Inmaculada Medina-Bulo

List of Publications by Year
in descending order

81 papers	819 citations	567144 15 h-index	580701 25 g-index
82 all docs	82 docs citations	82 times ranked	590 citing authors

#	Article	IF	Citations
1	ModeL4CEP: Graphical domain-specific modeling languages for CEP domains and event patterns. Expert Systems With Applications, 2015, 42, 8095-8110.	4.4	77
2	MEdit4CEP: A model-driven solution for real-time decision making in SOA 2.0. Knowledge-Based Systems, 2015, 89, 97-112.	4.0	51
3	Evolutionary mutation testing. Information and Software Technology, 2011, 53, 1108-1123.	3.0	45
4	A stream processing architecture for heterogeneous data sources in the Internet of Things. Computer Standards and Interfaces, 2020, 70, 103426.	3.8	44
5	Assessment of class mutation operators for C$++$ with the MuCPP mutation system. Information and Software Technology, 2017, 81, 169-184.	3.0	40
6	Exact scalable sensitivity analysis for the next release problem. ACM Transactions on Software Engineering and Methodology, 2014, 23, 1-31.	4.8	29
7	Test Event Generation for a Fall-Detection IoT System. IEEE Internet of Things Journal, 2019, 6, 6642-6651.	5.5	29
8	A model-driven approach for facilitating user-friendly design of complex event patterns. Expert Systems With Applications, 2014, 41, 445-456.	4.4	26
9	A Hybrid Algorithm for Optimal Wireless Sensor Network Deployment with the Minimum Number of Sensor Nodes. Algorithms, 2017, 10, 80.	1.2	26
10	Assessment of C++ objectâ€oriented mutation operators: A selective mutation approach. Software Testing Verification and Reliability, 2017, 27, e1630.	1.7	22
11	Quantitative Evaluation of Mutation Operators for WS-BPEL Compositions. , 2010, , .		20
12	Assessment of collaborative learning experiences by graphical analysis of wiki contributions. Interactive Learning Environments, 2014, 22, 444-466.	4.4	20
13	Quality metrics for mutation testing with applications to WSâ€BPEL compositions. Software Testing Verification and Reliability, 2015, 25, 536-571.	1.7	19
14	GAmera: An Automatic Mutant Generation System for WS-BPEL Compositions. , 2009, , .		18
15	EUnit: A Unit Testing Framework for Model Management Tasks. Lecture Notes in Computer Science, 2011, , 395-409.	1.0	18
16	Evolutionary mutation testing for IoT with recorded and generated events. Software - Practice and Experience, 2019, 49, 640-672.	2.5	18
17	Class mutation operators for C++ object-oriented systems. Annales Des Telecommunications/Annals of Telecommunications, 2015, 70, 137-148.	1.6	15
18	MEdit4CEP-SP: A model-driven solution to improve decision-making through user-friendly management and real-time processing of heterogeneous data streams. Knowledge-Based Systems, 2021, 213, 106682.	4.0	15

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19	Evaluation of Mutation Testing in a Nuclear Industry Case Study. IEEE Transactions on Reliability, 2018, 67, 1406-1419.	3.5	14
20	A Wearable Fall Detection System Based on Body Area Networks. IEEE Access, 2020, 8, 193060-193074.	2.6	14
21	Fall Detection from Electrocardiogram (ECG) Signals and Classification by Deep Transfer Learning. Information (Switzerland), 2021, 12, 63.	1.7	14
22	Search-based mutant selection for efficient test suite improvement: Evaluation and results. Information and Software Technology, 2018, 104, 130-143.	3.0	13
23	Customizable and scalable automated assessment of C/C++ programming assignments. Computer Applications in Engineering Education, 2020, 28, 1449-1466.	2.2	13
24	Scalability of assessments of wiki-based learning experiences in higher education. Computers in Human Behavior, 2014, 31, 638-650.	5.1	12
25	Coverage-based quality metric of mutation operators for test suite improvement. Software Quality Journal, 2019, 27, 823-859.	1.4	12
26	Analogies and Differences between Mutation Operators for WS-BPEL 2.0 and Other Languages. , 2011, , .		10
27	Performance mutation testing. Software Testing Verification and Reliability, 2021, 31, e1728.	1.7	10
28	Approaching the Internet of Things through Integrating SOA and Complex Event Processing. Advances in Web Technologies and Engineering Book Series, 2014, , 304-323.	0.4	10
29	A verified Common Lisp implementation of Buchberger's algorithm in ACL2. Journal of Symbolic Computation, 2010, 45, 96-123.	0.5	9
30	Monitoring traffic in computer networks with dynamic distributed remote packet capturing. , 2015, , .		9
31	Using Genetic Algorithms for Deadline-Constrained Monitor Selection in Dynamic Computer Networks. , 2015, , .		9
32	Takuan: A Dynamic Invariant Generation System for WS-BPEL Compositions. , 2008, , .		8
33	A Framework for Genetic Test-Case Generation for WS-BPEL Compositions. Lecture Notes in Computer Science, 2014, , 1-16.	1.0	7
34	Hierarchical events for efficient distributed network analysis and surveillance. , 2012, , .		6
35	Header Field Based Partitioning of Network Traffic for Distributed Packet Capturing and Processing. , 2014, , .		6
36	Performance mutation testing: Hypothesis and open questions. Information and Software Technology, 2018, 103, 159-161.	3.0	6

