability Analysis Using HOL Theorem Proving. Lecture Notes in Computer Science, 2020, , 105-122.	1.3	4
134	Single Dual Setting Directional Over-current Relay Based Line Protection Logic for Distributed Generation Integrated Power Systems. , 2020, , .		4
135	Verification of Tail Distribution Bounds in a Theorem Prover. AIP Conference Proceedings, 2007, , .	0.4	3
136	Timing variation aware dynamic digital phase detector for low‐latency clock domain crossing. IET Circuits, Devices and Systems, 2014, 8, 58-64.	1.4	3
137	Formal analysis of electromagnetic optics. Proceedings of SPIE, 2014, , .	0.8	3
138	VerTGen: An automatic verilog testbench generator for generic circuits. , 2016, , .		3
139	Towards autonomous collision avoidance in surgical robots using image segmentation and genetic algorithms. , 2016, , .		3
140	Behavior profiling of power distribution networks for runtime hardware trojan detection. , 2017, , .		3
141	Formally Verifying Transfer Functions of Linear Analog Circuits. IEEE Design and Test, 2017, 34, 30-37.	1.2	3
142	Approximation-Conscious IC Testing. , 2018, , .		3
143	Formal Analysis of Robotic Cell Injection Systems Using Theorem Proving. Lecture Notes in Computer Science, 2019, , 127-141.	1.3	3
144	Proof searching and prediction in HOL4 with evolutionary/heuristic and deep learning techniques. Applied Intelligence, 2021, 51, 1580-1601.	5.3	3

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145	Formal verification of Matrix based MATLAB models using interactive theorem proving. PeerJ Computer Science, 2021, 7, e440.	4.5	3
146	Formal Probabilistic Analysis of a WSN-Based Monitoring Framework for IoT Applications. Communications in Computer and Information Science, 2017, , 93-108.	0.5	3
147	Formal Analysis of Information Flow Using Min-Entropy and Belief Min-Entropy. Lecture Notes in Computer Science, 2013, , 131-146.	1.3	3
148	Machine Learning-Based Self-Compensating Approximate Computing. , 2020, , .		3
149	Telesurgical Robotics. , 2015, , 5482-5490.		3
150	Formal Probabilistic Analysis: A Higher-Order Logic Based Approach. Lecture Notes in Computer Science, 2010, , 2-19.	1.3	3
151	Formal analysis of the biological circuits using higher-order-logic theorem proving. , 2020, , .		3
152	Formal reasoning about synthetic biology using higher-order-logic theorem proving. IET Systems Biology, 2020, 14, 271-283.	1.5	3
153	Augmenting RRT*-planner with local trees for motion planning in complex dynamic environments. , 2014, , .		2
154	Safe-radius based motion planning of hexapod using RRT-connect. , 2015, , .		2
155	Formal verification of demand response based home energy management systems in smart grids. , 2017, , .		2
156	Ver2Smv â€" A tool for automatic verilog to SMV translation for verifying digital circuits. , 2018, , .		2
157	Formal reliability analysis of oil and gas pipelines. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2018, 232, 320-334.	0.7	2
158	Formal probabilistic analysis of a surgical robot control algorithm with different virtual fixtures. Innovations in Systems and Software Engineering, 2018, 14, 83-100.	2.1	2
159	Toward Model Checking-Driven Fair Comparison of Dynamic Thermal Management Techniques Under Multithreaded Workloads. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 1725-1738.	2.7	2
160	LPQ-SAM: A Low-Power Quality Scalable Approximate Multiplier. Journal of Circuits, Systems and Computers, 2021, 30, 2150017.	1.5	2
161	ForASec: Formal Analysis of Hardware Trojan-Based Security Vulnerabilities in Sequential Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 1167-1180.	2.7	2
162	Towards the Formalization of Fractional Calculus in Higher-Order Logic. Lecture Notes in Computer Science, 2015, , 316-324.	1.3	2

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163	Formal Availability Analysis Using Theorem Proving. Lecture Notes in Computer Science, 2016, , 226-242.	1.3	2
164	Formal Verification and Safety Assessment ofâaâHemodialysis Machine. Lecture Notes in Computer Science, 2018, , 241-254.	1.3	2
165	Using Probabilistic Analysis for the Certification of Machine Control Systems. Lecture Notes in Computer Science, 2013, , 305-320.	1.3	2
166	Formal Analysis of Soft Errors using Theorem Proving. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 122, 75-84.	0.8	2
167	On the Formalization of Zsyntax with Applications in Molecular Biology. Scalable Computing, 2015, 16, .	1.0	2
168	Formal Timing Analysis of Digital Circuits. Communications in Computer and Information Science, 2019, , 84-100.	0.5	2
169	A Formally Verified Algebraic Approach for Dynamic Reliability Block Diagrams. Lecture Notes in Computer Science, 2019, , 253-269.	1.3	2
170	Formal Verification of Single Dual Setting Overcurrent Directional Relay Based Line Protection Logic for Smart Grids. , 2021, , .		2
171	On the accurate reliability analysis of combinational circuits using theorem proving. , 2010, , .		1
172	Formal verification of the heavy hitter problem. , 2012, , .		1
173	Analysis techniques for fractional order systems: A survey. , 2012, , .		1
174	Towards the formal verification of optical interconnects. , 2014, , .		1
175	Formal verification of energy consumption for an EEG monitoring wireless body area sensor network. , 2016, , .		1
176	CAnDy-TM: Comparative analysis of dynamic thermal management in many-cores using model checking. , 2017, , .		1
177	NoC-Based Implementation of Free Form Deformations in Medical Imaging Registration. Journal of Circuits, Systems and Computers, 2017, 26, 1750058.	1.5	1
178	Formal Probabilistic Analysis of a Virtual Fixture Control Algorithm for a Surgical Robot. Lecture Notes in Computer Science, 2017, , 1-16.	1.3	1
179	AAG: An automatic assertion generation framework for RTL designs. , 2018, , .		1
180	Towards Probabilistic Formal Analysis of SATS-Simultaneously Moving Aircraft (SATS-SMA). Journal of Automated Reasoning, 2018, 60, 85-105.	1.4	1

