José Ignacio Hidalgo

List of Publications by Year
in descending order

113 papers	995 citations	623574 14 h-index	580701 25 g-index
123 all docs	123 docs citations	123 times ranked	820 citing authors

#	Article	IF	Citations
1	A hybrid heuristic for the traveling salesman problem. IEEE Transactions on Evolutionary Computation, 2001, 5, 613-622.	7.5	156
2	Matching island topologies to problem structure in parallel evolutionary algorithms. Soft Computing, 2013, 17, 1209-1225.	2.1	71
3	Data Based Prediction of Blood Glucose Concentrations Using Evolutionary Methods. Journal of Medical Systems, 2017, 41, 142.	2.2	63
4	Technical market indicators optimization using evolutionary algorithms. , 2008, , .		49
5	glUCModel: A monitoring and modeling system for chronic diseases applied to diabetes. Journal of Biomedical Informatics, 2014, 48, 183-192.	2.5	46
6	Modeling glycemia in humans by means of Grammatical Evolution. Applied Soft Computing Journal, 2014, 20, 40-53.	4.1	31
7	Is the island model fault tolerant?. , 2007, , .		24
8	Multiobjective optimization of technical market indicators. , 2009, , .		23
9	Adaptive Task Migration Policies for Thermal Control in MPSoCs. , 2010, , .		21
10	Analysis of the unstressed lattice spacing, d0, for the determination of the residual stress in a friction stir welded plate of an age-hardenable aluminum alloy â€" Use of equilibrium conditions and a genetic algorithm. Acta Materialia, 2014, 74, 189-199.	3.8	21
11	Particle swarm grammatical evolution for energy demand estimation. Energy Science and Engineering, 2020, 8, 1068-1079.	1.9	18
12	Combining data augmentation, EDAs and grammatical evolution for blood glucose forecasting. Memetic Computing, 2018, 10, 267-277.	2.7	17
13	Glucose forecasting combining Markov chain based enrichment of data, random grammatical evolution and Bagging. Applied Soft Computing Journal, 2020, 88, 105923.	4.1	17
14	A parallel evolutionary algorithm for technical market indicators optimization. Natural Computing, 2013, 12, 195-207.	1.8	16
15	3D thermal-aware floorplanner using a MOEA approximation. The Integration VLSI Journal, 2013, 46, 10-21.	1.3	16
16	Real-time evolvable pulse shaper for radiation measurements. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 727, 73-83.	0.7	16
17	Optimization methodology of dynamic data structures based on genetic algorithms for multimedia embedded systems. Journal of Systems and Software, 2009, 82, 590-602.	3.3	14
18	Bivariate empirical and n-variate Archimedean copulas in estimation of distribution algorithms. , 2010, , .		14

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19	A methodology to automatically optimize dynamic memory managers applying grammatical evolution. Journal of Systems and Software, 2014, 91, 109-123.	3.3	14
20	Ensemble Models of Cutting-Edge Deep Neural Networks for Blood Glucose Prediction in Patients with Diabetes. Sensors, 2021, 21, 7090.	2.1	14
21	Using a GPU-CPU architecture to speed up a GA-based real-time system for trading the stock market. Soft Computing, 2012, 16, 203-215.	2.1	13
22	Thermal-aware floorplanner for 3D IC, including TSVs, liquid microchannels and thermal domains optimization. Applied Soft Computing Journal, 2015, 34, 164-177.	4.1	13
23	Automatic generation of models for energy demand estimation using Grammatical Evolution. Energy, 2018, 164, 183-193.	4.5	13
24	Optimization of dynamic data structures in multimedia embedded systems using evolutionary computation. , 2007, , .		11
25	Calibration of an agent-based simulation model to the data of women infected by Human Papillomavirus with uncertainty. Applied Soft Computing Journal, 2019, 80, 546-556.	4.1	10
26	Using evolutionary algorithms to determine the residual stress profile across welds of age-hardenable aluminum alloys. Applied Soft Computing Journal, 2016, 40, 429-438.	4.1	9
27	Diagnosing hospital bacteraemia in the framework of predictive, preventive and personalised medicine using electronic health records and machine learning classifiers. EPMA Journal, 2021, 12, 365-381.	3.3	9
28	Thermal-aware floorplanning exploration for 3D multi-core architectures. , 2010, , .		8
29	Adaptive Task Migration Policies for Thermal Control in MPSoCs. Lecture Notes in Electrical Engineering, 2011, , 83-115.	0.3	8
30	Forecasting Call Centre Arrivals. Journal of Forecasting, 2013, 32, 628-638.	1.6	8
31	Predicting Glycemia in Diabetic Patients By Evolutionary Computation and Continuous Glucose Monitoring. , 2016, , .		8
32	A meta-grammatical evolutionary process for portfolio selection and trading. Genetic Programming and Evolvable Machines, 2017, 18, 411-431.	1.5	8
33	Data augmentation and evolutionary algorithms to improve the prediction of blood glucose levels in scarcity of training data. , 2017, , .		8
34	Boolean networks decomposition using genetic algorithms. Microelectronics Journal, 1997, 28, 551-560.	1.1	6
35	Optimization of dynamic memory managers for embedded systems using grammatical evolution. , 2009, , .		6
36	A genetic algorithm approach to customizing a glucose model based on usual therapeutic parameters. Progress in Artificial Intelligence, 2017, 6, 255-261.	1.5	6

