

Juan Julián Merelo

List of Publications by Year in descending order

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Version: 2024-02-01

116
papers

1,704
citations

331259

21
h-index

344852

36
g-index

121
all docs

121
docs citations

121
times ranked

1509
citing authors

#	ARTICLE	IF	CITATIONS
1	Proteinotopic feature maps. <i>Neurocomputing</i> , 1994, 6, 443-454.	3.5	128
2	G-Prop: Global optimization of multilayer perceptrons using GAs. <i>Neurocomputing</i> , 2000, 35, 149-163.	3.5	125
3	Evolving RBF neural networks for time-series forecasting with EvRBF. <i>Information Sciences</i> , 2004, 165, 207-220.	4.0	88
4	Statistical analysis of the main parameters involved in the design of a genetic algorithm. <i>IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews</i> , 2002, 32, 31-37.	3.3	83
5	A network analysis of the 2010 FIFA world cup champion team play. <i>Journal of Systems Science and Complexity</i> , 2013, 26, 21-42.	1.6	77
6	Beyond source code: The importance of other artifacts in software development (a case study). <i>Journal of Systems and Software</i> , 2006, 79, 1233-1248.	3.3	75
7	Evolving Multilayer Perceptrons. <i>Neural Processing Letters</i> , 2000, 12, 115-128.	2.0	58
8	Statistical analysis of the parameters of a neuro-genetic algorithm. <i>IEEE Transactions on Neural Networks</i> , 2002, 13, 1374-1394.	4.8	53
9	Diversity Through Multiculturalism: Assessing Migrant Choice Policies in an Island Model. <i>IEEE Transactions on Evolutionary Computation</i> , 2011, 15, 456-469.	7.5	52
10	EvAg: a scalable peer-to-peer evolutionary algorithm. <i>Genetic Programming and Evolvable Machines</i> , 2010, 11, 227-246.	1.5	49
11	DatAC: A visual analytics platform to explore climate and air quality indicators associated with the COVID-19 pandemic in Spain. <i>Science of the Total Environment</i> , 2021, 750, 141424.	3.9	40
12	Bloat Control Operators and Diversity in Genetic Programming: A Comparative Study. <i>Evolutionary Computation</i> , 2010, 18, 305-332.	2.3	35
13	KANTS: A Stigmergic Ant Algorithm for Cluster Analysis and Swarm Art. <i>IEEE Transactions on Cybernetics</i> , 2014, 44, 843-856.	6.2	31
14	The EvoSpace Model for Pool-Based Evolutionary Algorithms. <i>Journal of Grid Computing</i> , 2015, 13, 329-349.	2.5	30
15	Pareto-based multi-colony multi-objective ant colony optimization algorithms: an island model proposal. <i>Soft Computing</i> , 2013, 17, 1175-1207.	2.1	29
16	Automated playtesting in collectible card games using evolutionary algorithms: A case study in hearthstone. <i>Knowledge-Based Systems</i> , 2018, 153, 133-146.	4.0	27
17	Asynchronous distributed genetic algorithms with Javascript and JSON. , 2008, , .		26
18	Effect of Noisy Fitness in Real-Time Strategy Games Player Behaviour Optimisation Using Evolutionary Algorithms. <i>Journal of Computer Science and Technology</i> , 2012, 27, 1007-1023.	0.9	26

