Francisco Chicano

List of Publications by Year
in descending order

104 papers	1,549 citations	430754 18 h-index	434063 31 g-index
109 all docs	109 docs citations	109 times ranked	962 citing authors

#	Article	IF	Citations
1	Software project management with GAs. Information Sciences, 2007, 177, 2380-2401.	4.0	205
2	Training Neural Networks with GA Hybrid Algorithms. Lecture Notes in Computer Science, 2004, , 852-863.	1.0	59
3	Evolutionary algorithms for the multi-objective test data generation problem. Software - Practice and Experience, 2012, 42, 1331-1362.	2.5	58
4	The software project scheduling problem: A scalability analysis of multi-objective metaheuristics. Applied Soft Computing Journal, 2014, 15, 136-148.	4.1	53
5	EARMO: An Energy-Aware Refactoring Approach for Mobile Apps. IEEE Transactions on Software Engineering, 2018, 44, 1176-1206.	4.3	50
6	Observations in using parallel and sequential evolutionary algorithms for automatic software testing. Computers and Operations Research, 2008, 35, 3161-3183.	2.4	46
7	Partition Crossover for Pseudo-Boolean Optimization. , 2015, , .		46
8	Optimal antenna placement using a new multi-objective chc algorithm. , 2007, , .		43
9	Finding safety errors with ACO. , 2007, , .		42
10	Gray Box Optimization for Mk Landscapes (NK Landscapes and MAX-kSAT). Evolutionary Computation, 2016, 24, 491-519.	2.3	40
11	NK Hybrid Genetic Algorithm for Clustering. IEEE Transactions on Evolutionary Computation, 2018, 22, 748-761.	7.5	38
12	Using multi-objective metaheuristics to solve the software project scheduling problem. , 2011, , .		35
13	On the use of developers' context for automatic refactoring of software anti-patterns. Journal of Systems and Software, 2017, 128, 236-251.	3.3	34
14	Autocorrelation measures for the quadratic assignment problem. Applied Mathematics Letters, 2012, 25, 698-705.	1.5	33
15	Multi-objective Optimal Test Suite Computation for Software Product Line Pairwise Testing. , 2013, , .		33
16	A Methodology to Find the Elementary Landscape Decomposition of Combinatorial Optimization Problems. Evolutionary Computation, 2011, 19, 597-637.	2.3	31
17	Fitness Probability Distribution of Bit-Flip Mutation. Evolutionary Computation, 2015, 23, 217-248.	2.3	30
18	ON THE BEHAVIOR OF PARALLEL GENETIC ALGORITHMS FOR OPTIMAL PLACEMENT OF ANTENNAE IN TELECOMMUNICATIONS. International Journal of Foundations of Computer Science, 2005, 16, 343-359.	0.8	29

#	ARTICLE	IF	CITATIONS
19	Optimizing one million variable NK landscapes by hybridizing deterministic recombination and local search. , 2017, , .		29
20	Estimating software testing complexity. Information and Software Technology, 2013, 55, 2125-2139.	3.0	28
21	Efficient identification of improving moves in a ball for pseudo-boolean problems. , 2014, , .		28
22	Ant colony optimization with partial order reduction for discovering safety property violations in concurrent models. Information Processing Letters, 2008, 106, 221-231.	0.4	26
23	Local Optima Networks, Landscape Autocorrelation and Heuristic Search Performance. Lecture Notes in Computer Science, 2012, , 337-347.	1.0	25
24	Search based algorithms for test sequence generation in functional testing. Information and Software Technology, 2015, 58, 419-432.	3.0	25
25	ACOhg. , 2007, , .		24
26	Evolutionary algorithm for prioritized pairwise test data generation. , 2012, , .		24
27	Comparative analysis of classical multi-objective evolutionary algorithms and seeding strategies for pairwise testing of Software Product Lines. , 2014, , .		20
28	Finding deadlocks in large concurrent java programs using genetic algorithms. , 2008, , .		19
29	A parallel evolutionary algorithm for prioritized pairwise testing of software product lines. , 2014, , .		19
30	Using metaheuristics for the location of bicycle stations. Expert Systems With Applications, 2020, 161, 113684.	4.4	19
31	Tunnelling Crossover Networks. , 2015, , .		16
32	Searching for liveness property violations in concurrent systems with ACO. , 2008, , .		15
33	Efficient anytime algorithms to solve the bi-objective Next Release Problem. Journal of Systems and Software, 2019, 156, 217-231.	3.3	13
34	Ant Colony Optimization for Model Checking. , 2007, , 523-530.		12
35	Enhancing partition crossover with articulation points analysis. , 2018, , .		12
36	Intelligent Testing of Traffic Light Programs: Validation in Smart Mobility Scenarios. Mathematical Problems in Engineering, 2016, 2016, 1-19.	0.6	11

