

Mark Harman

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

279
papers

12,573
citations

53
h-index

101
g-index

300
ext. papers

15,300
ext. citations

2.2
avg, IF

7.06
L-index

#	Paper	IF	Citations
279	Testing Web Enabled Simulation at Scale Using Metamorphic Testing 2021 ,		6
278	"Ignorance and Prejudice" in Software Fairness 2021 ,		4
277	Enhancing Genetic Improvement of Software with Regression Test Selection 2021 ,		2
276	Facebook's Cyber-Cyber and Cyber-Physical Digital Twins 2021 ,		2
275	App Store Effects on Software Engineering Practices. <i>IEEE Transactions on Software Engineering</i> , 2021 , 47, 300-319	3.5	14
274	A Survey of Performance Optimization for Mobile Applications. <i>IEEE Transactions on Software Engineering</i> , 2021 , 1-1	3.5	4
273	Fairea: a model behaviour mutation approach to benchmarking bias mitigation methods 2021 ,		1
272	Machine Learning Testing: Survey, Landscapes and Horizons. <i>IEEE Transactions on Software Engineering</i> , 2020 , 1-1	3.5	110
271	Cost measures matter for mutation testing study validity 2020 ,		2
270	Automatic testing and improvement of machine translation 2020 ,		13
269	WES 2020 ,		4
268	A Study of Bug Resolution Characteristics in Popular Programming Languages. <i>IEEE Transactions on Software Engineering</i> , 2020 , 1-1	3.5	2
267	Learning From Mistakes: Machine Learning Enhanced Human Expert Effort Estimates. <i>IEEE Transactions on Software Engineering</i> , 2020 , 1-1	3.5	2
266	. <i>IEEE Transactions on Software Engineering</i> , 2020 , 46, 302-320	3.5	17
265	. <i>IEEE Transactions on Software Engineering</i> , 2020 , 1-1	3.5	4
264	The importance of accounting for real-world labelling when predicting software vulnerabilities 2019 ,		19
263	SapFix: Automated End-to-End Repair at Scale 2019 ,		35

262	Mutation Testing Advances: An Analysis and Survey. <i>Advances in Computers</i> , 2019 , 275-378	2.9	101
261	. <i>IEEE Transactions on Software Engineering</i> , 2019 , 45, 1150-1169	3.5	11
260	Some challenges for software testing research (invited talk paper) 2019 ,		2
259	Comparative Analysis of Constraint Handling Techniques for Constrained Combinatorial Testing. <i>IEEE Transactions on Software Engineering</i> , 2019 , 1-1	3.5	5
258	Predictive Mutation Testing. <i>IEEE Transactions on Software Engineering</i> , 2019 , 45, 898-918	3.5	35
257	Detecting Trivial Mutant Equivalences via Compiler Optimisations. <i>IEEE Transactions on Software Engineering</i> , 2018 , 44, 308-333	3.5	31
256	Specialising Software for Different Downstream Applications Using Genetic Improvement and Code Transplantation. <i>IEEE Transactions on Software Engineering</i> , 2018 , 44, 574-594	3.5	17
255	We Need a Testability Transformation Semantics. <i>Lecture Notes in Computer Science</i> , 2018 , 3-17	0.9	5
254	An Empirical Study of Meta- and Hyper-Heuristic Search for Multi-Objective Release Planning. <i>ACM Transactions on Software Engineering and Methodology</i> , 2018 , 27, 1-32	3.3	20
253	Are mutants really natural? 2018 ,		5
252	OASIs: oracle assessment and improvement tool 2018 ,		2
251	Customer Rating Reactions Can Be Predicted Purely using App Features 2018 ,		13
250	Deploying Search Based Software Engineering with Sapienz at Facebook. <i>Lecture Notes in Computer Science</i> , 2018 , 3-45	0.9	24
249	Memory mutation testing. <i>Information and Software Technology</i> , 2017 , 81, 97-111	3.4	15
248	An experimental search-based approach to cohesion metric evaluation. <i>Empirical Software Engineering</i> , 2017 , 22, 292-329	3.3	10
247	Adaptive Multi-Objective Evolutionary Algorithms for Overtime Planning in Software Projects. <i>IEEE Transactions on Software Engineering</i> , 2017 , 43, 898-917	3.5	23
246	Generalized observational slicing for tree-represented modelling languages 2017 ,		8
245	Inferring Automatic Test Oracles 2017 ,		5

