Bernabe Dorronsoro

List of Publications by Citations

119 papers	**2,004** citations	**20** h-index	**41** g-index
149 ext. papers	**2,344** ext. citations	**2.5** avg, IF	**5.1** L-index

#	Paper	IF	Citations
119	. *IEEE Transactions on Evolutionary Computation*, **2005**, 9, 126-142	15.6	294
118	AbYSS: Adapting Scatter Search to Multiobjective Optimization. *IEEE Transactions on Evolutionary Computation*, **2008**, 12, 439-457	15.6	230
117	MOCell: A cellular genetic algorithm for multiobjective optimization. *International Journal of Intelligent Systems*, **2009**, 24, 726-746	8.4	176
116	Improving Classical and Decentralized Differential Evolution With New Mutation Operator and Population Topologies. *IEEE Transactions on Evolutionary Computation*, **2011**, 15, 67-98	15.6	125
115	A cellular multi-objective genetic algorithm for optimal broadcasting strategy in metropolitan MANETs. *Computer Communications*, **2007**, 30, 685-697	5.1	64
114	Energy-Aware Scheduling on Multicore Heterogeneous Grid Computing Systems. *Journal of Grid Computing*, **2013**, 11, 653-680	4.2	60
113	Computing nine new best-so-far solutions for Capacitated VRP with a cellular Genetic Algorithm. *Information Processing Letters*, **2006**, 98, 225-230	0.8	57
112	A novel multi-objective evolutionary algorithm with fuzzy logic based adaptive selection of operators: FAME. *Information Sciences*, **2019**, 471, 233-251	7.7	49
111	Design Issues in a Multiobjective Cellular Genetic Algorithm **2007**, 126-140		41
110	Introduction to Cellular Genetic Algorithms. *Operations Research/ Computer Science Interfaces Series*, **2008**, 3-20	0.3	41
109	Solving the Vehicle Routing Problem by Using Cellular Genetic Algorithms. *Lecture Notes in Computer Science*, **2004**, 11-20	0.9	39
108	Achieving super-linear performance in parallel multi-objective evolutionary algorithms by means of cooperative coevolution. *Computers and Operations Research*, **2013**, 40, 1552-1563	4.6	36
107	Towards a Reliable Comparison and Evaluation of Network Intrusion Detection Systems Based on Machine Learning Approaches. *Applied Sciences (Switzerland)*, **2020**, 10, 1775	2.6	34
106	Solving very large instances of the scheduling of independent tasks problem on the GPU. *Journal of Parallel and Distributed Computing*, **2013**, 73, 101-110	4.4	33
105	Efficient Batch Job Scheduling in Grids Using Cellular Memetic Algorithms. *Mathematical Modelling and Algorithms*, **2008**, 7, 217-236		33
104	Multi-objective evolutionary algorithms for energy-aware scheduling on distributed computing systems. *Applied Soft Computing Journal*, **2014**, 24, 432-446	7.5	32
103	Information dissemination in VANETs based upon a tree topology. *Ad Hoc Networks*, **2012**, 10, 111-127	4.8	30

