Pedro Castillo Valdivieso

List of Publications by Year
in descending order

120 papers	1,378 citations	471477 17 h-index	454934 30 g-index
133 all docs	133 docs citations	133 times ranked	1104 citing authors

#	Article	IF	Citations
1	G-Prop: Global optimization of multilayer perceptrons using GAs. Neurocomputing, 2000, 35, 149-163.	5.9	125
2	Evolving RBF neural networks for time-series forecasting with EvRBF. Information Sciences, 2004, 165, 207-220.	6.9	88
3	Statistical analysis of the main parameters involved in the design of a genetic algorithm. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2002, 32, 31-37.	2.9	83
4	EvoloPy: An Open-source Nature-inspired Optimization Framework in Python. , 2016, , .		59
5	Evolving Multilayer Perceptrons. Neural Processing Letters, 2000, 12, 115-128.	3.2	58
6	Improving financial bankruptcy prediction in a highly imbalanced class distribution using oversampling and ensemble learning: a case from the Spanish market. Progress in Artificial Intelligence, 2020, 9, 31-53.	2.4	54
7	Statistical analysis of the parameters of a neuro-genetic algorithm. IEEE Transactions on Neural Networks, 2002, 13, 1374-1394.	4.2	53
8	Studying real traffic and mobility scenarios for a Smart City using a new monitoring and tracking system. Future Generation Computer Systems, 2017, 76, 163-179.	7.5	52
9	Applying computational intelligence methods for predicting the sales of newly published books in a real editorial business management environment. Knowledge-Based Systems, 2017, 115, 133-151.	7.1	31
10	Pareto-based multi-colony multi-objective ant colony optimization algorithms: an island model proposal. Soft Computing, 2013, 17, 1175-1207.	3.6	29
11	Asynchronous distributed genetic algorithms with Javascript and JSON. , 2008, , .		26
12	Comparing evolutionary hybrid systems for design and optimization of multilayer perceptron structure along training parameters. Information Sciences, 2007, 177, 2884-2905.	6.9	25
13	Corporate security solutions for BYOD: A novel user-centric and self-adaptive system. Computer Communications, 2015, 68, 83-95.	5.1	23
14	Algorithm::Evolutionary, a flexible Perl module for evolutionary computation. Soft Computing, 2010, 14, 1091-1109.	3.6	22
15	Service oriented evolutionary algorithms. Soft Computing, 2013, 17, 1059-1075.	3.6	21
16	Cost-sensitive ensemble methods for bankruptcy prediction in a highly imbalanced data distribution: a real case from the Spanish market. Progress in Artificial Intelligence, 2020, 9, 361-375.	2.4	19
17	Conference Paper Assignment Using a Combined Greedy/Evolutionary Algorithm. Lecture Notes in Computer Science, 2004, , 602-611.	1.3	19
18	Sentiment Analysis for e-Payment Service Providers Using Evolutionary eXtreme Gradient Boosting. IEEE Access, 2020, 8, 189930-189944.	4.2	18

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19	EvoCluster: An Open-Source Nature-Inspired Optimization Clustering Framework in Python. Lecture Notes in Computer Science, 2020, , 20-36.	1.3	18
20	Implementation Matters: Programming Best Practices for Evolutionary Algorithms. Lecture Notes in Computer Science, 2011, , 333-340.	1.3	18
21	Finding a needle in a haystack using hints and evolutionary computation: the case of evolutionary MasterMind. Applied Soft Computing Journal, 2006, 6, 170-179.	7.2	17
22	NectaRSS, an intelligent RSS feed reader. Journal of Network and Computer Applications, 2008, 31, 793-806.	9.1	15
23	SA-prop: Optimization of multilayer perceptron parameters using simulated annealing. Lecture Notes in Computer Science, 1999, , 661-670.	1.3	14
24	Cloud-based evolutionary algorithms: An algorithmic study. Natural Computing, 2013, 12, 135-147.	3.0	14
25	Comparing the Performance of Deep Learning Methods to Predict Companiesâ€™ Financial Failure. IEEE Access, 2021, 9, 97010-97038.	4.2	14
26	Teaching Learning-Based Optimization With Evolutionary Binarization Schemes for Tackling Feature Selection Problems. IEEE Access, 2021, 9, 41082-41103.	4.2	14
27	P2P Evolutionary Algorithms: A Suitable Approach for Tackling Large Instances in Hard Optimization Problems. Lecture Notes in Computer Science, 2008, , 622-631.	1.3	14
28	Ephemeral Computing and Bioinspired Optimization - Challenges and Opportunities. , 2015, , .		14
29	Comparing multiobjective evolutionary ensembles for minimizing type I and II errors for bankruptcy prediction. , 2008, , .		13
30	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.	4.0	13
31	From ephemeral computing to deep bioinspired algorithms: New trends and applications. Future Generation Computer Systems, 2018, 88, 735-746.	7.5	13
32	A bibliometric study of the research area of videogames using Dimensions.ai database. Procedia Computer Science, 2019, 162, 737-744.	2.0	11
33	A Robust Multi-Objective Feature Selection Model Based on Local Neighborhood Multi-Verse Optimization. IEEE Access, 2021, 9, 100009-100028.	4.2	11
34	Testing the Intermediate Disturbance Hypothesis: Effect of Asynchronous Population Incorporation on Multi-Deme Evolutionary Algorithms. Lecture Notes in Computer Science, 2008, , 266-275.	1.3	11
35	Evolvable agents, a fine grained approach for distributed evolutionary computing: walking towards the peer-to-peer computing frontiers. Soft Computing, 2008, 12, 1145-1156.	3.6	10
36	Exploring population structures for locally concurrent and massively parallel Evolutionary Algorithms. , 2008, , .		9