244	Human Competitiveness of Genetic Programming in Spectrum-Based Fault Localisation. <i>ACM Transactions on Software Engineering and Methodology</i> , 2017 , 26, 1-30	3.3	24
243	The Value of Exact Analysis in Requirements Selection. <i>IEEE Transactions on Software Engineering</i> , 2017 , 43, 580-596	3.5	12
242	Genetic improvement of GPU software. <i>Genetic Programming and Evolvable Machines</i> , 2017 , 18, 5-44	2	20
241	A survey of the use of crowdsourcing in software engineering. <i>Journal of Systems and Software</i> , 2017 , 126, 57-84	3.3	148
240	Sapienz: multi-objective automated testing for Android applications 2016 ,		169
239	Mutation-aware fault prediction 2016 ,		23
238	Test oracle assessment and improvement 2016 ,		15
237	An empirical study on dependence clusters for effort-aware fault-proneness prediction 2016 ,		14
236	Multi-objective software effort estimation 2016 ,		72
235	API-Constrained Genetic Improvement. <i>Lecture Notes in Computer Science</i> , 2016 , 224-230	0.9	6
234	HOMI: Searching Higher Order Mutants for Software Improvement. <i>Lecture Notes in Computer Science</i> , 2016 , 18-33	0.9	4
233	Automated search for good coverage criteria 2016 ,		6
232	Comparing white-box and black-box test prioritization 2016 ,		68
231	Evaluation of estimation models using the Minimum Interval of Equivalence. <i>Applied Soft Computing Journal</i> , 2016 , 49, 956-967	7.5	5
230	Threats to the validity of mutation-based test assessment 2016 ,		51
229	Achievements, Open Problems and Challenges for Search Based Software Testing 2015 ,		79
228	GI4GI 2015 ,		3
227	Practical Combinatorial Interaction Testing: Empirical Findings on Efficiency and Early Fault Detection. <i>IEEE Transactions on Software Engineering</i> , 2015 , 41, 901-924	3.5	51

226	2015,		49
225	Deep Parameter Optimisation 2015,		51
224	Reducing Energy Consumption Using Genetic Improvement 2015,		57
223	Empirical evaluation of pareto efficient multi-objective regression test case prioritisation 2015,		44
222	Improving CUDA DNA Analysis Software with Genetic Programming 2015,		33
221	Automated software transplantation 2015,		62
220	App store mining and analysis 2015,		9
219	Genetic Improvement using Higher Order Mutation 2015,		5
218	Grow and Graft a Better CUDA pknotsRG for RNA Pseudoknot Free Energy Calculation 2015,		18
217	Inferring Test Models from Kate's Bug Reports Using Multi-objective Search. <i>Lecture Notes in Computer Science, 2015, 301-307</i>	0.9	8
216	Regression Test Case Prioritisation for Guava. <i>Lecture Notes in Computer Science, 2015, 221-227</i>	0.9	3
215	ORBS and the limits of static slicing 2015,		11
214	An Integer Linear Programming approach to the single and bi-objective Next Release Problem. <i>Information and Software Technology, 2015, 65, 1-13</i>	3.4	41
213	Feature lifecycles as they spread, migrate, remain, and die in App Stores 2015,		32
212	Trivial Compiler Equivalence: A Large Scale Empirical Study of a Simple, Fast and Effective Equivalent Mutant Detection Technique 2015,		61
211	Mutation testing of memory-related operators 2015,		7
210	Transformed Vargha-Delaney Effect Size. <i>Lecture Notes in Computer Science, 2015, 318-324</i>	0.9	17
209	Multi-objective Module Clustering for Kate. <i>Lecture Notes in Computer Science, 2015, 282-288</i>	0.9	4

