# Bernabe Dorronsoro

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 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 | Two novel branch and bound algorithms for the vertex bisection problem. *Expert Systems With Applications*, **2022**, 190, 116169 | 7.8 | |
| 118 | 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 |
| 117 | Learning to optimize timetables for efficient transfers in public transportation systems. *Applied Soft Computing Journal*, **2022**, 119, 108616 | 7.5 | 2 |
| 116 | Including Dynamic Adaptative Topology to Particle Swarm Optimization Algorithms. *Lecture Notes in Management and Industrial Engineering*, **2021**, 517-531 | 0.3 | |
| 115 | Micro-Genetic algorithm with fuzzy selection of operators for multi-Objective optimization: FAME. *Swarm and Evolutionary Computation*, **2021**, 61, 100818 | 9.8 | 6 |
| 114 | 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 |
| 113 | A Study on the Use of Hyper-heuristics Based on Meta-Heuristics for Dynamic Optimization. *Studies in Computational Intelligence*, **2021**, 295-314 | 0.8 | |
| 112 | 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 |
| 111 | Intelligent Electric Drive Management for Plug-in Hybrid Buses. *Communications in Computer and Information Science*, **2020**, 85-97 | 0.3 | |
| 110 | Learning Variables Structure Using Evolutionary Algorithms to Improve Predictive Performance. *Communications in Computer and Information Science*, **2020**, 58-68 | 0.3 | |
| 109 | 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 |
| 108 | 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 |
| 107 | Parallel virtual savant for the heterogeneous computing scheduling problem. *Journal of Computational Science*, **2020**, 39, 101048 | 3.4 | 1 |
| 106 | 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 |
| 105 | A Novel CAD Tool for Electric Educational Diagrams. *Applied Sciences (Switzerland)*, **2019**, 9, 810 | 2.6 | 1 |
| 104 | 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 |
| 103 | Evolutionary Algorithms for Optimizing Cost and QoS on Cloud-based Content Distribution Networks. *Programming and Computer Software*, **2019**, 45, 544-556 | 0.8 | 3 |

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|---|---|---|---|
| 102 | A novel multi-objective evolutionary algorithm with fuzzy logic based adaptive selection of operators: FAME. *Information Sciences*, **2019**, 471, 233-251 | 7.7 | 49 |
| 101 | Support Vector Machine Acceleration for Intel Xeon Phi Manycore Processors. *Communications in Computer and Information Science*, **2018**, 277-290 | 0.3 | 1 |
| 100 | The Virtual Savant: Automatic generation of parallel solvers. *Information Sciences*, **2018**, 432, 411-430 | 7.7 | 4 |
| 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 Comparative Analysis of Accurate and Robust Bi-objective Scheduling Heuristics for Datacenters. *Communications in Computer and Information Science*, **2018**, 223-235 | 0.3 | |
| 97 | Analyzing the Influence of LLVM Code Optimization Passes on Software Performance. *Communications in Computer and Information Science*, **2018**, 272-283 | 0.3 | 1 |
| 96 | Finding the Most Influential Parameters of Coalitions in a PSO-CO Algorithm. *Communications in Computer and Information Science*, **2018**, 284-296 | 0.3 | |
| 95 | Optimization Models with Coalitional Cellular Automata. *Emergence, Complexity and Computation*, **2018**, 139-169 | 0.1 | |
| 94 | Virtual Savant for the Heterogeneous Computing Scheduling Problem **2018**, | | 3 |
| 93 | Using simulation-based optimization in the context of IT service management change process. *Decision Support Systems*, **2018**, 112, 35-47 | 5.6 | 9 |
| 92 | 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 |
| 91 | Combining Machine Learning and Genetic Algorithms to Solve the Independent Tasks Scheduling Problem **2017**, | | 9 |
| 90 | Optimizing the Profit and QoS of Virtual Brokers in the Cloud. *Computer Communications and Networks*, **2017**, 277-300 | 0.5 | 2 |
| 89 | 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 |
| 88 | Multiobjective Workflow Scheduling in a Federation of Heterogeneous Green-Powered Data Centers **2016**, | | 7 |
| 87 | Multiobjective Energy-Aware Workflow Scheduling in Distributed Datacenters. *Communications in Computer and Information Science*, **2016**, 79-93 | 0.3 | 2 |
| 86 | A parallel cooperative coevolutionary SMPSO algorithm for multi-objective optimization **2016**, | | 2 |
| 85 | 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 |