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37	Swarm hybrid optimization for a piecewise model fitting applied to a glucose model. Journal of Systems and Information Technology, 2018, 20, 404-416.	0.8	6
38	Structured grammatical evolution for glucose prediction in diabetic patients. , 2019, , .		6
39	A Parallel Hybrid Heuristic for the TSP. Lecture Notes in Computer Science, 2001, , 193-202.	1.0	6
40	Blood glucose prediction using multi-objective grammatical evolution: analysis of the "agnostic"and "what-if"scenarios. Genetic Programming and Evolvable Machines, 2022, 23, 161-192.	1.5	6
41	A parallel evolutionary algorithm to optimize dynamic data types in embedded systems. Soft Computing, 2008, 12, 1157-1167.	2.1	5
42	A technique for the optimization of the parameters of technical indicators with Multi-Objective Evolutionary Algorithms. , 2012, , .		5
43	Blind optimisation problem instance classification via enhanced universal similarity metric. Memetic Computing, 2014, 6, 263.	2.7	5
44	Real time evolvable hardware for optimal reconfiguration of cusp-like pulse shapers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 763, 124-131.	0.7	5
45	Forecasting glucose levels in patients with diabetes mellitus using semantic grammatical evolution and symbolic aggregate approximation. , 2017, , .		5
46	Glucose forecasting using genetic programming and latent glucose variability features. Applied Soft Computing Journal, 2021, 110, 107609.	4.1	5
47	A CPU-GPU Parallel Ant Colony Optimization Solver for the Vehicle Routing Problem. Lecture Notes in Computer Science, 2018, , 653-667.	1.0	5
48	A method for multiple-level logic synthesis based on the simulated annealing algorithm. Microelectronics Journal, 1997, 28, 143-150.	1.1	4
49	Solving discrete deceptive problems with EMMRS. , 2008, , .		4
50	Analysis of multi-objective evolutionary algorithms to optimize dynamic data types in embedded systems. , 2008, , .		4
51	Power Profiling-Guided Floorplanner for Thermal Optimization in 3D Multiprocessor Architectures. Lecture Notes in Computer Science, 2011, , 11-21.	1.0	4
52	Simulation of high-performance memory allocators. Microprocessors and Microsystems, 2011, 35, 755-765.	1.8	4
53	Multi-objective optimization of dynamic memory managers using grammatical evolution. , 2011, , .		4
54	A GA Combining Technical and Fundamental Analysis for Trading the Stock Market. Lecture Notes in Computer Science, 2012, , 174-183.	1.0	4

