Juan Antonio Gmez Pulido

List of Publications by Year in Descending Order

159 papers	1,052 citations	16 h-index	25 g-index
184 ext. papers	1,280 ext. citations	2.3 avg, IF	4.52 L-index

#	Paper	IF	Citations
159	Fast Montgomery Modular Multiplier using FPGAs. *IEEE Embedded Systems Letters*, **2021**, 1-1	1	1
158	Predicting the Appearance of Hypotension During Hemodialysis Sessions Using Machine Learning Classifiers. *International Journal of Environmental Research and Public Health*, **2021**, 18,	4.6	1
157	Analyzing and Predicting Students Performance by Means of Machine Learning: A Review. *Applied Sciences (Switzerland)*, **2020**, 10, 1042	2.6	46
156	Recommender system implementations for embedded collaborative filtering applications. *Microprocessors and Microsystems*, **2020**, 73, 102997	2.4	7
155	Performance of Two Approaches of Embedded Recommender Systems. *Electronics (Switzerland)*, **2020**, 9, 546	2.6	3
154	Predicting Infectious Diseases by Using Machine Learning Classifiers. *Lecture Notes in Computer Science*, **2020**, 590-599	0.9	
153	Comparison Between Stochastic Gradient Descent and VLE Metaheuristic for Optimizing Matrix Factorization. *Communications in Computer and Information Science*, **2020**, 153-164	0.3	
152	Exploring Further Advantages in an Alternative Formulation for the Set Covering Problem. *Mathematical Problems in Engineering*, **2020**, 2020, 1-24	1.1	4
151	Machine Learning Applied to Diagnosis of Human Diseases: A Systematic Review. *Applied Sciences (Switzerland)*, **2020**, 10, 5135	2.6	16
150	Optimizing Latent Factors and Collaborative Filtering for Students Performance Prediction. *Applied Sciences (Switzerland)*, **2020**, 10, 5601	2.6	5
149	Data Science and AI-Based Optimization in Scientific Programming. *Scientific Programming*, **2019**, 2019, 1-3	1.4	1
148	Solving the Set Covering Problem Using Spotted Hyena Optimizer and Autonomous Search. *Lecture Notes in Computer Science*, **2019**, 854-861	0.9	1
147	Toward a Robust Multi-Objective Metaheuristic for Solving the Relay Node Placement Problem in Wireless Sensor Networks. *Sensors*, **2019**, 19,	3.8	7
146	Selecting latent factors when predicting student performance in online campus by using recommender systems **2018**,		1
145	Applying an Electromagnetism-Like Algorithm for Solving the Manufacturing Cell Design Problem **2018**, 1212-1231		
144	Time Series Optimization for Energy Prediction in Wi-Fi Infrastructures. *Contributions To Statistics*, **2018**, 245-257	0.1	
143	Improving the Accuracy of Prediction Applications by Efficient Tuning of Gradient Descent Using Genetic Algorithms. *Lecture Notes in Computer Science*, **2018**, 210-221	0.9	

