Macario Polo Usaola

List of Publications by Year
in descending order

49 papers	664 citations	687363 13 h-index	642732 23 g-index
51 all docs	51 docs citations	51 times ranked	424 citing authors

#	Article	IF	Citations
1	Decreasing the cost of mutation testing with second‑order mutants. Software Testing Verification and Reliability, 2009, 19, 111-131.	2.0	106
2	Mutation Testing Cost Reduction Techniques: A Survey. IEEE Software, 2010, 27, 80-86.	1.8	64
3	Mutation Testing. IEEE Software, 2014, 31, 30-35.	1.8	41
4	Angels and monsters. , 2014, , .		30
5	Validating Second-Order Mutation at System Level. IEEE Transactions on Software Engineering, 2013, 39, 570-587.	5.6	29
6	Automated generation of test oracles using a model-driven approach. Information and Software Technology, 2013, 55, 301-319.	4.4	25
7	Integrating techniques and tools for testing automation. Software Testing Verification and Reliability, 2007, 17, 3-39.	2.0	24
8	Test Automation. IEEE Software, 2013, 30, 84-89.	1.8	24
9	Generating three-tier applications from relational databases: a formal and practical approach. Information and Software Technology, 2002, 44, 923-941.	4.4	23
10	Using a qualitative research method for building a software maintenance methodology. Software - Practice and Experience, 2002, 32, 1239-1260.	3.6	23
11	Parallel mutation testing. Software Testing Verification and Reliability, 2013, 23, 315-350.	2.0	23
12	Automated model-based testing using the UML testing profile and QVT. , 2009, , .		20
13	Reducing mutation costs through uncovered mutants. Software Testing Verification and Reliability, 2015, 25, 464-489.	2.0	20
14	Mutation at System and Functional Levels. , 2010, , .		17
15	Bacterio: Java mutation testing tool: A framework to evaluate quality of tests cases. , 2012, , .		15
16	Reduction of Test Suites Using Mutation. Lecture Notes in Computer Science, 2012, , 425-438.	1.3	14
17	Integrating Outsourcing in the Maintenance Process. Information Technology and Management, 2002, 3, 247-269.	2.4	13
18	Mutant Execution Cost Reduction: Through MUSIC (Mutant Schema Improved with Extra Code). , 2012, , .		13

#	Article	IF	Citations
19	Mutation at the multi-class and system levels. Science of Computer Programming, 2013, 78, 364-387.	1.9	12
20	Roles in the maintenance process. Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM, 1999, 24, 84-86.	0.7	11
21	Model-driven testing in software product lines. , 2009, , .		11
22	Testing-based Process for Evaluating Component Replaceability. Electronic Notes in Theoretical Computer Science, 2009, 236, 101-115.	0.9	9
23	An MDAâ€based approach for database reâ€engineering. Journal of Software: Evolution and Process, 2007, 19, 383-417.	1.1	8
24	PROW: A Pairwise algorithm with constRaints, Order and Weight. Journal of Systems and Software, 2015, 99, 1-19.	4.5	8
25	Testingâ€based process for component substitutability. Software Testing Verification and Reliability, 2012, 22, 529-561.	2.0	5
26	Knowledge extraction of the behaviour of software developers by the analysis of time recording logs. , 2010, , .		5
27	Software product line testing: A feature oriented approach. , 2012, , .		5
28	Test Case Generation with Regular Expressions and Combinatorial Techniques. , 2017, , .		5
29	Model-Driven Test Code Generation. Communications in Computer and Information Science, 2013, , 155-168.	0.5	5
30	Quantum software testing: State of the art. Journal of Software: Evolution and Process, 2023, 35, .	1.6	5
31	An Architecture for the Development of Mutation Operators. , 2017, , .		4
32	MANTOOL: a tool for supporting the software maintenance process. Journal of Software: Evolution and Process, 2001, 13, 77-95.	1.1	3
33	Assessment of Maintenance Maturity in IT Departments of Public Entities: Two Case Studies. Lecture Notes in Computer Science, 2001, , 86-97.	1.3	3
34	COTS Component Testing through Aspect-Based Metadata. , 2005, , 71-88.		2
35	A COMPARISON OF EFFORT ESTIMATION METHODS FOR 4GL PROGRAMS: EXPERIENCES WITH STATISTICS AND DATA MINING. International Journal of Software Engineering and Knowledge Engineering, 2006, 16, 127-140.	0.8	2
36	Testing-based assessment process for upgrading component systems. , 2008, , .		2

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37	Towards an automated testing framework to manage variability using the UML Testing Profile. , 2009, , .		2
38	PRECISO: A Reverse Engineering Tool to Discover Web Services from Relational Databases. , 2009, , .		2
39	Testing-Based Selection Method for Integrability on Service-Oriented Applications. , 2010, , .		2
40	A Model Based Testing Approach for Model-Driven Development and Software Product Lines. Communications in Computer and Information Science, 2011, , 193-208.	0.5	2
41	Investigating the impact on execution time and energy consumption of developing with Spring. Sustainable Computing: Informatics and Systems, 2021, 32, 100603.	2.2	2
42	A Methodology for Database Reengineering to Web Services. Lecture Notes in Computer Science, 2006, , 226-240.	1.3	2
43	Automated generation of oracled test cases with regular expressions and combinatorial techniques. Journal of Software: Evolution and Process, 2020, 32, e2273.	1.6	1
44	Analysing the combination of cost reduction techniques in Android mutation testing. Software Testing Verification and Reliability, 0, , e1769.	2.0	1
45	Automated Generation of Performance Test Cases from Functional Tests for Web Applications. Communications in Computer and Information Science, 2013, , 164-173.	0.5	1
46	Model Based Testing in Software Product Lines. Lecture Notes in Business Information Processing, 2012, , 270-283.	1.0	0
47	Automated test generation for multi-state systems. , 2013, , .		0
48	Test-Case Mutation. , 2007, , 157-176.		0
49	ProFit â€" Performing Dynamic Analysis of Software Systems. Communications in Computer and Information Science, 2019, , 255-262.	0.5	0