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|---|---|---|---|
| 84 | 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 |
| 83 | VoIP service model for multi-objective scheduling in cloud infrastructure. *International Journal of Metaheuristics*, **2015**, 4, 185 | 0.8 | 5 |
| 82 | Efficient Heuristics for Profit Optimization of Virtual Cloud Brokers. *IEEE Computational Intelligence Magazine*, **2015**, 10, 33-43 | 5.6 | 23 |
| 81 | Metaheuristics for the Virtual Machine Mapping Problem in Clouds. *Informatica*, **2015**, 26, 111-134 | 2.9 | 2 |
| 80 | 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 |
| 79 | Multi-objective evolutionary algorithms for energy-aware scheduling on distributed computing systems. *Applied Soft Computing Journal*, **2014**, 24, 432-446 | 7.5 | 32 |
| 78 | Realistic Vehicular Mobility **2014**, 191-207 | | |
| 77 | Proposed Optimization Framework **2014**, 105-134 | | |
| 76 | Broadcasting Protocol **2014**, 135-152 | | |
| 75 | Energy Management **2014**, 153-171 | | |
| 74 | Introduction to Evolutionary Algorithms **2014**, 27-47 | | 0 |
| 73 | Survey on Optimization Problems for Mobile Ad Hoc Networks **2014**, 49-78 | | |
| 72 | The sandpile scheduler. *Cluster Computing*, **2014**, 17, 191-204 | 2.1 | 8 |
| 71 | 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 |
| 70 | A power efficient genetic algorithm for resource allocation in cloud computing data centers **2014**, | | 19 |
| 69 | Savant: Automatic generation of a parallel scheduling heuristic for map-reduce. *International Journal of Hybrid Intelligent Systems*, **2014**, 11, 287-302 | 0.9 | 6 |
| 68 | Optimising small-world properties in VANETs: Centralised and distributed overlay approaches. *Applied Soft Computing Journal*, **2014**, 21, 637-646 | 7.5 | 7 |
| 67 | A Survey of Decomposition Methods for Multi-objective Optimization. *Studies in Computational Intelligence*, **2014**, 453-465 | 0.8 | 14 |

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| 66 | Optimizing AEDB Broadcasting Protocol with Parallel Multi-objective Cooperative Coevolutionary NSGA-II. *Lecture Notes in Computer Science*, **2014**, 39-50 | 0.9 | |
| 65 | It's Not a Bug, It's a Feature: Wait-Free Asynchronous Cellular Genetic Algorithm. *Lecture Notes in Computer Science*, **2014**, 361-370 | 0.9 | |
| 64 | **2014**, | | 23 |
| 63 | Cellular genetic algorithms without additional parameters. *Journal of Supercomputing*, **2013**, 63, 816-835 | 2.5 | 13 |
| 62 | 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 |
| 61 | Finding scalable configurations for AEDB broadcasting protocol using multi-objective evolutionary algorithms. *Cluster Computing*, **2013**, 16, 527-544 | 2.1 | 6 |
| 60 | A two-phase heuristic for the energy-efficient scheduling of independent tasks on computational grids. *Cluster Computing*, **2013**, 16, 421-433 | 2.1 | 20 |
| 59 | Energy-Aware Scheduling on Multicore Heterogeneous Grid Computing Systems. *Journal of Grid Computing*, **2013**, 11, 653-680 | 4.2 | 60 |
| 58 | A Parallel Hybrid Evolutionary Algorithm for the Optimization of Broker Virtual Machines Subletting in Cloud Systems **2013**, | | 8 |
| 57 | Savant: Automatic parallelization of a scheduling heuristic with machine learning **2013**, | | 1 |
| 56 | 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 |
| 55 | A Parallel Multi-objective Local Search for AEDB Protocol Tuning **2013**, | | 3 |
| 54 | Computational intelligence for cloud management current trends and opportunities **2013**, | | 5 |
| 53 | An Overlay Approach for Optimising Small-World Properties in VANETs. *Lecture Notes in Computer Science*, **2013**, 32-41 | 0.9 | 1 |
| 52 | A Study of the Combination of Variation Operators in the NSGA-II Algorithm. *Lecture Notes in Computer Science*, **2013**, 269-278 | 0.9 | 7 |
| 51 | Comparison of Green Light Optimal Speed Advisory approaches **2013**, | | 29 |
| 50 | Using Complex Network Topologies and Self-Organizing Maps for Time Series Prediction. *Advances in Intelligent Systems and Computing*, **2013**, 323-332 | 0.4 | 2 |
| 49 | Evolutionary Algorithms Based on Game Theory and Cellular Automata with Coalitions. *Intelligent Systems Reference Library*, **2013**, 481-503 | 0.8 | 6 |