142	Novel and Classic Metaheuristics for Tunning a Recommender System for Predicting Student Performance in Online Campus. *Lecture Notes in Computer Science*, **2018**, 125-133	0.9	2
141	A gravitational search algorithm for solving the relay node placement problem in wireless sensor networks. *International Journal of Communication Systems*, **2017**, 30, e2957	1.7	3
140	Context-aware prediction of access points demand in Wi-Fi networks. *Computer Networks*, **2017**, 117, 52-61	5.4	1
139	Analyzing the effects of binarization techniques when solving the set covering problem through swarm optimization. *Expert Systems With Applications*, **2017**, 70, 67-82	7.8	38
138	Energy Prediction of Access Points in Wi-Fi Networks According to Users Behaviour. *Applied Sciences (Switzerland)*, **2017**, 7, 825	2.6	
137	Solving the Location Area Problem by Using Differential Evolution. *Journal of Communications Software and Systems*, **2017**, 4, 131	0.8	2
136	Applying an Electromagnetism-Like Algorithm for Solving the Manufacturing Cell Design Problem. *Advances in Computational Intelligence and Robotics Book Series*, **2017**, 37-61	0.4	
135	Studying the multiobjective variable neighbourhood search algorithm when solving the relay node placement problem in Wireless Sensor Networks. *Soft Computing*, **2016**, 20, 67-86	3.5	9
134	Fine-grained parallelization of fitness functions in bioinformatics optimization problems: gene selection for cancer classification and biclustering of gene expression data. *BMC Bioinformatics*, **2016**, 17, 330	3.6	5
133	Embedded intelligence for fast QoS-based vertical handoff in heterogeneous wireless access networks. *Pervasive and Mobile Computing*, **2015**, 19, 141-155	3.5	21
132	Reliability and efficiency in wireless sensor networks: heuristic approaches. *Journal of Heuristics*, **2015**, 21, 141-143	1.9	2
131	Assuming multiobjective metaheuristics to solve a three-objective optimisation problem for Relay Node deployment in Wireless Sensor Networks. *Applied Soft Computing Journal*, **2015**, 30, 675-687	7.5	36
130	Complexity Analysis of HEVC Decoding for Multi-core Platforms. *Lecture Notes in Computer Science*, **2015**, 502-509	0.9	
129	Deconvolution of X-ray Diffraction Profiles Using Genetic Algorithms and Differential Evolution. *Lecture Notes in Computer Science*, **2015**, 503-514	0.9	1
128	Planning the Deployment of Indoor Wireless Sensor Networks Through Multiobjective Evolutionary Techniques. *Lecture Notes in Computer Science*, **2015**, 128-139	0.9	
127	On the Use of Perfect Sequences and Genetic Algorithms for Estimating the Indoor Location of Wireless Sensors. *International Journal of Distributed Sensor Networks*, **2015**, 11, 720574	1.7	0
126	Hardware security platform for multicast communications. *Journal of Systems Architecture*, **2014**, 60, 11-21	5.5	4
125	A Trajectory-Based Heuristic to Solve a Three-Objective Optimization Problem for Wireless Sensor Network Deployment. *Lecture Notes in Computer Science*, **2014**, 27-38	0.9	2

124	. *IEEE Transactions on Evolutionary Computation*, **2013**, 17, 457-473	15.6	21
123	A new Multiobjective Artificial Bee Colony algorithm to solve a real-world frequency assignment problem. *Neural Computing and Applications*, **2013**, 22, 1447-1459	4.8	21
122	A multiobjective approach based on artificial bee colony for the static routing and wavelength assignment problem. *Soft Computing*, **2013**, 17, 199-211	3.5	13
121	Comparing multiobjective swarm intelligence metaheuristics for DNA motif discovery. *Engineering Applications of Artificial Intelligence*, **2013**, 26, 314-326	7.2	10
120	Swarm optimisation algorithms applied to large balanced communication networks. *Journal of Network and Computer Applications*, **2013**, 36, 504-522	7.9	6
119	A parallel evolutionary approach to solve the relay node placement problem in wireless sensor networks **2013**,		11
118	LOW POWER CONSUMPTION SECURITY PLATFORM FOR INDUSTRIAL COMMUNICATIONS USING AN MPSOC. *Journal of Circuits, Systems and Computers*, **2013**, 22, 1350029	0.9	2
117	Solving the Location Areas Scheme in Realistic Networks by Using a Multi-objective Algorithm. *Lecture Notes in Computer Science*, **2013**, 72-81	0.9	2
116	Simulated Annealing for Real-Time Vertical-Handoff in Wireless Networks. *Lecture Notes in Computer Science*, **2013**, 198-209	0.9	4
115	A Trajectory Algorithm to Solve the Relay Node Placement Problem in Wireless Sensor Networks. *Lecture Notes in Computer Science*, **2013**, 145-156	0.9	1
114	High-Speed Reconfigurable Parallel System to Design Good Error Correcting Codes in Communications. *Journal of Signal Processing Systems*, **2012**, 66, 147-152	1.4	3
113	Multiobjective Teaching-Learning-Based Optimization (MO-TLBO) for motif finding **2012**,		8
112	Solving the Location Areas problem with Strength Pareto Evolutionary Algorithm **2012**,		5
111	**2012**,		2
110	Multi-objective evolutionary algorithms for energy-efficiency in heterogeneous wireless sensor networks **2012**,		1
109	Comparing Different Operators and Models to Improve a Multiobjective Artificial Bee Colony Algorithm for Inferring Phylogenies. *Lecture Notes in Computer Science*, **2012**, 187-200	0.9	2
108	Predicting DNA Motifs by Using Evolutionary Multiobjective Optimization. *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, **2012**, 42, 913-925		16
107	Solving large-scale SONET network design problems using bee-inspired algorithms. *Optical Switching and Networking*, **2012**, 9, 97-117	1.6	3