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181	SAT Based Fitness Scoring for Digital Circuit Evolution. Journal of Circuits, Systems and Computers, 2018, 27, 1850099.	1.5	1
182	Electronic Design of a Semi-Automated Micromanipulator Cell Injection System. , 2018, , .		1
183	A modular and generic virtual reality training framework for micro-robotic cell injection systems. , 2018, , .		1
184	Formalization of Asymptotic Notations in HOL4. , 2019, , .		1
185	On the Formalization of Importance Measures Using HOL Theorem Proving. , 2019, , .		1
186	A Generic Virtual Reality Training Simulator for Intracytoplasmic Sperm Injection. , 2019, , .		1
187	Formal Verification of ECCs for Memories Using ACL2. Journal of Electronic Testing: Theory and Applications (JETTA), 2020, 36, 643-663.	1.2	1
188	Formal Analysis of Unmanned Aerial Vehicles Using Higher-Order-Logic Theorem Proving. Journal of Aerospace Information Systems, 2020, 17, 481-495.	1.4	1
189	Toward the Formalization of Macroscopic Models of Traffic Flow Using Higher-Order-Logic Theorem Proving. IEEE Access, 2020, 8, 27291-27307.	4.2	1
190	Formal verification of robotic cell injection systems. , 2020, , 143-170.		1
191	Petri net and rewriting logic based formal analysis of multi-agent based safety-critical systems. Multiagent and Grid Systems, 2020, 16, 47-66.	0.9	1
192	Dynamic Fault Tree Models for FPGA Fault Tolerance and Reliability. , 2021, , .		1
193	Formal Probabilistic Analysis of Distributed Resource Management Schemes in On-Chip Systems. , 2016, , .		1
194	Improvement Strategies for Device Interoperability Middleware using Formal Reliability Analysis. Scalable Computing, 2016, 17, .	1.0	1
195	State of the Art and Key Design Challenges of Telesurgical Robotics. , 2018, , 6872-6881.		1
196	Telesurgical Robotics and a Kinematic Perspective. , 2018, , 6882-6893.		1
197	State of the Art and Key Design Challenges of Telesurgical Robotics. Advances in Computer and Electrical Engineering Book Series, 2019, , 1100-1111.	0.3	1
198	Formal Verification of Rewriting Rules for Dynamic Fault Trees. Lecture Notes in Computer Science, 2019, , 513-531.	1.3	1

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199	FASiM: A Framework for Automatic Formal Analysis of Simulink Models of Linear Analog Circuits. , 2020, , .		1
200	Formalization of bond graph using higher-order-logic theorem proving. ISA Transactions, 2022, 128, 453-469.	5.7	1
201	A Comparative Study on the Characteristics of Mobile Applications for the Restaurant Industry. , 2021, , .		1
202	Formal analysis of 2D image processing filters using higher-order logic theorem proving. Eurasip Journal on Advances in Signal Processing, 2022, 2022, .	1.7	1
203	Performance analysis of real-time rewriting models. , 2010, , .		0
204	Towards precise, scalable and automatic analysis of analog and mixed signal circuits. , 2010, , .		0
205	V-HOLT verifier - An automatic formal verification tool for combinational circuits. , 2012, , .		0
206	PNOC: Implementation on Verilog for FPGA. , 2013, , .		0
207	Clock domain crossing (CDC) in 3D-SICs: Semi QDI asynchronous vs loosely synchronous. The Integration VLSI Journal, 2016, 52, 367-380.	2.1	0
208	Formalization of Birth-Death and IID processes in higher-order logic. , 2017, , .		0
209	Formal Analysis of Information Flow in HOL. Lecture Notes in Computer Science, 2017, , 283-299.	1.3	0
210	Automatic Formal Verification of Digital Components of IoTs Using CBMC. , 2018, , .		0
211	Formal probabilistic performance verification of randomly-scheduled wireless sensor networks. International Journal of Critical Computer-Based Systems, 2018, 8, 311.	0.1	0
212	Formal Verification of n-bit ALU Using Theorem Proving. Lecture Notes in Computer Science, 2018, , 74-89.	1.3	0
213	Low Power Digital Clock Multipliers for Battery-Operated Internet of Things (IoT) Devices. , 2018, , .		0
214	COMFAST: A comparative framework for analysis of scheduling techniques in multi-core systems. , 2018, , .		0
215	Formal verification of a domain specific language for run-time adaptation. , 2018, , .		0
216	Electronic Controller Design of a Semi-Automatic Cell Microinjection System. , 2019, , .		0

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217	Formal Stability Analysis of Control Systems. Communications in Computer and Information Science, 2019, , 3-17.	0.5	0
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