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37	Determining the significance and relative importance of parameters of a simulated quenching algorithm using statistical tools. Applied Intelligence, 2012, 37, 239-254.	5.3	9
38	A Cross-Platform Assessment of Energy Consumption in Evolutionary Algorithms. Lecture Notes in Computer Science, 2016, , 548-557.	1.3	9
39	Classification of Arabic healthcare questions based on word embeddings learned from massive consultations: a deep learning approach. Journal of Ambient Intelligence and Humanized Computing, 2022, 13, 1811-1827.	4.9	9
40	A Distributed Service Oriented Framework for Metaheuristics Using a Public Standard. Studies in Computational Intelligence, 2010, , 211-222.	0.9	9
41	Multiobjective Optimization of Ensembles of Multilayer Perceptrons for Pattern Classification. Lecture Notes in Computer Science, 2006, , 453-462.	1.3	8
42	Using free cloud storage services for distributed evolutionary algorithms. , 2011, , .		8
43	NodIO. , 2016, , .		8
44	Enhancing a MOACO for Solving the Bi-criteria Pathfinding Problem for a Military Unit in a Realistic Battlefield. , 2007, , 712-721.		8
45	Offensive Language Detection in Arabic Social Networks Using Evolutionary-Based Classifiers Learned From Fine-Tuned Embeddings. IEEE Access, 2022, 10, 75018-75039.	4.2	8
46	Evolving two-dimensional fuzzy systems. Fuzzy Sets and Systems, 2003, 138, 381-398.	2.7	7
47	Assessing speed-ups in commodity cloud storage services for distributed evolutionary algorithms. , 2011, , .		7
48	Creating autonomous agents for playing Super Mario Bros game by means of evolutionary finite state machines. Evolutionary Intelligence, 2014, 6, 205-218.	3.6	7
49	Studying the effect of population size in distributed evolutionary algorithms on heterogeneous clusters. Applied Soft Computing Journal, 2016, 38, 530-547.	7.2	7
50	Analysing the influence of the fitness function on genetically programmed bots for a real-time strategy game. Entertainment Computing, 2017, 18, 15-29.	2.9	7
51	Simulation Approach for Optimal Maintenance Intervals Estimation of Electronic Devices. Advances in Intelligent Systems and Computing, 2016, , 153-164.	0.6	7
52	Tree Depth Influence in Genetic Programming for Generation of Competitive Agents for RTS Games. Lecture Notes in Computer Science, 2014, , 411-421.	1.3	7
53	Distributed multi-objective evolutionary optimization using island-based selective operator application. Applied Soft Computing Journal, 2019, 85, 105757.	7.2	6
54	EvoCluster: An Open-Source Nature-Inspired Optimization Clustering Framework. SN Computer Science, 2021, 2, 1.	3.6	6