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19	Web newspaper layout optimization using simulated annealing. IEEE Transactions on Systems, Man, and Cybernetics, 2002, 32, 686-691.	5.5	25
20	Comparing evolutionary hybrid systems for design and optimization of multilayer perceptron structure along training parameters. Information Sciences, 2007, 177, 2884-2905.	4.0	25
21	Improving genetic algorithms performance via deterministic population shrinkage. , 2009, , .		24
22	Open classroom: enhancing student achievement on artificial intelligence through an international online competition. Journal of Computer Assisted Learning, 2015, 31, 14-31.	3.3	24
23	Corporate security solutions for BYOD: A novel user-centric and self-adaptive system. Computer Communications, 2015, 68, 83-95.	3.1	23
24	Algorithm::Evolutionary, a flexible Perl module for evolutionary computation. Soft Computing, 2010, 14, 1091-1109.	2.1	22
25	Optimal Fuzzy Controller Design for Autonomous Robot Path Tracking Using Population-Based Metaheuristics. Symmetry, 2022, 14, 202.	1.1	20
26	Optimizing player behavior in a real-time strategy game using evolutionary algorithms. , 2011, , .		19
27	A novel representation of genomic sequences for taxonomic clustering and visualization by means of self-organizing maps. Bioinformatics, 2015, 31, 736-744.	1.8	19
28	Designing robust volunteer-based evolutionary algorithms. Genetic Programming and Evolvable Machines, 2014, 15, 221-244.	1.5	18
29	A Hybrid Fuzzy Genetic Algorithm for an Adaptive Traffic Signal System. Advances in Fuzzy Systems, 2015, 2015, 1-11.	0.6	18
30	Towards automatic StarCraft strategy generation using genetic programming. , 2015, , .		16
31	NectaRSS, an intelligent RSS feed reader. Journal of Network and Computer Applications, 2008, 31, 793-806.	5.8	15
32	Genotypic differences and migration policies in an island model. , 2009, , .		15
33	SA-prop: Optimization of multilayer perceptron parameters using simulated annealing. Lecture Notes in Computer Science, 1999, , 661-670.	1.0	14
34	Comparing multiobjective evolutionary ensembles for minimizing type I and II errors for bankruptcy prediction. , 2008, , .		13
35	CHAC, A MOACO algorithm for computation of bi-criteria military unit path in the battlefield: Presentation and first results. International Journal of Intelligent Systems, 2009, 24, 818-843.	3.3	13
36	hCHAC: A family of MOACO algorithms for the resolution of the bi-criteria military unit pathfinding problem. Computers and Operations Research, 2013, 40, 1524-1551.	2.4	13

#	ARTICLE	IF	CITATIONS
37	Title is missing!. Neural Processing Letters, 1998, 8, 55-65.	2.0	12
38	Increasing GP Computing Power for Free via Desktop GRID Computing and Virtualization. , 2009, , .		12
39	Where is evolutionary computation going? A temporal analysis of the EC community. Genetic Programming and Evolvable Machines, 2007, 8, 239-253.	1.5	11
40	Parallel quadrant interlocking factorization on hypercube computers. Parallel Computing, 1990, 15, 87-100.	1.3	10
41	Evolvable agents, a fine grained approach for distributed evolutionary computing: walking towards the peer-to-peer computing frontiers. Soft Computing, 2008, 12, 1145-1156.	2.1	10
42	Visualizing the evolution of a web-based social network. Journal of Network and Computer Applications, 2008, 31, 677-698.	5.8	10
43	Exploring population structures for locally concurrent and massively parallel Evolutionary Algorithms. , 2008, , .		9
44	Controlling bots in a First Person Shooter game using genetic algorithms. , 2010, , .		9
45	Fluid evolutionary algorithms. , 2010, , , .		9
46	Determining the significance and relative importance of parameters of a simulated quenching algorithm using statistical tools. Applied Intelligence, 2012, 37, 239-254.	3.3	9
47	Application of the Fuzzy Kohonen Clustering Network to biological macromolecules images classification. Lecture Notes in Computer Science, 1999, , 331-340.	1.0	8
48	Using free cloud storage services for distributed evolutionary algorithms. , 2011, , .		8
49	Forced evolution in silico by artificial transposons and their genetic operators: The ant navigation problem. Information Sciences, 2015, 306, 88-110.	4.0	8
50	Enhancing a MOACO for Solving the Bi-criteria Pathfinding Problem for a Military Unit in a Realistic Battlefield. , 2007, , 712-721.		8
51	Evolving a TORCS Modular Fuzzy Driver Using Genetic Algorithms. Lecture Notes in Computer Science, 2018, , 342-357.	1.0	8
52	Evolving two-dimensional fuzzy systems. Fuzzy Sets and Systems, 2003, 138, 381-398.	1.6	7
53	Assessing speed-ups in commodity cloud storage services for distributed evolutionary algorithms. , 2011, , , .		7
54	Is there a free lunch for cloud-based evolutionary algorithms?. , 2013, , , .		7

