

# Eneko Osaba

## List of Publications by Year in descending order

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117  
papers

2,409  
citations

411340

20  
h-index

263392

45  
g-index

124  
all docs

124  
docs citations

124  
times ranked

2335  
citing authors

#	ARTICLE	IF	CITATIONS
1	Adaptive Multifactorial Evolutionary Optimization for Multitask Reinforcement Learning. IEEE Transactions on Evolutionary Computation, 2022, 26, 233-247.	7.5	17
2	Editorial: Memetic Computing: Accelerating optimization heuristics with problem-dependent local search methods. Swarm and Evolutionary Computation, 2022, 70, 101047.	4.5	6
3	Smart Processing for Systems under Uncertainty or Perturbation. Electronics (Switzerland), 2022, 11, 680.	1.8	0
4	NATURE- AND BIO-INSPIRED OPTIMIZATION: THE GOOD, THE BAD, THE UGLY AND THE HOPEFUL. Dyna (Spain), 2022, 97, 114-117.	0.1	1
5	Evolutionary Multitask Optimization: a Methodological Overview, Challenges, and Future Research Directions. Cognitive Computation, 2022, 14, 927-954.	3.6	27
6	A Systematic Literature Review of Quantum Computing for Routing Problems. IEEE Access, 2022, 10, 55805-55817.	2.6	18
7	Lights and shadows in Evolutionary Deep Learning: Taxonomy, critical methodological analysis, cases of study, learned lessons, recommendations and challenges. Information Fusion, 2021, 67, 161-194.	11.7	21
8	Review of Swarm Intelligence for Improving Time Series Forecasting. Springer Tracts in Nature-inspired Computing, 2021, , 61-79.	1.2	1
9	Applied Optimization and Swarm Intelligence: A Systematic Review and Prospect Opportunities. Springer Tracts in Nature-inspired Computing, 2021, , 1-23.	1.2	5
10	Soccer-Inspired Metaheuristics: Systematic Review of Recent Research and Applications. Springer Tracts in Nature-inspired Computing, 2021, , 81-102.	1.2	6
11	Hybrid Quantum Computing - Tabu Search Algorithm for Partitioning Problems: Preliminary Study on the Traveling Salesman Problem. , 2021, , .		14
12	Optimization and Prediction Techniques for Self-Healing and Self-Learning Applications in a Trustworthy Cloud Continuum. Information (Switzerland), 2021, 12, 308.	1.7	2
13	A Tutorial On the design, experimentation and application of metaheuristic algorithms to real-World optimization problems. Swarm and Evolutionary Computation, 2021, 64, 100888.	4.5	154
14	Focusing on the hybrid quantum computing - Tabu search algorithm. , 2021, , .		5
15	Bio-inspired computation for big data fusion, storage, processing, learning and visualization: state of the art and future directions. Neural Computing and Applications, 2021, , 1-31.	3.2	14
16	AT-MFCGA: An Adaptive Transfer-guided Multifactorial Cellular Genetic Algorithm for Evolutionary Multitasking. Information Sciences, 2021, 570, 577-598.	4.0	25
17	CURIE: a cellular automaton for concept drift detection. Data Mining and Knowledge Discovery, 2021, 35, 2655-2678.	2.4	4
18	A prescription of methodological guidelines for comparing bio-inspired optimization algorithms. Swarm and Evolutionary Computation, 2021, 67, 100973.	4.5	73