106	MO-ABC/DE - Multiobjective Artificial Bee Colony with Differential Evolution for unconstrained multiobjective optimization **2012**,		4
105	A Comparative Study on Multiobjective Swarm Intelligence for the Routing and Wavelength Assignment Problem. *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, **2012**, 42, 1644-1655		14
104	Relay Node Positioning in Wireless Sensor Networks by Means of Evolutionary Techniques. *Lecture Notes in Computer Science*, **2012**, 18-25	0.9	3
103	Solving the reporting cells problem by using a parallel team of evolutionary algorithms. *Logic Journal of the IGPL*, **2012**, 20, 722-731	1	8
102	Fast decision algorithms in low-power embedded processors for quality-of-service based connectivity of mobile sensors in heterogeneous wireless sensor networks. *Sensors*, **2012**, 12, 1612-24	3.8	4
101	Evolutionary Swarm based algorithms to minimise the link cost in Communication Networks. *International Journal of Computational Intelligence Systems*, **2012**, 5, 745-761	3.4	
100	Inferring Phylogenetic Trees Using a Multiobjective Artificial Bee Colony Algorithm. *Lecture Notes in Computer Science*, **2012**, 144-155	0.9	2
99	Solving SONET Problems Using a Hybrid Scatter Search Algorithm. *Studies in Computational Intelligence*, **2012**, 81-97	0.8	2
98	Comparing Multiobjective Artificial Bee Colony Adaptations for Discovering DNA Motifs. *Lecture Notes in Computer Science*, **2012**, 110-121	0.9	3
97	A Multi-objective Approach to Solve the Location Areas Problem. *Lecture Notes in Computer Science* , **2012**, 72-83	0.9	1
96	Using a Multiobjective OpenMP+MPI DE for the Static RWA Problem. *Lecture Notes in Computer Science*, **2012**, 224-231	0.9	
95	Discovering DNA Motifs with a Parallel Shared Memory Differential Evolution. *Lecture Notes in Computer Science*, **2012**, 232-239	0.9	
94	Artificial Bee Colony Algorithm applied to WiMAX network planning problem **2011**,		8
93	Solving ring loading problems using bio-inspired algorithms. *Journal of Network and Computer Applications*, **2011**, 34, 668-685	7.9	8
92	Using a hybrid honey bees mating optimisation algorithm for solving SONET/SDH design problems **2011**,		1
91	Accelerating floating-point fitness functions in evolutionary algorithms: a FPGA-CPU-GPU performance comparison. *Genetic Programming and Evolvable Machines*, **2011**, 12, 403-427	2	13
90	Optimization algorithms for large-scale real-world instances of the frequency assignment problem. *Soft Computing*, **2011**, 15, 975-990	3.5	25
89	Automatic texture characterization using Gabor filters and neurofuzzy computing. *International Journal of Advanced Manufacturing Technology*, **2011**, 52, 15-32	3.2	5