208	The App Sampling Problem for App Store Mining 2015 ,		51
207	Learning Combinatorial Interaction Test Generation Strategies Using Hyperheuristic Search 2015 ,		31
206	Optimizing Existing Software With Genetic Programming. <i>IEEE Transactions on Evolutionary Computation</i> , 2015 , 19, 118-135	15.6	99
205	The Oracle Problem in Software Testing: A Survey. <i>IEEE Transactions on Software Engineering</i> , 2015 , 41, 507-525	3.5	337
204	Automated Transplantation of Call Graph and Layout Features into Kate. <i>Lecture Notes in Computer Science</i> , 2015 , 262-268	0.9	14
203	Grow and Serve: Growing Django Citation Services Using SBSE. <i>Lecture Notes in Computer Science</i> , 2015 , 269-275	0.9	10
202	SBSector: Search Based Component Selection for Budget Hardware. <i>Lecture Notes in Computer Science</i> , 2015 , 289-294	0.9	1
201	The executable experimental template pattern for the systematic comparison of metaheuristics 2014 ,		8
200	FITTEST: A new continuous and automated testing process for future Internet applications 2014 ,		6
199	Coherent clusters in source code. <i>Journal of Systems and Software</i> , 2014 , 88, 1-24	3.3	8
198	Genetic improvement for adaptive software engineering (keynote) 2014 ,		27
197	Robust next release problem 2014 ,		21
196	The plastic surgery hypothesis 2014 ,		84
195	Exact scalable sensitivity analysis for the next release problem. <i>ACM Transactions on Software Engineering and Methodology</i> , 2014 , 23, 1-31	3.3	28
194	Coverage and fault detection of the output-uniqueness test selection criteria 2014 ,		32
193	Improving 3D medical image registration CUDA software with genetic programming 2014 ,		25
192	An analysis of the relationship between conditional entropy and failed error propagation in software testing 2014 ,		33
191	ORBS: language-independent program slicing 2014 ,		33

190	Angels and monsters 2014 ,		22
189	A study of equivalent and stubborn mutation operators using human analysis of equivalence 2014 ,		83
188	Search-Based Software Project Management 2014 , 373-399		19
187	Equivalence hypothesis testing in experimental software engineering. <i>Software Quality Journal</i> , 2014 , 22, 215-238	1.2	6
186	Less is More: Temporal Fault Predictive Performance over Multiple Hadoop Releases. <i>Lecture Notes in Computer Science</i> , 2014 , 240-246	0.9	18
185	Babel Pidgin: SBSE Can Grow and Graft Entirely New Functionality into a Real World System. <i>Lecture Notes in Computer Science</i> , 2014 , 247-252	0.9	33
184	Using Genetic Improvement and Code Transplants to Specialise a C++ Program to a Problem Class. <i>Lecture Notes in Computer Science</i> , 2014 , 137-149	0.9	66
183	Genetically Improved CUDA C++ Software. <i>Lecture Notes in Computer Science</i> , 2014 , 87-99	0.9	20
182	The FITTEST Tool Suite for Testing Future Internet Applications. <i>Lecture Notes in Computer Science</i> , 2014 , 1-31	0.9	
181	The FITTEST Tool Suite for Testing Future Internet Applications. <i>Lecture Notes in Computer Science</i> , 2014 , 1-31	0.9	1
180	Testing and verification in service-oriented architecture: a survey. <i>Software Testing Verification and Reliability</i> , 2013 , 23, 261-313	0.9	58
179	GPGPU test suite minimisation: search based software engineering performance improvement using graphics cards. <i>Empirical Software Engineering</i> , 2013 , 18, 550-593	3.3	28
178	Foreword to the invited impact paper on automatic software repair. <i>Software Quality Journal</i> , 2013 , 21, 419-419	1.2	
177	Genetic programming for Reverse Engineering 2013 ,		22
176	Pricing crowdsourcing-based software development tasks 2013 ,		30
175	Dynamic adaptive Search Based Software Engineering needs fast approximate metrics (keynote) 2013 ,		5
174	Automated generation of state abstraction functions using data invariant inference 2013 ,		4
173	Amorphous Slicing of Extended Finite State Machines. <i>IEEE Transactions on Software Engineering</i> , 2013 , 39, 892-909	3.5	14