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37	Test suite minimization for mutation testing of WS-BPEL compositions. , 2018, , .		6
38	A Framework for Mutant Genetic Generation for WS-BPEL. Lecture Notes in Computer Science, 2009, , 229-240.	1.0	6
39	Application of Metamorphic Testing to a Case Study in Web Services Compositions. Communications in Computer and Information Science, 2012, , 168-181.	0.4	6
40	GiGAn. , 2017, , .		6
41	Mutation testing in the wild: findings from GitHub. Empirical Software Engineering, 2022, 27, .	3.0	6
42	Complex event processing applied to early maritime threat detection. , 2012, , .		5
43	Mutation Testing of Event Processing Queries. , 2012, , .		5
44	Towards an Integrated SOA-based Architecture for Interoperable and Responsive Manufacturing Systems. Procedia Engineering, 2013, 63, 123-132.	1.2	5
45	Bridging the Gap between Low-Level Network Traffic Data Acquisition and Higher-Level Frameworks. , 2014, , .		5
46	Using Genetic Algorithms to Generate Test Suites for FSMs. Lecture Notes in Computer Science, 2019, , 741-752.	1.0	5
47	Using Evolutionary Mutation Testing to improve the quality of test suites. , 2017, , .		4
48	Model Translation from Papyrus-RT into the nuXmv Model Checker. Lecture Notes in Computer Science, 2021, , 3-20.	1.0	4
49	Improving Takuan to Analyze a Meta-Search Engine WS-BPEL Composition. , 2008, , .		3
50	GAmera: A Tool for WS-BPEL Composition Testing Using Mutation Analysis. Lecture Notes in Computer Science, 2010, , 490-493.	1.0	3
51	Improving network traffic acquisition and processing with the Java Virtual Machine. , 2015, , .		3
52	Software Testing: Cost Reduction in Industry 4.0. , 2019, , .		3
53	Using Constraint Solvers to Support Metamorphic Testing. , 2019, , .		3
54	A systematic literature review of the SBSE research community in Spain. Progress in Artificial Intelligence, 2020, 9, 113-128.	1.5	3

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55	Mutation Testing. , 2015, , 7212-7221.		3
56	Towards Event-Driven Context-Aware Web Services. Advances in Web Technologies and Engineering Book Series, 0, , 148-159.	0.4	3
57	Automatic dynamic generation of likely invariants for WS-BPEL compositions. Expert Systems With Applications, 2014, 41, 5041-5055.	4.4	2
58	Local parallelization of pleasingly parallel stream processing on multiple CPU cores. , 2016, , .		2
59	Maintaining Genetic Diversity in Multimodal Evolutionary Algorithms using Population Injection. , 2016, , .		2
60	Mutation Testing and Self/Peer Assessment: Analyzing their Effect on Students in a Software Testing Course. , 2021, , .		2
61	Takuan: A Tool for WS-BPEL Composition Testing Using Dynamic Invariant Generation. Lecture Notes in Computer Science, 2010, , 531-534.	1.0	2
62	Hypertext navigation of ACL2 proofs with XMLEye. , 2009, , .		1
63	Towards an Integrated SOA-Based Architecture for Interoperable and Responsive Manufacturing Systems Using the ISA-95 Object Model. Key Engineering Materials, 2014, 615, 145-156.	0.4	1
64	PTTAC: Passive Testing Tool for Asynchronous Systems. , 2014, , .		1
65	Enhancing WS-BPEL Dynamic Invariant Generation Using XML Schema and XPath Information. Lecture Notes in Computer Science, 2009, , 469-472.	1.0	1
66	An Approach for Model-Driven Design and Generation of Performance Test Cases with UML and MARTE. Communications in Computer and Information Science, 2013, , 136-150.	0.4	1
67	Domain-Specific Language for Generating Administrative Process Applications. , 2015, , .		1
68	Using Evolutionary Computation to Improve Mutation Testing. Lecture Notes in Computer Science, 2017, , 381-391.	1.0	1
69	Model-Driven Design of Performance Requirements. , 2011, , .		0
70	A Model-Driven Approach for Web Service Adaptation Using Complex Event Processing. Communications in Computer and Information Science, 2013, , 346-359.	0.4	0
71	Local programming language barriers in stream-based systems. , 2016, , .		0
72	On the feasibility of using hybrid evolutionary dynamic optimization for optimal monitor selection in dynamic communication networks. , 2018, , .		0

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73	Guest Editorial: Special Section on ICTSS. Information and Software Technology, 2020, 118, 106222.	3.0	0
74	IoT-TEG 4.0: A New Approach 4.0 for Test Event Generation. IEEE Transactions on Reliability, 2022, 71, 1368-1380.	3.5	0
75	Two Case Studies on Generating Administrative Process Applications with AdminDSL. Lecture Notes in Business Information Processing, 2016, , 96-116.	0.8	0
76	Preventing Health Risks Caused by Unhealthy Air Quality Using a CEP-Based SOA 2.0. Advances in Medical Technologies and Clinical Practice Book Series, 2017, , 170-196.	0.3	0
77	Combining Case-Based Reasoning with Complex Event Processing for Network Traffic Classification. Lecture Notes in Computer Science, 2018, , 110-123.	1.0	0
78	Mutation Testing Applied to Object-Oriented Languages. , 2018, , 7459-7469.		0
79	Mutation Testing Applied to Object-Oriented Languages. Advances in Computer and Electrical Engineering Book Series, 2019, , 1426-1438.	0.2	0
80	Mutation Operators for Google Query Language. Communications in Computer and Information Science, 2020, , 354-365.	0.4	0
81	Mutationâ€inspired symbolic execution for software testing. IET Software, 0, , .	1.5	0