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55	A review of bioinspired computerâ€aided design tools for hardware design. Concurrency Computation Practice and Experience, 2013, 25, 1015-1036.	1.4	4
56	Comparative study of meta-heuristic 3D floorplanning algorithms. Neurocomputing, 2015, 150, 67-81.	3.5	4
57	A hybrid automated trading system based on multi-objective grammatical evolution. Journal of Intelligent and Fuzzy Systems, 2017, 32, 2461-2475.	0.8	4
58	Calibrating a large network model describing the transmission dynamics of the human papillomavirus using a particle swarm optimization algorithm in a distributed computing environment. International Journal of High Performance Computing Applications, 2018, 32, 721-728.	2.4	4
59	Can clustering improve glucose forecasting with genetic programming models?. , 2019, , .		4
60	Noise spectral analysis and error estimation of continuous glucose monitors under real-life conditions of diabetes patients. Biomedical Signal Processing and Control, 2020, 61, 101934.	3.5	4
61	Profiled glucose forecasting using genetic programming and clustering. , 2020, , .		4
62	iTest: online assessment and selfâ€assessment in mathematics. Interactive Technology and Smart Education, 2010, 7, 154-167.	3.8	3
63	Improving reliability of embedded systems through dynamic memory manager optimization using grammatical evolution. , 2010, , .		3
64	Compilable Phenotypes: Speeding-Up the Evaluation of Glucose Models in Grammatical Evolution. Lecture Notes in Computer Science, 2016, , 118-133.	1.0	3
65	Recovery of Particle Detector Degeneration Based on the Pulse Height Spectrum of an Adaptive Trapezoidal Pulse Shaper. IEEE Transactions on Nuclear Science, 2017, 64, 1095-1100.	1.2	3
66	A Memetic Algorithm for Workforce Distribution in Dynamic Multi-Skill Call Centres. Lecture Notes in Computer Science, 2010, , 178-189.	1.0	3
67	Identification of Models for Glucose Blood Values in Diabetics by Grammatical Evolution. , 2018, , 367-393.		3
68	Empirical characterization of the latency of long asynchronous pipelines with data-dependent module delays. , 2004, , .		2
69	A methodology for reconfigurable hardware design based upon evolutionary computation. Microprocessors and Microsystems, 2004, 28, 363-371.	1.8	2
70	Reducing power of functional units in high-performance processors by checking instruction codes and resizing adders. IET Computers and Digital Techniques, 2007, 1, 113.	0.9	2
71	Characterizing asynchronous variable latencies through probability distribution functions. Microprocessors and Microsystems, 2009, 33, 483-497.	1.8	2
72	Adaptive Cache Memories for SMT Processors. , 2010, , .		2

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73	Simulation of High-Performance Memory Allocators. , 2010, , .		2
74	A combination of evolutionary algorithm and mathematical programming for the 3d thermal-aware floorplanning problem. , 2011, , .		2
75	On a generalized name entity recognizer based on Hidden Markov Models. , 2011, , .		2
76	Fast and scalable temperature-driven floorplan design in 3D MPSoCs. , 2012, , .		2
77	Special issue on parallel architectures and bioinspired algorithm: guest editors message. Concurrency Computation Practice and Experience, 2013, 25, 1013-1014.	1.4	2
78	Clarke and parkes error grid analysis of diabetic glucose models obtained with evolutionary computation. , 2014, , .		2
79	Parallel Bioinspired Algorithms on the Grid and Cloud. Journal of Grid Computing, 2015, 13, 305-308.	2.5	2
80	Data-Based Identification of Prediction Models for Glucose. , 2015, , .		2
81	Forecasting in a Multi-skill Call Centre. Lecture Notes in Computer Science, 2010, , 582-589.	1.0	2
82	Comparing the Performance of a 64-bit Fully-Asynchronous Superscalar Processor versus its Synchronous Counterpart. , 2006, , .		1
83	A Power-Aware Technique for Functional Units in High-Performance Processors. , 2006, , .		1
84	A phase adaptive cache hierarchy for SMT processors. Microprocessors and Microsystems, 2011, 35, 683-694.	1.8	1
85	Optimization of technical indicators in real time with multiobjective evolutionary algorithms. , 2012, , .		1
86	Solving GA-hard problems with EMMRS and GPGPUs. , 2014, , .		1
87	Modeling and predicting the Spanish Bachillerato academic results over the next few years using a random network model. Physica A: Statistical Mechanics and Its Applications, 2016, 442, 36-49.	1.2	1
88	Exploring the influence of industries and randomness in stock prices. Empirical Economics, 2018, 55, 713-729.	1.5	1
89	Multilayer analysis of population diversity in grammatical evolution for symbolic regression. Soft Computing, 2020, 24, 11283-11295.	2.1	1
90	Identificación de patrones de glucemia en pacientes con diabetes tipo 1 mediante monitorización continua de glucosa y técnicas de clusterización. Endocrinologia, Diabetes Y Nutrición, 2021, 68, 170-174.	0.1	1