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37	Tunneling between plateaus. , 2018, , .		11
38	Effective anytime algorithm for multiobjective combinatorial optimization problems. Information Sciences, 2021, 565, 210-228.	4.0	11
39	Efficient refactoring scheduling based on partial order reduction. Journal of Systems and Software, 2018, 145, 25-51.	3.3	10
40	Facing robustness as a multi-objective problem: A bi-objectiveÂshortestÂpath problem in smart regions. Information Sciences, 2019, 503, 255-273.	4.0	10
41	Finding liveness errors with ACO. , 2008, , .		9
42	Elementary landscape decomposition of the quadratic assignment problem. , 2010, , .		9
43	Elementary landscape decomposition of the 0-1 unconstrained quadratic optimization. Journal of Heuristics, 2013, 19, 711-728.	1.1	9
44	Exact computation of the expectation surfaces for uniform crossover along with bit-flip mutation. Theoretical Computer Science, 2014, 545, 76-93.	0.5	9
45	Finding the Best Compromise Between Design Quality and Testing Effort During Refactoring. , 2016, , .		9
46	CMSA algorithm for solving the prioritized pairwise test data generation problem in software product lines. Journal of Heuristics, 2021, 27, 229-249.	1.1	9
47	Comparing Metaheuristic Algorithms for Error Detection in Java Programs. Lecture Notes in Computer Science, 2011, , 82-96.	1.0	9
48	A Novel Multiobjective Formulation of the Robust Software Project Scheduling Problem. Lecture Notes in Computer Science, 2012, , 497-507.	1.0	9
49	On the Application of SAT Solvers to the Test Suite Minimization Problem. Lecture Notes in Computer Science, 2012, , 45-59.	1.0	9
50	Elementary landscape decomposition of the frequency assignment problem. Theoretical Computer Science, 2011, 412, 6002-6019.	0.5	8
51	Exact computation of the expectation curves of the bit-flip mutation using landscapes theory. , 2011, , .		8
52	Local optima network analysis for MAX-SAT. , 2019, , .		8
53	Optimal Placement of Antennae Using Metaheuristics. , 2006, , 214-222.		7
54	On the scalability of multi-objective metaheuristics for the software scheduling problem. , 2011, , .		7

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55	Robust solutions for the software project scheduling problem: a preliminary analysis. International Journal of Metaheuristics, 2012, 2, 56.	0.1	7
56	A New Evaluation Function for Clustering. , 2016, , .		6
57	Elementary Landscape Decomposition of the Test Suite Minimization Problem. Lecture Notes in Computer Science, 2011, , 48-63.	1.0	6
58	Fitness Function Distributions over Generalized Search Neighborhoods in the q-ary Hypercube. Evolutionary Computation, 2013, 21, 561-590.	2.3	5
59	Evolutionary Computation for Software Product Line Testing: An Overview and Open Challenges. Studies in Computational Intelligence, 2016, , 59-87.	0.7	5
60	EARMO. , 2018, , .		5
61	Quasi-Optimal Recombination Operator. Lecture Notes in Computer Science, 2019, , 131-146.	1.0	5
62	An experimental and practical study on the equivalent mutant connection: An evolutionary approach. Information and Software Technology, 2020, 124, 106317.	3.0	5
63	Software Testing with Evolutionary Strategies. Lecture Notes in Computer Science, 2006, , 50-65.	1.0	5
64	Dealing with inheritance in OO evolutionary testing. , 2009, , .		4
65	Elementary landscapes of frequency assignment problems. , 2010, , .		4
66	Efficient Hill Climber for Constrained Pseudo-Boolean Optimization Problems. , 2016, , .		4
67	Using metaheuristic algorithms remotely via ROS. , 2007, , .		3
68	CTPATH: A Real World System to Enable Green Transportation by Optimizing Environmentaly Friendly Routing Paths. Lecture Notes in Computer Science, 2016, , 63-75.	1.0	3
69	Hybrid Algorithms Based on Integer Programming for the Search of Prioritized Test Data in Software Product Lines. Lecture Notes in Computer Science, 2017, , 3-19.	1.0	3
70	A systematic literature review of the SBSE research community in Spain. Progress in Artificial Intelligence, 2020, 9, 113-128.	1.5	3
71	Efficient Hill Climber for Multi-Objective Pseudo-Boolean Optimization. Lecture Notes in Computer Science, 2016, , 88-103.	1.0	3
72	Benchmark Generator for Software Testers. International Federation for Information Processing, 2011, , 378-388.	0.4	3