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| 48 | Oversized Populations and Cooperative Selection: Dealing with Massive Resources in Parallel Infrastructures. *Lecture Notes in Computer Science*, **2013**, 444-449 | 0.9 | 2 |
| 47 | Optimisation of the enhanced distance based broadcasting protocol for MANETs. *Journal of Supercomputing*, **2012**, 62, 1213-1240 | 2.5 | 10 |
| 46 | Study of different small-world topology generation mechanisms for Genetic Algorithms **2012**, | | 4 |
| 45 | Information dissemination in VANETs based upon a tree topology. *Ad Hoc Networks*, **2012**, 10, 111-127 | 4.8 | 30 |
| 44 | Novel efficient asynchronous cooperative co-evolutionary multi-objective algorithms **2012**, | | 5 |
| 43 | Designing a Self-Organized Approach for Scheduling Bag-of-Tasks **2012**, | | 3 |
| 42 | Multi-objective Cooperative Coevolutionary Evolutionary Algorithms for Continuous and Combinatorial Optimization. *Studies in Computational Intelligence*, **2011**, 49-74 | 0.8 | 10 |
| 41 | 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 |
| 40 | Adaptive Neighborhoods for Cellular Genetic Algorithms **2011**, | | 6 |
| 39 | Optimization and Performance Analysis of the AEDB Broadcasting Algorithm **2011**, | | 2 |
| 38 | Efficient Hierarchical Task Scheduling on GRIDS Accounting for Computation and Communications. *Studies in Computational Intelligence*, **2011**, 25-47 | 0.8 | |
| 37 | Multi-objective robust static mapping of independent tasks on grids **2010**, | | 5 |
| 36 | A new parallel asynchronous cellular genetic algorithm for scheduling in grids **2010**, | | 8 |
| 35 | A Cellular Genetic Algorithm for scheduling applications and energy-aware communication optimization **2010**, | | 14 |
| 34 | Iterated Local Search for de Novo Genomic Sequencing. *Lecture Notes in Computer Science*, **2010**, 428-436 | 0.9 | 1 |
| 33 | Differential Evolution Algorithms with Cellular Populations **2010**, 320-330 | | 6 |
| 32 | A New Parallel Asynchronous Cellular Genetic Algorithm for de Novo Genomic Sequencing **2009**, | | 5 |
| 31 | An asynchronous parallel implementation of a cellular genetic algorithm for combinatorial optimization **2009**, | | 6 |