88	A multi-objective network design for real traffic models of the internet by means of a parallel framework for solving NP-hard problems **2011**,		3
87	COMPARATIVE ANALYSIS OF A HYBRID DE ALGORITHM WITH THE VNS ALGORITHM AND ITS VARIATION SVNS TO SOLVE A REAL-WORLD FREQUENCY ASSIGNMENT PROBLEM. *Applied Artificial Intelligence*, **2011**, 25, 217-234	2.3	2
86	Differential evolution for solving the mobile location management. *Applied Soft Computing Journal*, **2011**, 11, 410-427	7.5	29
85	A Multiobjective Gravitational Search Algorithm Applied to the Static Routing and Wavelength Assignment Problem. *Lecture Notes in Computer Science*, **2011**, 41-50	0.9	5
84	Optimizing a realistic large-scale frequency assignment problem using a new parallel evolutionary approach. *Engineering Optimization*, **2011**, 43, 813-842	2	4
83	Applying a Multiobjective Gravitational Search Algorithm (MO-GSA) to Discover Motifs. *Lecture Notes in Computer Science*, **2011**, 372-379	0.9	9
82	Processor for Measuring Radio Network Design Quality. *Wireless Engineering and Technology*, **2011**, 02, 204-211	0.8	2
81	Ant Colonies to Assign Terminals to Concentrators. *Studies in Computational Intelligence*, **2011**, 165-178	0.8	1
80	Finding Motifs in DNA Sequences Applying a Multiobjective Artificial Bee Colony (MOABC) Algorithm. *Lecture Notes in Computer Science*, **2011**, 89-100	0.9	12
79	Tackling the Static RWA Problem by Using a Multiobjective Artificial Bee Colony Algorithm. *Lecture Notes in Computer Science*, **2011**, 364-371	0.9	4
78	A Parallel Niched Pareto Evolutionary Algorithm for Multiple Sequence Alignment. *Advances in Intelligent and Soft Computing*, **2011**, 157-165		1
77	Parametric Approximation of Functions Using Genetic Algorithms: An Example with a Logistic Curve. *Lecture Notes in Computer Science*, **2011**, 313-320	0.9	0
76	A new methodology to implement the AES algorithm using partial and dynamic reconfiguration. *The Integration VLSI Journal*, **2010**, 43, 72-80	1.4	58
75	A Hybrid Scatter Search algorithm to assign terminals to concentrators **2010**,		2
74	An evolutionary approach for performing multiple sequence alignment **2010**,		4
73	Parallel AlineaGA: An island parallel evolutionary algorithm for multiple sequence alignment **2010**,		2
72	Solving the Routing and Wavelength Assignment Problem in WDM Networks by Using a Multiobjective Variable Neighborhood Search Algorithm. *Advances in Intelligent and Soft Computing* , **2010**, 47-54		7
71	Swarm Intelligence, Scatter Search and Genetic Algorithm to Tackle a Realistic Frequency Assignment Problem. *Advances in Intelligent and Soft Computing*, **2010**, 441-448		2