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55	Empirical Validation of a Gossiping Communication Mechanism for Parallel EAs. , 2007, , 129-136.		6
56	AltmÃ©tricas a nivel institucional: visibilidad en la Web de la producciÃ³n cientÃfica de las universidades espaÃ±olas a partir de Altmetric.com. Profesional De La Informacion, 2018, 27, 483.	2.7	6
57	Studying and Tackling Noisy Fitness in Evolutionary Design of Game Characters. , 2014, , .		6
58	Balancing safety and speed in the military path finding problem. , 2007, , .		5
59	Using Student Conferences to Increase Participation in the Classroom: A Case Study. IEEE Transactions on Education, 2012, 55, 580-581.	2.4	5
60	There Can Be only One: Evolving RTS Bots via Joust Selection. Lecture Notes in Computer Science, 2016, , 541-557.	1.3	5
61	Comparing Heterogeneous and Homogeneous Flocking Strategies for the Ghost Team in the Game of Ms. Pac-Man. IEEE Transactions on Games, 2016, 8, 278-287.	1.4	5
62	Detection and Analysis of Anomalies in People Density and Mobility Through Wireless Smartphone Tracking. IEEE Access, 2020, 8, 54237-54253.	4.2	5
63	Predicting Financial Distress: A Case Study Using Self-organizing Maps. , 2007, , 774-781.		5
64	Evolving Evil: Optimizing Flocking Strategies Through Genetic Algorithms for the Ghost Team in the Game of Ms. Pac-Man. Lecture Notes in Computer Science, 2014, , 313-324.	1.3	5
65	Performance for the Masses. , 2016, , .		4
66	Visualization of Neural Net Evolution. Lecture Notes in Computer Science, 2003, , 534-541.	1.3	4
67	Evolving XSLT Stylesheets for Document Transformation. Lecture Notes in Computer Science, 2008, , 1021-1030.	1.3	4
68	Co-Evolutionary Optimization of Autonomous Agents in a Real-Time Strategy Game. Lecture Notes in Computer Science, 2014, , 374-385.	1.3	4
69	Comparing ACO Algorithms for Solving the Bi-criteria Military Path-Finding Problem. , 2007, , 665-674.		4
70	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.	0.9	3
71	A Novel Wireless Mobility Monitoring and Tracking System. International Journal of Conceptual Structures and Smart Applications, 2016, 4, 55-71.	0.1	3
72	An approach for estimation of integrated reliability indices and maintenance intervals of fiber-optic communication lines. , 2016, , .		3

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73	A comparison of implementations of basic evolutionary algorithm operations in different languages. , 2016, , .		3
74	Benchmarking Languages for Evolutionary Algorithms. Lecture Notes in Computer Science, 2016, , 27-41.	1.3	3
75	Applying Ant Colony optimization for Service Function Chaining in a 5G Network. , 2019, , .		3
76	Addressing High Dimensional Multi-objective Optimization Problems by Coevolutionary Islands with Overlapping Search Spaces. Lecture Notes in Computer Science, 2016, , 107-117.	1.3	3
77	Evolvable Agents in Static and Dynamic Optimization Problems. Lecture Notes in Computer Science, 2008, , 488-497.	1.3	3
78	Cost-Sensitive Metaheuristic Optimization-Based Neural Network with Ensemble Learning for Financial Distress Prediction. Applied Sciences (Switzerland), 2022, 12, 6918.	2.5	3
79	Evolutionary system for prediction and optimization of hardware architecture performance. , 2008, , .		2
80	A search for scalable evolutionary solutions to the game of MasterMind. , 2013, , .		2
81	Comparing Wireless Traffic Tracking with Regular Traffic Control Systems for the Detection of Congestions in Streets. Lecture Notes in Computer Science, 2016, , 42-51.	1.3	2
82	Studying How to Apply Chatbots Technology in Higher-Education: First Results and Future Strategies. Lecture Notes in Computer Science, 2021, , 185-198.	1.3	2
83	Cooperative Co-evolution of Multilayer Perceptrons. Lecture Notes in Computer Science, 2003, , 358-365.	1.3	2
84	How the World Was MADE: Parametrization ofÂEvolved Agent-Based Models for Backstory Generation. Lecture Notes in Computer Science, 2015, , 443-454.	1.3	2
85	Parallelizing the Design of Radial Basis Function Neural Networks by Means of Evolutionary Meta-algorithms. Lecture Notes in Computer Science, 2009, , 383-390.	1.3	2
86	Studying the Cache Size in a Gossip-Based Evolutionary Algorithm. Studies in Computational Intelligence, 2009, , 131-140.	0.9	2
87	Evolvable Agents: A Framework for Peer-to-Peer Evolutionary Algorithms. Studies in Computational Intelligence, 2010, , 43-62.	0.9	2
88	The Influence of Input Data Standardization Methods on the Prediction Accuracy of Genetic Programming Generated Classifiers. , 2018, , .		2
89	Using Evolutionary Algorithms for Server Hardening via the Moving Target Defense Technique. Lecture Notes in Computer Science, 2020, , 670-685.	1.3	2
90	Evolutionary Design of a Brain-Computer Interface. Lecture Notes in Computer Science, 2005, , 669-676.	1.3	1