172	2013,		27
171	Empirical evaluation of search based requirements interaction management. <i>Information and Software Technology</i> , 2013 , 55, 126-152	3-4	41
170	AUSTIN: An open source tool for search based software testing of C programs. <i>Information and Software Technology</i> , 2013 , 55, 112-125	3-4	33
169	Cloud engineering is Search Based Software Engineering too. <i>Journal of Systems and Software</i> , 2013 , 86, 2225-2241	3-3	32
168	An orchestrated survey of methodologies for automated software test case generation. <i>Journal of Systems and Software</i> , 2013 , 86, 1978-2001	3-3	34 ¹
167	Searching for better configurations: a rigorous approach to clone evaluation 2013,		90
166	Empirical answers to fundamental software engineering problems (panel) 2013,		3
165	Efficient Identification of Linchpin Vertices in Dependence Clusters. <i>ACM Transactions on Programming Languages and Systems</i> , 2013 , 35, 1-35	1.6	1
164	State-based model slicing. <i>ACM Computing Surveys</i> , 2013 , 45, 1-36	13.4	26
163	Efficiency and early fault detection with lower and higher strength combinatorial interaction testing 2013,		52
162	Fault localization prioritization. <i>ACM Transactions on Software Engineering and Methodology</i> , 2013 , 22, 1-29	3-3	65
161	1st International workshop on combining modelling and search-based software engineering (CMSBSE 2013) 2013,		1
160	Using Genetic Algorithms to Search for Key Stakeholders in Large-Scale Software Projects 2013, 118-134		2
159	Provably Optimal and Human-Competitive Results in SBSE for Spectrum Based Fault Localisation. <i>Lecture Notes in Computer Science</i> , 2013 , 224-238	0.9	42
158	Applying Genetic Improvement to MiniSAT. <i>Lecture Notes in Computer Science</i> , 2013 , 257-262	0.9	19
157	Agent-Based Modelling of Stock Markets Using Existing Order Book Data. <i>Lecture Notes in Computer Science</i> , 2013 , 101-114	0.9	2
156	Input Domain Reduction through Irrelevant Variable Removal and Its Effect on Local, Global, and Hybrid Search-Based Structural Test Data Generation. <i>IEEE Transactions on Software Engineering</i> , 2012 , 38, 453-477	3.5	32
155	Augmenting test suites effectiveness by increasing output diversity 2012,		16

154	Dynamic adaptive search based software engineering 2012 ,		43
153	App store mining and analysis: MSR for app stores 2012 ,		148
152	Experimental assessment of software metrics using automated refactoring 2012 ,		46
151	The role of Artificial Intelligence in Software Engineering 2012 ,		34
150	Regression testing minimization, selection and prioritization: a survey. <i>Software Testing Verification and Reliability</i> , 2012 , 22, 67-120	0.9	623
149	Test data regeneration: generating new test data from existing test data. <i>Software Testing Verification and Reliability</i> , 2012 , 22, 171-201	0.9	27
148	Regression test suite prioritization using system models. <i>Software Testing Verification and Reliability</i> , 2012 , 22, 481-506	0.9	22
147	Evolutionary testing of autonomous software agents. <i>Autonomous Agents and Multi-Agent Systems</i> , 2012 , 25, 260-283	2	27
146	The GISMOE challenge: constructing the pareto program surface using genetic programming to find better programs (keynote paper) 2012 ,		66
145	Search-based software engineering. <i>ACM Computing Surveys</i> , 2012 , 45, 1-61	13.4	431
144	Finding the Optimal Balance between Over and Under Approximation of Models Inferred from Execution Logs 2012 ,		17
143	Crawlability Metrics for Web Applications 2012 ,		2
142	Search Based Software Engineering: Techniques, Taxonomy, Tutorial. <i>Lecture Notes in Computer Science</i> , 2012 , 1-59	0.9	94
141	Optimised Realistic Test Input Generation Using Web Services. <i>Lecture Notes in Computer Science</i> , 2012 , 105-120	0.9	2
140	Automated web application testing using search based software engineering 2011 ,		51
139	Automatically generating realistic test input from web services 2011 ,		23
138	Symbolic search-based testing 2011 ,		49
137	A unifying theory of control dependence and its application to arbitrary program structures. <i>Theoretical Computer Science</i> , 2011 , 412, 6809-6842	1.1	19

