

# Carlos A Coello Coello

## List of Publications by Year in descending order

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491  
papers

30,222  
citations

20759

60  
h-index

7136

153  
g-index

508  
all docs

508  
docs citations

508  
times ranked

13966  
citing authors

#	ARTICLE	IF	CITATIONS
1	Handling multiple objectives with particle swarm optimization. IEEE Transactions on Evolutionary Computation, 2004, 8, 256-279.	7.5	3,484
2	Theoretical and numerical constraint-handling techniques used with evolutionary algorithms: a survey of the state of the art. Computer Methods in Applied Mechanics and Engineering, 2002, 191, 1245-1287.	3.4	1,867
3	Evolutionary Algorithms for Solving Multi-Objective Problems. Genetic Algorithms and Evolutionary Computation, 2002, , .	0.3	1,478
4	Use of a self-adaptive penalty approach for engineering optimization problems. Computers in Industry, 2000, 41, 113-127.	5.7	1,045
5	A Comprehensive Survey of Evolutionary-Based Multiobjective Optimization Techniques. Knowledge and Information Systems, 1999, 1, 269-308.	2.1	1,019
6	Evolutionary multi-objective optimization: a historical view of the field. IEEE Computational Intelligence Magazine, 2006, 1, 28-36.	3.4	911
7	MOPSO: a proposal for multiple objective particle swarm optimization. , 0, , .		879
8	Constraint-handling in nature-inspired numerical optimization: Past, present and future. Swarm and Evolutionary Computation, 2011, 1, 173-194.	4.5	863
9	Constraint-handling in genetic algorithms through the use of dominance-based tournament selection. Advanced Engineering Informatics, 2002, 16, 193-203.	4.0	717
10	Solving Multiobjective Optimization Problems Using an Artificial Immune System. Genetic Programming and Evolvable Machines, 2005, 6, 163-190.	1.5	702
11	An updated survey of GA-based multiobjective optimization techniques. ACM Computing Surveys, 2000, 32, 109-143.	16.1	555
12	A Simple Multimembered Evolution Strategy to Solve Constrained Optimization Problems. IEEE Transactions on Evolutionary Computation, 2005, 9, 1-17.	7.5	513
13	Using the Averaged Hausdorff Distance as a Performance Measure in Evolutionary Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2012, 16, 504-522.	7.5	508
14	Improving PSO-Based Multi-objective Optimization Using Crowding, Mutation and $\epsilon$ -Dominance. Lecture Notes in Computer Science, 2005, , 505-519.	1.0	486
15	Bio-inspired computation: Where we stand and what's next. Swarm and Evolutionary Computation, 2019, 48, 220-250.	4.5	430
16	A comparative study of differential evolution variants for global optimization. , 2006, , .		401
17	SMPSO: A new PSO-based metaheuristic for multi-objective optimization. , 2009, , .		393
18	An empirical study about the usefulness of evolution strategies to solve constrained optimization problems. International Journal of General Systems, 2008, 37, 443-473.	1.2	382