#	ARTICLE	IF	CITATIONS
19	A Parallel Variable Neighborhood Search for Solving Real-World Production-Scheduling Problems. Lecture Notes in Computer Science, 2021, , 12-20.	1.0	0
20	More is not Always Better: Insights from a Massive Comparison of Meta-heuristic Algorithms over Real-Parameter Optimization Problems. , 2021, , .		3
21	MO-MFCGA: Multiobjective Multifactorial Cellular Genetic Algorithm for Evolutionary Multitasking. , 2021, , .		1
22	Bioinspired Computational Intelligence and Transportation Systems: A Long Road Ahead. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 466-495.	4.7	38
23	Community detection in networks using bio-inspired optimization: Latest developments, new results and perspectives with a selection of recent meta-heuristics. Applied Soft Computing Journal, 2020, 87, 106010.	4.1	48
24	Simultaneously Evolving Deep Reinforcement Learning Models using Multifactorial optimization. , 2020, , .		8
25	Multifactorial Cellular Genetic Algorithm (MFCGA): Algorithmic Design, Performance Comparison and Genetic Transferability Analysis. , 2020, , .		9
26	Genetic optimised serial hierarchical fuzzy classifier for breast cancer diagnosis. International Journal of Bio-Inspired Computation, 2020, 15, 194.	0.6	5
27	Data-Driven Optimization for Transportation Logistics and Smart Mobility Applications [Guest Editorial]. IEEE Intelligent Transportation Systems Magazine, 2020, 12, 6-9.	2.6	6
28	Is the Vehicle Routing Problem Dead? An Overview Through Bioinspired Perspective and a Prospect of Opportunities. Springer Tracts in Nature-inspired Computing, 2020, , 57-84.	1.2	16
29	On the design of hybrid bio-inspired meta-heuristics for complex multiattribute vehicle routing problems. Expert Systems, 2020, 37, e12528.	2.9	4
30	Benchmark dataset for the Asymmetric and Clustered Vehicle Routing Problem with Simultaneous Pickup and Deliveries, Variable Costs and Forbidden Paths. Data in Brief, 2020, 29, 105142.	0.5	3
31	COEBA: A Coevolutionary Bat Algorithm for Discrete Evolutionary Multitasking. Lecture Notes in Computer Science, 2020, , 244-256.	1.0	5
32	Parametric Learning of Associative Functional Networks Through a Modified Memetic Self-adaptive Firefly Algorithm. Lecture Notes in Computer Science, 2020, , 566-579.	1.0	1
33	Traveling salesman problem: a perspective review of recent research and new results with bio-inspired metaheuristics. , 2020, , 135-164.		30
34	dMFEA-II. , 2020, , .		3
35	A Novel Metaheuristic Approach for Loss Reduction and Voltage Profile Improvement in Power Distribution Networks Based on Simultaneous Placement and Sizing of Distributed Generators and Shunt Capacitor Banks. Lecture Notes in Computer Science, 2020, , 64-76.	1.0	0
36	Distributed Coordination of Heterogeneous Robotic Swarms Using Stochastic Diffusion Search. Lecture Notes in Computer Science, 2020, , 79-91.	1.0	0

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37	Genetic optimised serial hierarchical fuzzy classifier for breast cancer diagnosis. International Journal of Bio-Inspired Computation, 2020, 15, 194.	0.6	0
38	Adaptation of Sport Training Plans by Swarm Intelligence. Advances in Intelligent Systems and Computing, 2019, , 56-67.	0.5	1
39	Return, Diversification and Risk in Cryptocurrency Portfolios using Deep Recurrent Neural Networks and Multi-Objective Evolutionary Algorithms. , 2019, , .		4
40	Cuckoo Search Algorithm for Border Reconstruction of Medical Images with Rational Curves. Lecture Notes in Computer Science, 2019, , 320-330.	1.0	5
41	Combining bio-inspired meta-heuristics and novelty search for community detection over evolving graph streams. , 2019, , .		4
42	Discovering dependencies among mined association rules with population-based metaheuristics. , 2019, , .		5
43	Computing rational border curves of melanoma and other skin lesions from medical images with bat algorithm. , 2019, , .		2
44	Hybridizing differential evolution and novelty search for multimodal optimization problems. , 2019, , .		4
45	Cooperative game concepts in solving global optimization. , 2019, , .		1
46	Nature-inspired metaheuristics for optimizing information dissemination in vehicular networks. , 2019, , .		2
47	Hybrid Modified Firefly Algorithm for Border Detection of Skin Lesions in Medical Imaging. , 2019, , .		8
48	Using Adaptive Novelty Search in Differential Evolution. Communications in Computer and Information Science, 2019, , 267-275.	0.4	0
49	Dynamic Partitioning of Evolving Graph Streams Using Nature-Inspired Heuristics. Lecture Notes in Computer Science, 2019, , 367-380.	1.0	1
50	Bat Algorithm for Kernel Computation in Fractal Image Reconstruction. Lecture Notes in Computer Science, 2019, , 381-394.	1.0	1
51	Bio-inspired computation: Where we stand and what's next. Swarm and Evolutionary Computation, 2019, 48, 220-250.	4.5	430
52	Trophallaxis, Low-Power Vision Sensors and Multi-objective Heuristics for 3D Scene Reconstruction Using Swarm Robotics. Lecture Notes in Computer Science, 2019, , 599-615.	1.0	2
53	Ensemble classification for imbalanced data based on feature space partitioning and hybrid metaheuristics. Applied Intelligence, 2019, 49, 2807-2822.	3.3	33
54	Deep Recurrent Neural Networks and Optimization Meta-Heuristics for Green Urban Route Planning with Dynamic Traffic Estimates. , 2019, , .		3