136	Software Engineering Meets Evolutionary Computation. <i>Computer</i> , 2011 , 44, 31-39	1.6	50
135	Software Module Clustering as a Multi-Objective Search Problem. <i>IEEE Transactions on Software Engineering</i> , 2011 , 37, 264-282	3.5	234
134	An Analysis and Survey of the Development of Mutation Testing. <i>IEEE Transactions on Software Engineering</i> , 2011 , 37, 649-678	3.5	818
133	A study of the bi-objective next release problem. <i>Empirical Software Engineering</i> , 2011 , 16, 29-60	3.3	49
132	Crawlability metrics for automated web testing. <i>International Journal on Software Tools for Technology Transfer</i> , 2011 , 13, 131-149	1.3	13
131	The use of search-based optimization techniques to schedule and staff software projects: an approach and an empirical study. <i>Software - Practice and Experience</i> , 2011 , 41, 495-519	2.5	37
130	Comparing the performance of metaheuristics for the analysis of multi-stakeholder tradeoffs in requirements optimisation. <i>Information and Software Technology</i> , 2011 , 53, 761-773	3.4	24
129	Refactoring as Testability Transformation 2011 ,		12
128	Future Internet Testing with FITTEST 2011 ,		3
127	Model projection 2011 ,		16
126	Transition coverage testing for simulink/stateflow models using messy genetic algorithms 2011 ,		9
125	Strong higher order mutation-based test data generation 2011 ,		83
124	Making the Case for MORTO: Multi Objective Regression Test Optimization 2011 ,		27
123	FlagRemover. <i>ACM Transactions on Software Engineering and Methodology</i> , 2011 , 20, 1-33	3.3	16
122	Cooperative Co-evolutionary Optimization of Software Project Staff Assignments and Job Scheduling. <i>Lecture Notes in Computer Science</i> , 2011 , 127-141	0.9	23
121	Highly Scalable Multi Objective Test Suite Minimisation Using Graphics Cards. <i>Lecture Notes in Computer Science</i> , 2011 , 219-236	0.9	35
120	A Manifesto for Higher Order Mutation Testing 2010 ,		41
119	Automated patching techniques. <i>Communications of the ACM</i> , 2010 , 53, 108-108	2.5	20

118	The relationship between search based software engineering and predictive modeling 2010,		43
117	Coherent dependence clusters 2010,		4
116	Issues in clone classification for dataflow languages 2010,		9
115	Today/future importance analysis 2010,		15
114	2010,		43
113	Search Based Software Engineering: Introduction to the Special Issue of the IEEE Transactions on Software Engineering. <i>IEEE Transactions on Software Engineering, 2010, 36, 737-741</i>	3.5	20
112	AUSTIN: A Tool for Search Based Software Testing for the C Language and Its Evaluation on Deployed Automotive Systems 2010,		19
111	Empirical Study on the Efficiency of Search Based Test Generation for EFSM Models 2010,		12
110	Search Based Optimization of Requirements Interaction Management 2010,		22
109	Reducing qualitative human oracle costs associated with automatically generated test data 2010,		31
108	Why Source Code Analysis and Manipulation Will Always be Important 2010,		27
107	An alternative characterization of weak order dependence. <i>Information Processing Letters, 2010, 110, 939-943</i>	0.8	2
106	Assessing the impact of global variables on program dependence and dependence clusters. <i>Journal of Systems and Software, 2010, 83, 96-107</i>	3.3	17
105	Using hybrid algorithm for Pareto efficient multi-objective test suite minimisation. <i>Journal of Systems and Software, 2010, 83, 689-701</i>	3.3	86
104	An empirical investigation into branch coverage for C programs using CUTE and AUSTIN. <i>Journal of Systems and Software, 2010, 83, 2379-2391</i>	3.3	41
103	Efficient multi-objective higher order mutation testing with genetic programming. <i>Journal of Systems and Software, 2010, 83, 2416-2430</i>	3.3	91
102	Estimating the feasibility of transition paths in extended finite state machines. <i>Automated Software Engineering, 2010, 17, 33-56</i>	1.5	24
101	A Theoretical and Empirical Study of Search-Based Testing: Local, Global, and Hybrid Search. <i>IEEE Transactions on Software Engineering, 2010, 36, 226-247</i>	3.5	234