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91	Improving evolutionary solutions to the game of mastermind using an entropy-based scoring method. , 2013, , .		1
92	Parameter analysis of Monte Carlo simulation model for improvement of its performance with high accuracy of reliability estimations of radiocommunication equipment. , 2016, , .		1
93	The Uncertainty Quandary: A Study in the Context of the Evolutionary Optimization in Games and Other Uncertain Environments. Lecture Notes in Computer Science, 2016, , 40-60.	1.3	1
94	Application Areas of Ephemeral Computing: A Survey. Lecture Notes in Computer Science, 2016, , 153-167.	1.3	1
95	Ranking Programming Languages for Evolutionary Algorithm Operations. Lecture Notes in Computer Science, 2017, , 689-704.	1.3	1
96	Improving the algorithmic efficiency and performance of channel-based evolutionary algorithms. , 2019, , .		1
97	A Methodology for Redesigning Networks by Using Markov Random Fields. Mathematics, 2021, 9, 1389.	2.2	1
98	Online vs. Offline ANOVA Use on Evolutionary Algorithms. Lecture Notes in Computer Science, 2011, , 341-347.	1.3	1
99	Revisiting Population Structure and Particle Swarm Performance. , 2018, , .		1
100	hCHAC-4, an ACO Algorithm for Solving the Four-Criteria Military Path-finding Problem. Studies in Computational Intelligence, 2008, , 73-84.	0.9	1
101	Itâ€™s Time to Stop: A Comparison of Termination Conditions in the Evolution of Game Bots. Lecture Notes in Computer Science, 2015, , 355-368.	1.3	1
102	Ranking the Performance of Compiled and Interpreted Languages in Genetic Algorithms. , 2016, , .		1
103	Scaling in Concurrent Evolutionary Algorithms. Communications in Computer and Information Science, 2019, , 16-27.	0.5	1
104	Population size influence on the energy consumption of genetic programming. Measurement and Control, 2022, 55, 102-115.	1.8	1
105	Exploring the Role of Chatbots and Messaging Applications in Higher Education: A Teacherâ€™s Perspective. Lecture Notes in Computer Science, 2022, , 205-223.	1.3	1
106	Designing a Control System for an Autonomous Robot Using an Evolutionary Algorithm. Lecture Notes in Computer Science, 2005, , 685-692.	1.3	0
107	Influence of parameters on the performance of a MOACO algorithm for solving the bi-criteria military path-finding problem. , 2008, , .		0
108	Statistical analysis of the parameters of the simulated annealing algorithm. , 2010, , .		0

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109	Evolution of XPath Lists for Document Data Selection. , 2010, , 341-350.		0
110	Preface to the special issue on: Emerging Applications of Embedded Systems Research. Journal of Systems Architecture, 2011, 57, 867-868.	4.3	0
111	Migration study on a pareto-based island model for MOACOAs. , 2013, , .		0
112	Alife in the Clouds: A Short Review of Applications of Artificial Life to Cloud Computing and Back. Frontiers in Robotics and AI, 2018, 4, .	3.2	0
113	Comparing Hybrid Systems to Design and Optimize Artificial Neural Networks. Lecture Notes in Computer Science, 2004, , 240-249.	1.3	0
114	Pervasive Evolutionary Algorithms on Mobile Devices. Lecture Notes in Computer Science, 2009, , 163-170.	1.3	0
115	Using UN/CEFACTâ€™S Modelling Methodology (UMM) in e-Health Projects. Lecture Notes in Computer Science, 2009, , 925-932.	1.3	0
116	Studying the Influence of the Objective Balancing Parameter in the Performance of a Multi-Objective Ant Colony Optimization Algorithm. Studies in Computational Intelligence, 2010, , 163-176.	0.9	0
117	Finding Self-organized Criticality in Collaborative Work via Repository Mining. Lecture Notes in Computer Science, 2017, , 483-496.	1.3	0
118	Impact of Protests in the Number of Smart Devices in Streets: A New Approach to Analyze Protesters Behavior. Lecture Notes in Computer Science, 2017, , 75-85.	1.3	0
119	Improving Evolution of XSLT Stylesheets Using Heuristic Operators. Advances in Soft Computing, 0, , 161-170.	0.4	0
120	Evolving Machine Microprograms: Application to the CODE2 Microarchitecture. Advances in Soft Computing, 0, , 461-470.	0.4	0