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91	Parallel and Distributed Optimization of Dynamic Data Structures for Multimedia Embedded Systems. Studies in Computational Intelligence, 2010, , 263-290.	0.7	1
92	Evolving energy demand estimation models over macroeconomic indicators. , 2020, , .		1
93	Short and Medium Term Blood Glucose Prediction Using Multi-objective Grammatical Evolution. Lecture Notes in Computer Science, 2020, , 494-509.	1.0	1
94	Modelling Asynchronous Systems using Probability Distribution Functions. , 2008, , .		0
95	Design Flow of Dynamically-Allocated Data Types in Embedded Applications Based on Elitist Evolutionary Computation Optimization. , 2008, , .		0
96	Mixed heuristic and mathematical programming using reference points for dynamic data types optimization in multimedia embedded systems. , 2009, , .		0
97	Let them be the ones to invent?. Spanish pioneers of computers and telecommunications. , 2010, , .		0
98	(1+2)-evolution strategy for fitting a straight shuffle of min to a dataset. , 2011, , .		0
99	Power profiling-guided floorplanner for 3D multi-processor systems-on-chip. IET Circuits, Devices and Systems, 2012, 6, 322.	0.9	0
100	An evolutionary methodology for automatic design of finite state machines. , 2013, , .		0
101	Special issue on â€œEvolutionary Algorithms on Parallel Architectures and Distributed Infrastructuresâ€. International Journal of High Performance Computing Applications, 2018, 32, 674-675.	2.4	0
102	Determination of microscopic residual stresses using evolutionary algorithms. , 2019, , .		0
103	Determination of microscopic residual stresses using diffraction methods, EBSD maps, and evolutionary algorithms. , 2019, , .		0
104	A computational technique to predict the level of glucose of a diabetic patient with uncertainty in the short term. Computational and Mathematical Methods, 2020, 2, e1064.	0.3	0
105	Optimal Runtime Algorithm to Improve Fault Tolerance of Bus-Based Reconfigurable Designs. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 914-925.	2.1	0
106	Probabilistic Fitting of Glucose Models with Real-Coded Genetic Algorithms. , 2021, , .		0
107	Blood Glucose Prediction Using a Two Phase TSK Fuzzy Rule Based System. , 2021, , .		0
108	Estimation of Grain-Level Residual Stresses in a Quenched Cylindrical Sample of Aluminum Alloy AA5083 Using Genetic Programming. Lecture Notes in Computer Science, 2021, , 421-436.	1.0	0

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109	Power Reduction of Superscalar Processor Functional Units by Resizing Adder-Width. Lecture Notes in Computer Science, 2005, , 40-48.	1.0	0
110	A Technique to Reduce Static and Dynamic Power of Functional Units in High-Performance Processors. Lecture Notes in Computer Science, 2006, , 514-523.	1.0	0
111	Migration and Replacement Policies for Preserving Diversity in Dynamic Environments. Lecture Notes in Computer Science, 2012, , 456-465.	1.0	0
112	Embedded Grammars for Grammatical Evolution on GPGPU. Lecture Notes in Computer Science, 2017, , 789-805.	1.0	0
113	Evaluating the Influence of Mood and Stress on Glycemic Variability in People with T1DM Using Glucose Monitoring Sensors and Pools. International Journal of Diabetology, 2022, 3, 268-275.	0.9	0