102	Comparison of Green Light Optimal Speed Advisory approaches **2013**,		29
101	Efficient Heuristics for Profit Optimization of Virtual Cloud Brokers. *IEEE Computational Intelligence Magazine*, **2015**, 10, 33-43	5.6	23
100	**2014**,		23
99	A scalable parallel cooperative coevolutionary PSO algorithm for multi-objective optimization. *Journal of Parallel and Distributed Computing*, **2018**, 112, 111-125	4.4	20
98	A two-phase heuristic for the energy-efficient scheduling of independent tasks on computational grids. *Cluster Computing*, **2013**, 16, 421-433	2.1	20
97	A Survey on the Application of Evolutionary Algorithms for Mobile Multihop Ad Hoc Network Optimization Problems. *International Journal of Distributed Sensor Networks*, **2016**, 12, 2082496	1.7	19
96	A hierarchical approach for energy-efficient scheduling of large workloads in multicore distributed systems. *Sustainable Computing: Informatics and Systems*, **2014**, 4, 252-261	3	19
95	A power efficient genetic algorithm for resource allocation in cloud computing data centers **2014**,		19
94	Multiobjective evolutionary algorithms for energy and service level scheduling in a federation of distributed datacenters. *International Transactions in Operational Research*, **2017**, 24, 199-228	2.9	14
93	A Cellular Genetic Algorithm for scheduling applications and energy-aware communication optimization **2010**,		14
92	A Survey of Decomposition Methods for Multi-objective Optimization. *Studies in Computational Intelligence*, **2014**, 453-465	0.8	14
91	Solving the multi-objective flexible job shop scheduling problem with a novel parallel branch and bound algorithm. *Swarm and Evolutionary Computation*, **2020**, 53, 100632	9.8	14
90	Cellular genetic algorithms without additional parameters. *Journal of Supercomputing*, **2013**, 63, 816-835	2.5	13
89	Hierarchical Cellular Genetic Algorithm. *Lecture Notes in Computer Science*, **2006**, 111-122	0.9	13
88	A self-adaptive cellular memetic algorithm for the DNA fragment assembly problem **2008**,		12
87	Parallel Genetic Algorithms **2005**, 105-125		12
86	Efficient Batch Job Scheduling in Grids Using Cellular Memetic Algorithms. *Studies in Computational Intelligence*, **2008**, 273-299	0.8	12
85	A Hybrid Cellular Genetic Algorithm for the Capacitated Vehicle Routing Problem. *Studies in Computational Intelligence*, **2008**, 379-422	0.8	11

84	Optimisation of the enhanced distance based broadcasting protocol for MANETs. *Journal of Supercomputing*, **2012**, 62, 1213-1240	2.5	10
83	Multi-objective Cooperative Coevolutionary Evolutionary Algorithms for Continuous and Combinatorial Optimization. *Studies in Computational Intelligence*, **2011**, 49-74	0.8	10
82	Design and evaluation of tabu search method for job scheduling in distributed environments. *Parallel and Distributed Processing Symposium (IPDPS), Proceedings of the International Conference on*, **2008**,		10
81	A Simple Cellular Genetic Algorithm for Continuous Optimization		10
80	Efficient Batch Job Scheduling in Grids using Cellular Memetic Algorithms **2007**,		10
79	Combining Machine Learning and Genetic Algorithms to Solve the Independent Tasks Scheduling Problem **2017**,		9
78	The influence of grid shape and asynchronicity on cellular evolutionary algorithms		9
77	Using simulation-based optimization in the context of IT service management change process. *Decision Support Systems*, **2018**, 112, 35-47	5.6	9
76	The sandpile scheduler. *Cluster Computing*, **2014**, 17, 191-204	2.1	8
75	A Parallel Hybrid Evolutionary Algorithm for the Optimization of Broker Virtual Machines Subletting in Cloud Systems **2013**,		8
74	A new parallel asynchronous cellular genetic algorithm for scheduling in grids **2010**,		8
73	Cellular Genetic Algorithms. *Operations Research/ Computer Science Interfaces Series*, **2008**,	0.3	8
72	Optimising small-world properties in VANETs: Centralised and distributed overlay approaches. *Applied Soft Computing Journal*, **2014**, 21, 637-646	7.5	7
71	A Study of the Combination of Variation Operators in the NSGA-II Algorithm. *Lecture Notes in Computer Science*, **2013**, 269-278	0.9	7
70	Advanced models of cellular genetic algorithms evaluated on SAT **2005**,		7
69	Plane Separation: A method to solve dynamic multi-objective optimization problems with incorporated preferences. *Future Generation Computer Systems*, **2020**, 110, 864-875	7.5	7
68	Multiobjective Workflow Scheduling in a Federation of Heterogeneous Green-Powered Data Centers **2016**,		7
67	Theory and Practice of Cellular UMDA for Discrete Optimization. *Lecture Notes in Computer Science*, **2006**, 242-251	0.9	7