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55	Studying the effect of population size in distributed evolutionary algorithms on heterogeneous clusters. <i>Applied Soft Computing Journal</i> , 2016, 38, 530-547.	4.1	7
56	Introducing an Event-Based Architecture for Concurrent and Distributed Evolutionary Algorithms. <i>Lecture Notes in Computer Science</i> , 2018, , 399-410.	1.0	7
57	Randomized Parameter Settings for Heterogeneous Workers in a Pool-Based Evolutionary Algorithm. <i>Lecture Notes in Computer Science</i> , 2014, , 702-710.	1.0	7
58	Designing and testing a pool-based evolutionary algorithm. <i>Natural Computing</i> , 2013, 12, 149-162.	1.8	6
59	Fireworks: Evolutionary art project based on EvoSpace-interactive. , 2013, , .		6
60	Empirical Validation of a Gossiping Communication Mechanism for Parallel EAs. , 2007, , 129-136.		6
61	Application of vector quantization algorithms to protein classification and secondary structure computation. , 1991, , 415-421.		5
62	A genetic algorithm for dynamic modelling and prediction of activity in document streams. , 2007, , .		5
63	Balancing safety and speed in the military path finding problem. , 2007, , .		5
64	Automatic detection of trends in time-stamped sequences: an evolutionary approach. <i>Soft Computing</i> , 2010, 14, 211-227.	2.1	5
65	A comparative study on the performance of dissortative mating and immigrants-based strategies for evolutionary dynamic optimization. <i>Information Sciences</i> , 2011, 181, 4428-4459.	4.0	5
66	Using Student Conferences to Increase Participation in the Classroom: A Case Study. <i>IEEE Transactions on Education</i> , 2012, 55, 580-581.	2.0	5
67	The sandpile mutation Genetic Algorithm: an investigation on the working mechanisms of a diversity-oriented and self-organized mutation operator for non-stationary functions. <i>Applied Intelligence</i> , 2013, 39, 279-306.	3.3	5
68	A study on time-varying partially connected topologies for the particle swarm. , 2013, , .		5
69	StarTroper, a film trope rating optimizer using machine learning and evolutionary algorithms. <i>Expert Systems</i> , 2020, 37, e12525.	2.9	5
70	Towards a 2-dimensional self-organized framework for structured population-based metaheuristics. , 2012, , .		4
71	Complex systems in sports: Introduction to the special issue. <i>Journal of Systems Science and Complexity</i> , 2013, 26, 1-3.	1.6	4
72	The Simpsons did it: Exploring the film trope space and its large scale structure. <i>PLoS ONE</i> , 2021, 16, e0248881.	1.1	4

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73	KANTS: Artifical Ant System for Classification. Lecture Notes in Computer Science, 2008, , 339-346.	1.0	4
74	Configuring an evolutionary tool for the inventory and transportation problem. , 2007, , .		3
75	Multikulti algorithm: Using genotypic differences in adaptive distributed evolutionary algorithm migration policies. , 2009, , .		3
76	Developing services in a service oriented architecture for evolutionary algorithms. , 2013, , .		3
77	Using statistical tools to determine the significance and relative importance of the main parameters of an evolutionary algorithm. Intelligent Data Analysis, 2013, 17, 771-789.	0.4	3
78	Soft Computing Techniques Applied to Corporate and Personal Security. , 2015, , .		3
79	Event-Driven Multi-algorithm Optimization: Mixing Swarm and Evolutionary Strategies. Lecture Notes in Computer Science, 2021, , 747-762.	1.0	3
80	Optimization of web newspaper layout in real time. Computer Networks, 2001, 36, 311-321.	3.2	2
81	Evolutionary system for prediction and optimization of hardware architecture performance. , 2008, , .		2
82	Applying support vector machines and mutual information to book losses prediction. , 2010, , .		2
83	From pherographia to color pherographia: Color sketching with artificial ants. , 2011, , .		2
84	Optimizing worst-case scenario in evolutionary solutions to the MasterMind puzzle. , 2011, , .		2
85	A search for scalable evolutionary solutions to the game of MasterMind. , 2013, , .		2
86	Towards a multiobjective evolutionary approach to inventory and routing management in a retail chain. , 2013, , .		2
87	Randomized parameter settings for a pool-based particle swarm optimization algorithm. , 2017, , .		2
88	Studying How to Apply Chatbots Technology in Higher-Education: First Results and Future Strategies. Lecture Notes in Computer Science, 2021, , 185-198.	1.0	2
89	Studying the Cache Size in a Gossip-Based Evolutionary Algorithm. Studies in Computational Intelligence, 2009, , 131-140.	0.7	2
90	Modelling a Human-Like Bot in a First Person Shooter Game. International Journal of Creative Interfaces and Computer Graphics, 2015, 6, 21-37.	0.1	2