100	A trajectory-based strict semantics for program slicing. <i>Theoretical Computer Science</i> , 2010 , 411, 1372-1386	18
99	Why the Virtual Nature of Software Makes It Ideal for Search Based Optimization. <i>Lecture Notes in Computer Science</i> , 2010 , 1-12	0.9 23
98	FloPSy - Search-Based Floating Point Constraint Solving for Symbolic Execution. <i>Lecture Notes in Computer Science</i> , 2010 , 142-157	0.9 28
97	Multi objective higher order mutation testing with GP 2009 ,	4
96	Dependence clusters in source code. <i>ACM Transactions on Programming Languages and Systems</i> , 2009 , 32, 1-33	1.6 24
95	Automated test data generation for aspect-oriented programs 2009 ,	27
94	A search based approach to fairness analysis in requirement assignments to aid negotiation, mediation and decision making. <i>Requirements Engineering</i> , 2009 , 14, 231-245	2.7 63
93	TAIC PART 2007 and Mutation 2007 special issue editorial. <i>Journal of Systems and Software</i> , 2009 , 82, 1753-1754	3.3
92	Higher Order Mutation Testing. <i>Information and Software Technology</i> , 2009 , 51, 1379-1393	3.4 163
91	Empirical evaluation of a nesting testability transformation for evolutionary testing. <i>ACM Transactions on Software Engineering and Methodology</i> , 2009 , 18, 1-27	3.3 30
90	2009 ,	38
89	Search based data sensitivity analysis applied to requirement engineering 2009 ,	24
88	2009 ,	23
87	Clustering test cases to achieve effective and scalable prioritisation incorporating expert knowledge 2009 ,	97
86	Software project planning for robustness and completion time in the presence of uncertainty using multi objective search based software engineering 2009 ,	36
85	Using formal specifications to support testing. <i>ACM Computing Surveys</i> , 2009 , 41, 1-76	13.4 207
84	Improving Web Application Testing using testability measures 2009 ,	2
83	Identifying 'Linchpin Vertices' That Cause Large Dependence Clusters 2009 ,	10

82	A theoretical and empirical study of EFSM dependence 2009 ,		17
81	Measuring and Improving Latency to Avoid Test Suite Wear Out 2009 ,		9
80	Control Dependence for Extended Finite State Machines. <i>Lecture Notes in Computer Science</i> , 2009 , 216-230,		25
79	2008 ,		100
78	Bairness Analysis In Requirements Assignments 2008 ,		27
77	Evaluating Key Statements Analysis 2008 ,		2
76	Analysis of Procedure Splitability 2008 ,		5
75	Automated Session Data Repair for Web Application Regression Testing 2008 ,		18
74	MILU: A Customizable, Runtime-Optimized Higher Order Mutation Testing Tool for the Full C Language 2008 ,		84
73	Handling dynamic data structures in search based testing 2008 ,		23
72	Dependence Anti Patterns 2008 ,		11
71	An empirical study of the relationship between the concepts expressed in source code and dependence. <i>Journal of Systems and Software</i> , 2008 , 81, 2287-2298	3.3	8
70	Locating dependence structures using search-based slicing. <i>Information and Software Technology</i> , 2008 , 50, 1189-1209	3.4	8
69	Search Based Requirements Optimisation: Existing Work and Challenges 2008 , 88-94		62
68	Testability Transformation [Program Transformation to Improve Testability 2008 , 320-344		15
67	Search Based Software Engineering for Program Comprehension 2007 ,		23
66	Automated Test Data Generation using Search Based Software Engineering 2007 ,		20
65	The Current State and Future of Search Based Software Engineering 2007 ,		326

64	A multi-objective approach to search-based test data generation 2007 ,		74
63	The multi-objective next release problem 2007 ,		121
62	Heuristics for fault diagnosis when testing from finite state machines. <i>Software Testing Verification and Reliability</i> , 2007 , 17, 41-57	0.9	8
61	A non-standard semantics for program slicing and dependence analysis. <i>The Journal of Logic and Algebraic Programming</i> , 2007 , 72, 191-206		4
60	Equivalence of linear, free, liberal, structured program schemas is decidable in polynomial time. <i>Theoretical Computer Science</i> , 2007 , 373, 1-18	1.1	6
59	Pareto efficient multi-objective test case selection 2007 ,		186
58	An empirical study of static program slice size. <i>ACM Transactions on Software Engineering and Methodology</i> , 2007 , 16, 8	3.3	51
57	Empirical study of optimization techniques for massive slicing. <i>ACM Transactions on Programming Languages and Systems</i> , 2007 , 30, 3	1.6	19
56	Search Algorithms for Regression Test Case Prioritization. <i>IEEE Transactions on Software Engineering</i> , 2007 , 33, 225-237	3.5	420
55	Pareto optimal search based refactoring at the design level 2007 ,		120
54	A theoretical & empirical analysis of evolutionary testing and hill climbing for structural test data generation 2007 ,		53
53	The impact of input domain reduction on search-based test data generation 2007 ,		45
52	The Effect of Communication Overhead on Software Maintenance Project Staffing: a Search-Based Approach 2007 ,		17
51	Theoretical foundations of dynamic program slicing. <i>Theoretical Computer Science</i> , 2006 , 360, 23-41	1.1	30
50	Characterising, Explaining, and Exploiting the Approximate Nature of Static Analysis through Animation 2006 ,		4
49	Allowing Overlapping Boundaries in Source Code using a Search Based Approach to Concept Binding 2006 ,		13
48	2006 ,		6
47	An Empirical Study of Executable Concept Slice Size 2006 ,		6