66	Finding scalable configurations for AEDB broadcasting protocol using multi-objective evolutionary algorithms. *Cluster Computing*, **2013**, 16, 527-544	2.1	6
65	Savant: Automatic generation of a parallel scheduling heuristic for map-reduce. *International Journal of Hybrid Intelligent Systems*, **2014**, 11, 287-302	0.9	6
64	Adaptive Neighborhoods for Cellular Genetic Algorithms **2011**,		6
63	An asynchronous parallel implementation of a cellular genetic algorithm for combinatorial optimization **2009**,		6
62	Differential Evolution Algorithms with Cellular Populations **2010**, 320-330		6
61	Evolutionary Algorithms Based on Game Theory and Cellular Automata with Coalitions. *Intelligent Systems Reference Library*, **2013**, 481-503	0.8	6
60	Micro-Genetic algorithm with fuzzy selection of operators for multi-Objective optimization: ΕΑΜΕ. *Swarm and Evolutionary Computation*, **2021**, 61, 100818	9.8	6
59	The State of the Art in Cellular Evolutionary Algorithms. *Operations Research/ Computer Science Interfaces Series*, **2008**, 21-34	0.3	6
58	VoIP service model for multi-objective scheduling in cloud infrastructure. *International Journal of Metaheuristics*, **2015**, 4, 185	0.8	5
57	Computational intelligence for cloud management current trends and opportunities **2013**,		5
56	Multi-objective robust static mapping of independent tasks on grids **2010**,		5
55	A New Parallel Asynchronous Cellular Genetic Algorithm for de Novo Genomic Sequencing **2009**,		5
54	Novel efficient asynchronous cooperative co-evolutionary multi-objective algorithms **2012**,		5
53	Towards connectivity improvement in VANETs using bypass links **2009**,		5
52	A cellular multi-objective genetic algorithm for optimal broadcasting strategy in metropolitan MANETs		5
51	Estimation of Distribution Algorithms **2006**, 87-108		5
50	The Virtual Savant: Automatic generation of parallel solvers. *Information Sciences*, **2018**, 432, 411-430	7.7	4
49	Study of different small-world topology generation mechanisms for Genetic Algorithms **2012**,		4

48	Decentralized Cellular Evolutionary Algorithms. *Chapman & Hall/CRC Computer and Information Science Series*, **2005**, 7-103-7-120		4
47	APPLICATION OF POPULATION EVOLVABILITY IN A HYPER-HEURISTIC FOR DYNAMIC MULTI-OBJECTIVE OPTIMIZATION. *Technological and Economic Development of Economy*, **2019**, 25, 951-978	4.7	4
46	Optimal Broadcasting in Metropolitan MANETs Using Multiobjective Scatter Search. *Lecture Notes in Computer Science*, **2006**, 255-266	0.9	4
45	A Comparison Between Memetic Algorithm and Seeded Genetic Algorithm for Multi-objective Independent Task Scheduling on Heterogeneous Machines. *Studies in Computational Intelligence*, **2015**, 377-389	0.8	3
44	A Parallel Multi-objective Local Search for AEDB Protocol Tuning **2013**,		3
43	Designing a Self-Organized Approach for Scheduling Bag-of-Tasks **2012**,		3
42	Multi-objective Optimization for Information Sharing in Vehicular Ad Hoc Networks. *Communications in Computer and Information Science*, **2009**, 58-70	0.3	3
41	Evolutionary Algorithms for Optimizing Cost and QoS on Cloud-based Content Distribution Networks. *Programming and Computer Software*, **2019**, 45, 544-556	0.8	3
40	Virtual Savant for the Heterogeneous Computing Scheduling Problem **2018**,		3
39	Finding a robust configuration for the AEDB information dissemination protocol for mobile ad hoc networks. *Applied Soft Computing Journal*, **2015**, 32, 494-508	7.5	2
38	AEDB protocol tuning with a fast efficient parallel multi-objective local search. *International Journal of Ad Hoc and Ubiquitous Computing*, **2014**, 17, 144	0.7	2
37	Optimization and Performance Analysis of the AEDB Broadcasting Algorithm **2011**,		2
36	Metaheuristics for the Virtual Machine Mapping Problem in Clouds. *Informatica*, **2015**, 26, 111-134	2.9	2
35	Using Complex Network Topologies and Self-Organizing Maps for Time Series Prediction. *Advances in Intelligent Systems and Computing*, **2013**, 323-332	0.4	2
34	Optimizing the Profit and QoS of Virtual Brokers in the Cloud. *Computer Communications and Networks*, **2017**, 277-300	0.5	2
33	Oversized Populations and Cooperative Selection: Dealing with Massive Resources in Parallel Infrastructures. *Lecture Notes in Computer Science*, **2013**, 444-449	0.9	2
32	Multiobjective Energy-Aware Workflow Scheduling in Distributed Datacenters. *Communications in Computer and Information Science*, **2016**, 79-93	0.3	2
31	A parallel cooperative coevolutionary SMPSO algorithm for multi-objective optimization **2016**,		2