70	Solving the motif discovery problem by using Differential Evolution with Pareto Tournaments **2010**,		9
69	**2010**,		12
68	AlineaGA genetic algorithm with local search optimization for multiple sequence alignment. *Applied Intelligence*, **2010**, 32, 164-172	4.9	25
67	Improving the industrial classification of cork stoppers by using image processing and Neuro-Fuzzy computing. *Journal of Intelligent Manufacturing*, **2010**, 21, 745-760	6.7	9
66	Detecting skin in face recognition systems: A colour spaces study **2010**, 20, 806-823		115
65	Application of Differential Evolution to a Multi-Objective Real-World Frequency Assignment Problem. *Adaptation, Learning, and Optimization*, **2010**, 155-176	0.7	2
64	A Parallel Cooperative Evolutionary Strategy for Solving the Reporting Cells Problem. *Advances in Intelligent and Soft Computing*, **2010**, 71-78		1
63	A Multiobjective Variable Neighborhood Search for Solving the Motif Discovery Problem. *Advances in Intelligent and Soft Computing*, **2010**, 39-46		5
62	Solving the Reporting Cells Problem Using a Scatter Search Based Algorithm. *Lecture Notes in Computer Science*, **2010**, 534-543	0.9	6
61	Using a Parallel Team of Multiobjective Evolutionary Algorithms to Solve the Motif Discovery Problem. *Advances in Intelligent and Soft Computing*, **2010**, 569-576		2
60	Improving Optical WDM Networks by Using a Multi-core Version of Differential Evolution with Pareto Tournaments. *Advances in Intelligent and Soft Computing*, **2010**, 629-636		2
59	A Scatter Search Based Approach to Solve the Reporting Cells Problem. *Advances in Intelligent and Soft Computing*, **2010**, 145-152		
58	Soft Computing, Genetic Algorithms and Engineering Problems: An Example of Application to Minimize a Cantilever Wall Cost. *Lecture Notes in Computer Science*, **2010**, 566-575	0.9	
57	Solving a Realistic Location Area Problem Using SUMATRA Networks with the Scatter Search Algorithm **2009**,		4
56	IDEA and AES, two cryptographic algorithms implemented using partial and dynamic reconfiguration. *Microelectronics Journal*, **2009**, 40, 1032-1040	1.8	8
55	Benchmarking a Wide Spectrum of Metaheuristic Techniques for the Radio Network Design Problem. *IEEE Transactions on Evolutionary Computation*, **2009**, 13, 1133-1150	15.6	23
54	Perceptually Relevant Pattern Recognition Applied to Cork Quality Detection. *Lecture Notes in Computer Science*, **2009**, 927-936	0.9	
53	Multiobjective frequency assignment problem using the MO-VNS and MO-SVNS algorithms **2009**,		7

52	Optimizing Multiple Sequence Alignment by Improving Mutation Operators of a Genetic Algorithm **2009**,		3
51	GRASP and grid computing to solve the location area problem **2009**,		1
50	The Radio Network Design Optimization Problem. *Studies in Computational Intelligence*, **2009**, 219-260	0.8	2
49	Solving the weighted ring edge-loading problem without demand splitting using a Hybrid Differential Evolution Algorithm **2009**,		2
48	Performance Analysis of Reconfigurable Clusters to Design Good Error Correcting Codes in Communications. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2009**, 42, 125-130		1
47	Solving the Terminal Assignment Problem Using a Local Search Genetic Algorithm. *Advances in Soft Computing*, **2009**, 225-234		2
46	Solving the Ring Loading Problem Using Genetic Algorithms with Intelligent Multiple Operators. *Advances in Soft Computing*, **2009**, 235-244		2
45	Solving a Realistic FAP Using GRASP and Grid Computing. *Lecture Notes in Computer Science*, **2009**, 79-90	0.9	3
44	Parameter Analysis for Differential Evolution with Pareto Tournaments in a Multiobjective Frequency Assignment Problem. *Lecture Notes in Computer Science*, **2009**, 799-806	0.9	3
43	Solving a Real?World FAP Using the Scatter Search Metaheuristic. *Lecture Notes in Computer Science*, **2009**, 785-792	0.9	1
42	Applying Scatter Search to the Location Areas Problem. *Lecture Notes in Computer Science*, **2009**, 791-798	0.9	4
41	SS vs PBIL to Solve a Real-World Frequency Assignment Problem in GSM Networks. *Lecture Notes in Computer Science*, **2008**, 21-30	0.9	10
40	Applying Differential Evolution to the Reporting Cells problem. *Proceedings of the International Multiconference on Computer Science and Information Technology*, **2008**,		9
39	**2008**,		5
38	Population-Based Incremental Learning to Solve the FAP Problem **2008**,		2
37	Studying Different Variants of PBIL to Solve a Real-World FAP Problem in GSM Networks **2008**,		2
36	Applying Differential Evolution to a Realistic Location Area Problem Using SUMATRA **2008**,		5
35	Low decoding complexity video streams for portable video players **2008**,		1