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| 30 | MOCell: A cellular genetic algorithm for multiobjective optimization. *International Journal of Intelligent Systems*, **2009**, 24, 726-746 | 8.4 | 176 |
| 29 | Multi-objective Optimization for Information Sharing in Vehicular Ad Hoc Networks. *Communications in Computer and Information Science*, **2009**, 58-70 | 0.3 | 3 |
| 28 | Towards connectivity improvement in VANETs using bypass links **2009**, | | 5 |
| 27 | AbYSS: Adapting Scatter Search to Multiobjective Optimization. *IEEE Transactions on Evolutionary Computation*, **2008**, 12, 439-457 | 15.6 | 230 |
| 26 | Cellular Genetic Algorithms. *Operations Research/ Computer Science Interfaces Series*, **2008**, | 0.3 | 8 |
| 25 | A self-adaptive cellular memetic algorithm for the DNA fragment assembly problem **2008**, | | 12 |
| 24 | 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 |
| 23 | Efficient Batch Job Scheduling in Grids Using Cellular Memetic Algorithms. *Mathematical Modelling and Algorithms*, **2008**, 7, 217-236 | | 33 |
| 22 | Efficient Batch Job Scheduling in Grids Using Cellular Memetic Algorithms. *Studies in Computational Intelligence*, **2008**, 273-299 | 0.8 | 12 |
| 21 | A Hybrid Cellular Genetic Algorithm for the Capacitated Vehicle Routing Problem. *Studies in Computational Intelligence*, **2008**, 379-422 | 0.8 | 11 |
| 20 | Introduction to Cellular Genetic Algorithms. *Operations Research/ Computer Science Interfaces Series*, **2008**, 3-20 | 0.3 | 41 |
| 19 | The State of the Art in Cellular Evolutionary Algorithms. *Operations Research/ Computer Science Interfaces Series*, **2008**, 21-34 | 0.3 | 6 |
| 18 | Design of Cellular Memetic Algorithms. *Operations Research/ Computer Science Interfaces Series*, **2008**, 101-114 | 0.3 | 2 |
| 17 | A cellular multi-objective genetic algorithm for optimal broadcasting strategy in metropolitan MANETs. *Computer Communications*, **2007**, 30, 685-697 | 5.1 | 64 |
| 16 | Design Issues in a Multiobjective Cellular Genetic Algorithm **2007**, 126-140 | | 41 |
| 15 | Efficient Batch Job Scheduling in Grids using Cellular Memetic Algorithms **2007**, | | 10 |
| 14 | Hierarchical Cellular Genetic Algorithm. *Lecture Notes in Computer Science*, **2006**, 111-122 | 0.9 | 13 |
| 13 | 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 |

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| 12 | Estimation of Distribution Algorithms **2006**, 87-108 | | 5 |
| 11 | Optimal Broadcasting in Metropolitan MANETs Using Multiobjective Scatter Search. *Lecture Notes in Computer Science*, **2006**, 255-266 | 0.9 | 4 |
| 10 | Theory and Practice of Cellular UMDA for Discrete Optimization. *Lecture Notes in Computer Science*, **2006**, 242-251 | 0.9 | 7 |
| 9 | . *IEEE Transactions on Evolutionary Computation*, **2005**, 9, 126-142 | 15.6 | 294 |
| 8 | Advanced models of cellular genetic algorithms evaluated on SAT **2005**, | | 7 |
| 7 | Parallel Genetic Algorithms **2005**, 105-125 | | 12 |
| 6 | Decentralized Cellular Evolutionary Algorithms. *Chapman & Hall/CRC Computer and Information Science Series*, **2005**, 7-103-7-120 | | 4 |
| 5 | Solving the Vehicle Routing Problem by Using Cellular Genetic Algorithms. *Lecture Notes in Computer Science*, **2004**, 11-20 | 0.9 | 39 |
| 4 | A Simple Cellular Genetic Algorithm for Continuous Optimization | | 10 |
| 3 | A cellular multi-objective genetic algorithm for optimal broadcasting strategy in metropolitan MANETs | | 5 |
| 2 | The influence of grid shape and asynchronicity on cellular evolutionary algorithms | | 9 |
| 1 | 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 |