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55	Novelty search for global optimization. <i>Applied Mathematics and Computation</i> , 2019, 347, 865-881.	1.4	37
56	A 4-dimensional model and combined methodological approach to inclusive Urban planning and design for ALL. <i>Sustainable Cities and Society</i> , 2019, 44, 195-214.	5.1	23
57	A Discrete and Improved Bat Algorithm for solving a medical goods distribution problem with pharmacological waste collection. <i>Swarm and Evolutionary Computation</i> , 2019, 44, 273-286.	4.5	113
58	Using ICTs for the Improvement of Public Open Spaces: The Opportunity Offered by CyberParks Digital Tools. <i>Lecture Notes in Computer Science</i> , 2019, , 278-293.	1.0	0
59	Good practice proposal for the implementation, presentation, and comparison of metaheuristics for solving routing problems. <i>Neurocomputing</i> , 2018, 271, 2-8.	3.5	43
60	On Efficiently Solving the Vehicle Routing Problem with Time Windows Using the Bat Algorithm with Random Reinsertion Operators. <i>Studies in Computational Intelligence</i> , 2018, , 69-89.	0.7	12
61	Applications of Soft Computing in Intelligent Transportation Systems. <i>Studies in Fuzziness and Soft Computing</i> , 2018, , 63-81.	0.6	5
62	Differential Evolution for Association Rule Mining Using Categorical and Numerical Attributes. <i>Lecture Notes in Computer Science</i> , 2018, , 79-88.	1.0	13
63	Bat Algorithm Swarm Robotics Approach for Dual Non-cooperative Search with Self-centered Mode. <i>Lecture Notes in Computer Science</i> , 2018, , 201-209.	1.0	5
64	Community Detection in Weighted Directed Networks Using Nature-Inspired Heuristics. <i>Lecture Notes in Computer Science</i> , 2018, , 325-335.	1.0	2
65	Multi-Objective Optimization of Bike Routes for Last-Mile Package Delivery with Drop-Offs. , 2018, , .		5
66	Automatic Fitting of Feature Points for Border Detection of Skin Lesions in Medical Images with Bat Algorithm. <i>Studies in Computational Intelligence</i> , 2018, , 357-368.	0.7	7
67	Ensemble and Fuzzy Techniques Applied to Imbalanced Traffic Congestion Datasets: A Comparative Study. <i>Lecture Notes in Computer Science</i> , 2018, , 185-196.	1.0	1
68	Multi-objective Design of Time-Constrained Bike Routes Using Bio-inspired Meta-heuristics. <i>Lecture Notes in Computer Science</i> , 2018, , 197-210.	1.0	6
69	A Bio-inspired Approach for Collaborative Exploration with Mobile Battery Recharging in Swarm Robotics. <i>Lecture Notes in Computer Science</i> , 2018, , 75-87.	1.0	8
70	A discrete water cycle algorithm for solving the symmetric and asymmetric traveling salesman problem. <i>Applied Soft Computing Journal</i> , 2018, 71, 277-290.	4.1	89
71	Let nature decide its nature: On the design of collaborative hyperheuristics for decentralized ephemeral environments. <i>Future Generation Computer Systems</i> , 2018, 88, 792-805.	4.9	4
72	A Smartphone-Based System for Outdoor Data Gathering Using a Wireless Beacon Network and GPS Data: From Cyber Spaces to Senseable Spaces. <i>ISPRS International Journal of Geo-Information</i> , 2018, 7, 190.	1.4	13