34	Metaheuristics for solving a real-world frequency assignment problem in GSM networks **2008**,		20
33	Finding deadlocks in large concurrent java programs using genetic algorithms **2008**,		16
32	Custom Hardware Processor to Compute a Figure of Merit for the Fit of X-Ray Diffraction Peaks. *X-Ray Optics and Instrumentation*, **2008**, 2008, 1-7		2
31	A hybrid Differential Evolution algorithm to solve a real-world Frequency Assignment problem. *Proceedings of the International Multiconference on Computer Science and Information Technology*, **2008**,		11
30	Analysis of Parameter Settings for Differential Evolution Algorithm to Solve a Real-World Frequency Assignment Problem in GSM Networks **2008**,		5
29	Peaks Detection in X-Ray Diffraction Profiles Using Grid Computing. *Lecture Notes in Computer Science*, **2008**, 793-801	0.9	
28	Finding The Best Classifier for Evaluating Cork Quality In An Industrial Environment **2008**, 183-194		
27	3D Textural Mapping and Soft-Computing Applied to Cork Quality Inspection. *Lecture Notes in Computer Science*, **2008**, 743-752	0.9	
26	A Genetic Algorithm with Multiple Operators for Solving the Terminal Assignment Problem. *Studies in Computational Intelligence*, **2008**, 279-288	0.8	2
25	AlineaGA: A Genetic Algorithm for Multiple Sequence Alignment. *Studies in Computational Intelligence*, **2008**, 309-318	0.8	6
24	Comparing Hybrid Versions of SS and DE to Solve a Realistic FAP Problem. *Lecture Notes in Computer Science*, **2008**, 257-264	0.9	3
23	Fast Wide Area Network Design Optimisation Using Differential Evolution **2007**,		3
22	Image Processing and Neuro-Fuzzy Computing for Cork Quality Classification **2007**,		1
21	Reconfigurable computing system for image processing via the internet. *Microprocessors and Microsystems*, **2007**, 31, 498-515	2.4	4
20	Solving the frequency assignment problem with differential evolution **2007**,		1
19	Game Implementation: An Interesting Strategy to Teach Genetic Algorithms **2007**, 205-223		0
18	Advanced Texture Analysis in Cork Quality Detection. *Industrial Informatics, 2009 INDIN 2009 7th IEEE International Conference on*, **2007**,		3
17	Evaluation of Different Metaheuristics Solving the RND Problem **2007**, 101-110		8

16	Computers and Education **2007**,		4
15	A differential evolution algorithm for location area problem in mobile networks **2007**,		2
14	Hardware Modelling of Cellular Automata: The Game of Life Case **2007**, 589-595		0
13	Volunteer Computing, an Interesting Option for Grid Computing: Extremadura as Case Study. *Lecture Notes in Computer Science*, **2007**, 29-30	0.9	
12	Radio Network Design Using Population-Based Incremental Learning and Grid Computing with BOINC **2007**, 91-100		5
11	Using Omnidirectional BTS and Different Evolutionary Approaches to Solve the RND Problem **2007**, 853-860		4
10	Tele-Education of the Instruction Dynamic Scheduling Using a Web Simulator **2007**, 89-98		
9	A Differential Evolution Based Algorithm to Optimize the Radio Network Design Problem **2006**,		7
8	Reconfigurable Computing and Parallelism for Implementing and Accelerating Evolutionary Algorithms. *Studies in Computational Intelligence*, **2006**, 71-93	0.8	1
7	Parametric identification of solar series based on an adaptive parallel methodology. *Journal of Astrophysics and Astronomy*, **2005**, 26, 103-115	1.4	1
6	Control of Bloat in Genetic Programming by Means of the Island Model. *Lecture Notes in Computer Science*, **2004**, 263-271	0.9	5
5	Guest editors' introduction: Special issue on FPGAs: applications and designs. *Microprocessors and Microsystems*, **2004**, 28, 193-195	2.4	14
4	An educational tool for testing caches on symmetric multiprocessors. *Microprocessors and Microsystems*, **2001**, 25, 187-194	2.4	6
3	Searching optimal ROBDDs using methodologies based on evolutionary algorithms. *IET Circuits, Devices and Systems*, **1999**, 146, 164		1
2	Doing object oriented simulations. *ACM SIGSIM Simulation Digest*, **1991**, 21, 177-184		0
1	Genetic algorithms using parallelism and FPGAs: the TSP as case study		12