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91	A GA-optimized neural network for classification of biological particles from electron-microscopy images. Lecture Notes in Computer Science, 1997, , 1174-1182.	1.0	1
92	Complex networks and evolutionary computation. , 2007, , .		1
93	Study of the Robustness of a Meta-Algorithm for the Estimation of Parameters in Artificial Neural Networks Design. , 2008, , .		1
94	Generating colored 2-dimensional representations of sleep EEG with the KANTS clustering algorithm. , 2012, , .		1
95	Photo rendering with swarms: From figurative to abstract pherogenic imaging. , 2013, , .		1
96	Partially connected topologies for particle swarm. , 2013, , .		1
97	Improving evolutionary solutions to the game of mastermind using an entropy-based scoring method. , 2013, , .		1
98	Enforcing corporate security policies via computational intelligence techniques. , 2014, , .		1
99	Shuffle and Mate: A Dynamic Model for Spatially Structured Evolutionary Algorithms. Lecture Notes in Computer Science, 2014, , 50-59.	1.0	1
100	Revisiting Population Structure and Particle Swarm Performance. , 2018, , .		1
101	An Analysis of a Selecto-Lamarckian Model of Multimemetic Algorithms with Dynamic Self-organized Topology. Lecture Notes in Computer Science, 2013, , 205-216.	1.0	1
102	Particle Swarms with Dynamic Topologies and Conservation of Function Evaluations. , 2014, , .		1
103	Ranking the Performance of Compiled and Interpreted Languages in Genetic Algorithms. , 2016, , .		1
104	Exploring the Role of Chatbots and Messaging Applications in Higher Education: A Teacher's Perspective. Lecture Notes in Computer Science, 2022, , 205-223.	1.0	1
105	Influence of parameters on the performance of a MOACO algorithm for solving the bi-criteria military path-finding problem. , 2008, , .		0
106	Statistical analysis of the parameters of the simulated annealing algorithm. , 2010, , .		0
107	An evolutionary approach to integrated inventory and routing management in a real world case. , 2010, , .		0
108	Swarm art with KANTS: Using an ant clustering algorithm for generating abstract paintings. , 2012, , .		0

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109	Influence of selective pressure on quality of solutions and speed of evolutionary mastermind. , 2013, , .		0
110	A methodology for designing emergent literary backstories on non-player characters using genetic algorithms. , 2014, , .		0
111	Assessing different architectures for evolutionary algorithms in javascript. , 2014, , .		0
112	Asynchronous Steady State Particle Swarm. , 2016, , .		0
113	Increasing Performance via Gamification in a Volunteer-Based Evolutionary Computation System. Communications in Computer and Information Science, 2018, , 342-353.	0.4	0
114	Enhancing the Adaptive Dissortative Mating Genetic Algorithm in Fast Non-stationary Fitness Functions. Studies in Computational Intelligence, 2012, , 115-130.	0.7	0
115	Evolving the Strategies of Agents for the ANTS Game. Lecture Notes in Computer Science, 2013, , 324-333.	1.0	0
116	An Event-Based Architecture for Cross-Breed Multi-population Bio-inspired Optimization Algorithms. Lecture Notes in Computer Science, 2020, , 686-701.	1.0	0