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73	Using Novelty Search in Differential Evolution. Communications in Computer and Information Science, 2018, , 534-542.	0.4	4
74	QUANTUM COMPUTING: SIX KEY FACTORS TO UNDERSTAND THE FUTURE OF COMPUTATION. Dyna (Spain), 2018, 93, 238-241.	0.1	1
75	Interplay of Two Bat Algorithm Robotic Swarms in Non-cooperative Target Point Search. Communications in Computer and Information Science, 2018, , 543-550.	0.4	1
76	Task Classification Using Topological Graph Features for Functional M/EEG Brain Connectomics. Lecture Notes in Computer Science, 2018, , 21-32.	1.0	0
77	A discrete firefly algorithm to solve a rich vehicle routing problem modelling a newspaper distribution system with recycling policy. Soft Computing, 2017, 21, 5295-5308.	2.1	109
78	Improvement of Drug Delivery Routes Through the Adoption of Multi-Operator Evolutionary Algorithms and Intelligent Vans Capable of Reporting Real-Time Incidents. IEEE Transactions on Automation Science and Engineering, 2017, 14, 1009-1019.	3.4	11
79	Editorial: Special Issue HAIS15-IGPL. Logic Journal of the IGPL, 2017, 25, 859-861.	1.3	0
80	Smart Bandwidth Assignment in an Underlay Cellular Network for Internet of Vehicles. Sensors, 2017, 17, 2217.	2.1	13
81	Design and Field Experimentation of a Cooperative ITS Architecture Based on Distributed RSUs. Sensors, 2016, 16, 1147.	2.1	3
82	Poster: Efficient cluster-based resource allocation for co-existing vehicle and cellular users. , 2016, , .		0
83	A Comparative Study on the Performance of Evolutionary Fuzzy and Crisp Rule Based Classification Methods in Congestion Prediction. Transportation Research Procedia, 2016, 14, 4458-4467.	0.8	4
84	Comparison between Golden Ball Meta-heuristic, Evolutionary Simulated Annealing and Tabu Search for the Traveling Salesman Problem. , 2016, , .		7
85	Decentralised intelligent transport system with distributed intelligence based on classification techniques. IET Intelligent Transport Systems, 2016, 10, 674-682.	1.7	10
86	TIMON Project. , 2016, , .		1
87	A Hybrid Method for Short-Term Traffic Congestion Forecasting Using Genetic Algorithms and Cross Entropy. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 557-569.	4.7	108
88	GACE: A meta-heuristic based in the hybridization of Genetic Algorithms and Cross Entropy methods for continuous optimization. Expert Systems With Applications, 2016, 55, 508-519.	4.4	28
89	An improved discrete bat algorithm for symmetric and asymmetric Traveling Salesman Problems. Engineering Applications of Artificial Intelligence, 2016, 48, 59-71.	4.3	261
90	An Evolutionary Discrete Firefly Algorithm with Novel Operators for Solving the Vehicle Routing Problem with Time Windows. Studies in Computational Intelligence, 2016, , 21-41.	0.7	26