30	Virtual Savant as a generic learning approach applied to the basic independent Next Release Problem. *Applied Soft Computing Journal*, **2021**, 108, 107374	7.5	2
29	Design of Cellular Memetic Algorithms. *Operations Research/ Computer Science Interfaces Series*, **2008**, 101-114	0.3	2
28	Learning to optimize timetables for efficient transfers in public transportation systems. *Applied Soft Computing Journal*, **2022**, 119, 108616	7.5	2
27	Support Vector Machine Acceleration for Intel Xeon Phi Manycore Processors. *Communications in Computer and Information Science*, **2018**, 277-290	0.3	1
26	Analyzing the Influence of LLVM Code Optimization Passes on Software Performance. *Communications in Computer and Information Science*, **2018**, 272-283	0.3	1
25	A Novel CAD Tool for Electric Educational Diagrams. *Applied Sciences (Switzerland)*, **2019**, 9, 810	2.6	1
24	Savant: Automatic parallelization of a scheduling heuristic with machine learning **2013**,		1
23	An Overlay Approach for Optimising Small-World Properties in VANETs. *Lecture Notes in Computer Science*, **2013**, 32-41	0.9	1
22	Iterated Local Search for de Novo Genomic Sequencing. *Lecture Notes in Computer Science*, **2010**, 428-436.9		1
21	Parallel virtual savant for the heterogeneous computing scheduling problem. *Journal of Computational Science*, **2020**, 39, 101048	3.4	1
20	Assessing the Impact of Batch-Based Data Aggregation Techniques for Feature Engineering on Machine Learning-Based Network IDSs. *Advances in Intelligent Systems and Computing*, **2022**, 116-125	0.4	1
19	A novel multi-objective optimization approach to guarantee quality of service and energy efficiency in a heterogeneous bus fleet system. *Engineering Optimization*,1-17	2	1
18	Cost and QoS Optimization of Cloud-Based Content Distribution Networks Using Evolutionary Algorithms. *Communications in Computer and Information Science*, **2019**, 293-306	0.3	0
17	Introduction to Evolutionary Algorithms **2014**, 27-47		0
16	A Comparative Analysis of Accurate and Robust Bi-objective Scheduling Heuristics for Datacenters. *Communications in Computer and Information Science*, **2018**, 223-235	0.3	
15	Realistic Vehicular Mobility **2014**, 191-207		
14	Proposed Optimization Framework **2014**, 105-134		
13	Broadcasting Protocol **2014**, 135-152		