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73	Exact Computation of the Fitness-Distance Correlation for Pseudoboolean Functions with One Global Optimum. Lecture Notes in Computer Science, 2012, , 111-123.	1.0	3
74	Automatizing Software Cognitive Complexity Reduction. IEEE Access, 2022, 10, 11642-11656.	2.6	3
75	Dynastic Potential Crossover Operator. Evolutionary Computation, 2021, , 1-35.	2.3	3
76	The Asteroid Routing Problem: A Benchmark for Expensive Black-Box Permutation Optimization. Lecture Notes in Computer Science, 2022, , 124-140.	1.0	3
77	Problem understanding through landscape theory. , 2013, , .		2
78	The component model for elementary landscapes and partial neighborhoods. Theoretical Computer Science, 2014, 545, 59-75.	0.5	2
79	Mixed Integer Linear Programming Formulation for the Taxi Sharing Problem. Lecture Notes in Computer Science, 2016, , 106-117.	1.0	2
80	A Mobile Application and Academic Portal to Support Professionals Working with People Having Severe Intellectual or Developmental Disabilities. Procedia, Social and Behavioral Sciences, 2017, 237, 568-575.	0.5	2
81	Exact search-space size for the refactoring scheduling problem. Automated Software Engineering, 2018, 25, 195-200.	2.2	2
82	Editorial for the special issue on metaheuristics for combinatorial optimization. Journal of Heuristics, 2018, 24, 239-242.	1.1	2
83	Partition crossover for continuous optimization. , 2021, , .		2
84	Parallel Metaheuristics in Telecommunications. , 2005, , 495-515.		1
85	Exact computation of the expectation curves for uniform crossover. , 2012, , .		1
86	Evolutionary Algorithm Based on Partition Crossover (EAPX) for the Vehicle Routing Problem. , 2015, , .		1
87	Robust Bi-objective Shortest Path Problem in Real Road Networks. Lecture Notes in Computer Science, 2017, , 128-136.	1.0	1
88	An Intelligent Data Analysis of the Structure ofÂNP Problems for Efficient Solution: The Vehicle Routing Case. Advances in Intelligent Systems and Computing, 2018, , 368-378.	0.5	1
89	Natural evolution tells us how to best make goods delivery. , 2018, , .		1
90	Global Landscape Structure and the Random MAX-SAT Phase Transition. Lecture Notes in Computer Science, 2020, , 125-138.	1.0	1

#	Article	IF	Citations
91	Elementary Landscape Decomposition of the Hamiltonian Path Optimization Problem,. Lecture Notes in Computer Science, 2014, , 121-132.	1.0	1
92	Studying Solutions of the p-Median Problem for the Location of Public Bike Stations. Lecture Notes in Computer Science, 2018, , 198-208.	1.0	1
93	Editorial for the Special Issue on Combinatorial Optimization Problems. Evolutionary Computation, 2016, 24, 573-575.	2.3	0
94	Late-Breaking Abstracts Workshop at GECCO'16. , 2016, , .		0
95	Evolutionary computation, Winter 2016, vol. 24. ACM SIGEVOlution, 2017, 9, 10-11.	0.3	0
96	Preface to the Special Issue on Theory of Genetic and Evolutionary Computation. Algorithmica, 2017, 78, 558-560.	1.0	0
97	Optimal Neuron Selection and Generalization: NK Ensemble Neural Networks. Lecture Notes in Computer Science, 2018, , 449-460.	1.0	0
98	Guest Editorial Special Issue on Theoretical Foundations of Evolutionary Computation. IEEE Transactions on Evolutionary Computation, 2020, 24, 993-994.	7.5	0
99	Evaluation of alternative design choices for evolutionary mutation testing by means of automated configuration. Software Quality Journal, 2020, , 1.	1.4	0
100	Improving Search Efficiency and Diversity of Solutions in Multiobjective Binary Optimization by Using Metaheuristics Plus Integer Linear Programming. Lecture Notes in Computer Science, 2021, , 242-257.	1.0	0
101	Quadratization of gray coded representations, long path problems and needle functions. , 2021, , .		0
102	An Intelligent Advisor for City Traffic Policies. Lecture Notes in Computer Science, 2018, , 383-393.	1.0	0
103	Iterated Granular Neighborhood Algorithm for the Taxi Sharing Problem. Lecture Notes in Computer Science, 2020, , 291-304.	1.0	0
104	An Experimental and Practical Study on the Equivalent Mutant Connection: An Evolutionary Approach. , 2022, , .		0