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91	Short-Term Traffic Congestion Forecasting Using Hybrid Metaheuristics and Rule-Based Methods: A Comparative Study. Lecture Notes in Computer Science, 2016, , 290-299.	1.0	3
92	Design and Implementation of a Combinatorial Optimization Multi-population Meta-heuristic for Solving Vehicle Routing Problems. International Journal of Interactive Multimedia and Artificial Intelligence, 2016, 4, 89.	1.0	2
93	An adaptive local search with prioritized tracking for Dynamic Environments. International Journal of Computational Intelligence Systems, 2015, 8, 1053.	1.6	1
94	A multi-objective evolutionary algorithm for the tuning of fuzzy rule bases for uncoordinated intersections in autonomous driving. Information Sciences, 2015, 321, 14-30.	4.0	22
95	An Asymmetric Multiple Traveling Salesman Problem with Backhauls to solve a Dial-a-Ride problem. , 2015, , .		5
96	Hybridizing Genetic Algorithm with Cross Entropy for Solving Continuous Functions. , 2015, , .		0
97	Crossover versus Mutation: A Comparative Analysis of the Evolutionary Strategy of Genetic Algorithms Applied to Combinatorial Optimization Problems. Scientific World Journal, The, 2014, 2014, 1-22.	0.8	16
98	Focusing on the Golden Ball Metaheuristic: An Extended Study on a Wider Set of Problems. Scientific World Journal, The, 2014, 2014, 1-17.	0.8	14
99	A study on the efficiency of neutral crossover operators in genetic algorithms applied to the bin packing problem. , 2014, , .		0
100	A study on the impact of heuristic initialization functions in a genetic algorithm solving the N-queens problem. , 2014, , .		2
101	GABF: genetic algorithm with base fitness for obtaining generality from partial results: study in autonomous intersection by fuzzy logic. Applied Intelligence, 2014, 41, 1-12.	3.3	8
102	Golden ball: a novel meta-heuristic to solve combinatorial optimization problems based on soccer concepts. Applied Intelligence, 2014, 41, 145-166.	3.3	77
103	Hierarchical fuzzy rule-based system optimized with genetic algorithms for short term traffic congestion prediction. Transportation Research Part C: Emerging Technologies, 2014, 43, 127-142.	3.9	97
104	Comments on Albayrak, M., & Allahverdy N. (2011). Development a new mutation operator to solve the Traveling Salesman Problem by aid of genetic algorithms. Expert Systems with Applications, 38(3), 1313-1320. A proposal of good practice. Expert Systems With Applications, 2014, 41, 1530-1531.	4.4	2
105	On the influence of using initialization functions on genetic algorithms solving combinatorial optimization problems: A first study on the TSP. , 2014, , .		11
106	A multi-agent approach for dynamic production and distribution scheduling. Journal of Evidence-Based Medicine, 2014, 4, 229.	0.7	1
107	An Adaptive Multi-Crossover Population Algorithm for Solving Routing Problems. Studies in Computational Intelligence, 2014, , 113-124.	0.7	14
108	A Proposal of Good Practice in the Formulation and Comparison of Meta-heuristics for Solving Routing Problems. Advances in Intelligent Systems and Computing, 2014, , 31-40.	0.5	1

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109	A novel meta-heuristic based on soccer concepts to solve routing problems. , 2013, , .		18
110	A multi-crossover and adaptive island based population algorithm for solving routing problems. Journal of Zhejiang University: Science C, 2013, 14, 815-821.	0.7	19
111	Discussion related to “Wang, C.-H., & Lu, J.-Z. (2009). A hybrid genetic algorithm that optimizes capacitated vehicle routing problem. Expert Systems with Applications, 36(2), 2921-2936”. Expert Systems With Applications, 2013, 40, 5425-5426.	4.4	7
112	Analysis of the suitability of using blind crossover operators in genetic algorithms for solving routing problems. , 2013, , .		10
113	An Integrated Production and Distribution Scheduling Approach for Exceptions Handling. Lecture Notes in Mechanical Engineering, 2013, , 813-823.	0.3	0
114	Simulation Tool based on a Memetic Algorithm to Solve a Real Instance of a Dynamic TSP. , 2012, , .		3
115	Introductory Chapter: Nature-Inspired Methods for Stochastic, Robust, and Dynamic Optimization. , 0, , .		0
116	Introductory Chapter: Swarm Intelligence - Recent Advances, New Perspectives, and Applications. , 0, , .		1
117	Introductory Chapter: Artificial Intelligence - Latest Advances, New Paradigms and Novel Applications. Artificial Intelligence, 0, , .	2.0	0