46	Tool-Supported Refactoring of Existing Object-Oriented Code into Aspects. <i>IEEE Transactions on Software Engineering</i> , 2006 , 32, 698-717	3.5	40
45	Search Based Approaches to Component Selection and Prioritization for the Next Release Problem. <i>Conference on Software Maintenance, Proceedings of the</i> , 2006 ,		75
44	Search-based approaches to the component selection and prioritization problem 2006 ,		7
43	The species per path approach to SearchBased test data generation 2006 ,		34
42	Theory and algorithms for slicing unstructured programs. <i>Information and Software Technology</i> , 2006 , 48, 549-565	3.4	14
41	Improving test quality using robust unique input/output circuit sequences (UIOCs). <i>Information and Software Technology</i> , 2006 , 48, 696-707	3.4	8
40	A formalisation of the relationship between forms of program slicing. <i>Science of Computer Programming</i> , 2006 , 62, 228-252	1.1	27
39	A formal relationship between program slicing and partial evaluation. <i>Formal Aspects of Computing</i> , 2006 , 18, 103-119	1.2	7
38	Search Based Software Engineering. <i>Lecture Notes in Computer Science</i> , 2006 , 740-747	0.9	6
37	ConSUS: a light-weight program conditioner. <i>Journal of Systems and Software</i> , 2005 , 77, 241-262	3.3	10
36	Unifying program slicing and concept assignment for higher-level executable source code extraction. <i>Software - Practice and Experience</i> , 2005 , 35, 977-1006	2.5	11
35	Automated Unique Input Output Sequence Generation for Conformance Testing of FSMs. <i>Computer Journal</i> , 2005 , 49, 331-344	1.3	45
34	Generating feasible input sequences for extended finite state machines (EFSMs) using genetic algorithms 2005 ,		9
33	An empirical study of the robustness of two module clustering fitness functions 2005 ,		54
32	Static Program Slicing Algorithms are Minimal for Free Liberal Program Schemas. <i>Computer Journal</i> , 2005 , 48, 737-748	1.3	13
31	Branch-Coverage Testability Transformation for Unstructured Programs. <i>Computer Journal</i> , 2005 , 48, 421-436	1.3	19
30	A Survey of Empirical Results on Program Slicing. <i>Advances in Computers</i> , 2004 , 62, 105-178	2.9	71
29	Evolutionary testing in the presence of loop-assigned flags 2004 ,		48

28	Syntax-Directed Amorphous Slicing. <i>Automated Software Engineering</i> , 2004 , 11, 27-61	1.5	13
27	CONSTIT: a fully automated conditioned program slicer. <i>Software - Practice and Experience</i> , 2004 , 34, 15-46.5		20
26	Testability transformation. <i>IEEE Transactions on Software Engineering</i> , 2004 , 30, 3-16	3.5	161
25	. <i>IEEE Transactions on Software Engineering</i> , 2004 , 30, 715-735	3.5	21
24	How to Overcome the Equivalent Mutant Problem and Achieve Tailored Selective Mutation Using Co-evolution. <i>Lecture Notes in Computer Science</i> , 2004 , 1338-1349	0.9	57
23	Evolutionary testing in the presence of loop-assigned flags. <i>Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM</i> , 2004 , 29, 108-118	0.4	15
22	Computing Unique Input/Output Sequences Using Genetic Algorithms. <i>Lecture Notes in Computer Science</i> , 2004 , 164-177	0.9	19
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