#	ARTICLE	IF	CITATIONS
19	A Survey of Multiobjective Evolutionary Algorithms for Data Mining: Part I. IEEE Transactions on Evolutionary Computation, 2014, 18, 4-19.	7.5	319
20	CONSTRAINT-HANDLING USING AN EVOLUTIONARY MULTIOBJECTIVE OPTIMIZATION TECHNIQUE. Civil Engineering and Environmental Systems, 2000, 17, 319-346.	0.4	310
21	A Survey on Multiobjective Evolutionary Algorithms for the Solution of the Portfolio Optimization Problem and Other Finance and Economics Applications. IEEE Transactions on Evolutionary Computation, 2013, 17, 321-344.	7.5	254
22	Cultured differential evolution for constrained optimization. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 4303-4322.	3.4	237
23	g-dominance: Reference point based dominance for multiobjective metaheuristics. European Journal of Operational Research, 2009, 197, 685-692.	3.5	234
24	TREATING CONSTRAINTS AS OBJECTIVES FOR SINGLE-OBJECTIVE EVOLUTIONARY OPTIMIZATION. Engineering Optimization, 2000, 32, 275-308.	1.5	231
25	Efficient evolutionary optimization through the use of a cultural algorithm. Engineering Optimization, 2004, 36, 219-236.	1.5	206
26	Multiobjective optimization of trusses using genetic algorithms. Computers and Structures, 2000, 75, 647-660.	2.4	204
27	Particle Swarm Optimization With a Balanceable Fitness Estimation for Many-Objective Optimization Problems. IEEE Transactions on Evolutionary Computation, 2018, 22, 32-46.	7.5	202
28	Pareto-adaptive $\hat{\mu}$ -dominance. Evolutionary Computation, 2007, 15, 493-517.	2.3	192
29	On the Influence of the Number of Objectives on the Hardness of a Multiobjective Optimization Problem. IEEE Transactions on Evolutionary Computation, 2011, 15, 444-455.	7.5	191
30	A Study of the Parallelization of a Coevolutionary Multi-objective Evolutionary Algorithm. Lecture Notes in Computer Science, 2004, , 688-697.	1.0	179
31	HCS: A New Local Search Strategy for Memetic Multiobjective Evolutionary Algorithms. IEEE Transactions on Evolutionary Computation, 2010, 14, 112-132.	7.5	163
32	Survey of Multiobjective Evolutionary Algorithms for Data Mining: Part II. IEEE Transactions on Evolutionary Computation, 2014, 18, 20-35.	7.5	158
33	A survey of multi-objective metaheuristics applied to structural optimization. Structural and Multidisciplinary Optimization, 2014, 49, 537-558.	1.7	157
34	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
35	Use of cooperative coevolution for solving large scale multiobjective optimization problems. , 2013, , .		153
36	Handling constraints using multiobjective optimization concepts. International Journal for Numerical Methods in Engineering, 2004, 59, 1989-2017.	1.5	144

#	ARTICLE	IF	CITATIONS
37	Coevolutionary Multiobjective Evolutionary Algorithms: Survey of the State-of-the-Art. IEEE Transactions on Evolutionary Computation, 2018, 22, 851-865.	7.5	139
38	Handling preferences in evolutionary multiobjective optimization: a survey. , 0, , .		132
39	Optimal Power Flow Subject to Security Constraints Solved With a Particle Swarm Optimizer. IEEE Transactions on Power Systems, 2008, 23, 33-40.	4.6	127
40	Multiobjective Evolutionary Algorithms in Aeronautical and Aerospace Engineering. IEEE Transactions on Evolutionary Computation, 2012, 16, 662-694.	7.5	124
41	An updated survey of evolutionary multiobjective optimization techniques: state of the art and future trends. , 0, , .		123
42	Evolutionary multi-objective optimization: some current research trends and topics that remain to be explored. Frontiers of Computer Science, 2009, 3, 18-30.	0.6	123
43	MOSES: A MULTIOBJECTIVE OPTIMIZATION TOOL FOR ENGINEERING DESIGN. Engineering Optimization, 1999, 31, 337-368.	1.5	117
44	Multiobjective structural optimization using a microgenetic algorithm. Structural and Multidisciplinary Optimization, 2005, 30, 388-403.	1.7	117
45	Microgenetic multiobjective reconfiguration algorithm considering power losses and reliability indices for medium voltage distribution network. IET Generation, Transmission and Distribution, 2009, 3, 825-840.	1.4	113
46	Multiple trial vectors in differential evolution for engineering design. Engineering Optimization, 2007, 39, 567-589.	1.5	112
47	Hybridizing a genetic algorithm with an artificial immune system for global optimization. Engineering Optimization, 2004, 36, 607-634.	1.5	111
48	Improved Metaheuristic Based on the R2 Indicator for Many-Objective Optimization. , 2015, , .		108
49	Useful Infeasible Solutions in Engineering Optimization with Evolutionary Algorithms. Lecture Notes in Computer Science, 2005, , 652-662.	1.0	107
50	A Study of Multiobjective Metaheuristics When Solving Parameter Scalable Problems. IEEE Transactions on Evolutionary Computation, 2010, 14, 618-635.	7.5	107
51	Multi-Objective Particle Swarm Optimizers: An Experimental Comparison. Lecture Notes in Computer Science, 2009, , 495-509.	1.0	101
52	Evolutionary multiobjective optimization: open research areas and some challenges lying ahead. Complex & Intelligent Systems, 2020, 6, 221-236.	4.0	99
53	Multi-objective Optimization Using Differential Evolution: A Survey of the State-of-the-Art. Studies in Computational Intelligence, 2008, , 173-196.	0.7	97
54	Evolutionary Multiobjective Optimization in Materials Science and Engineering. Materials and Manufacturing Processes, 2009, 24, 119-129.	2.7	96

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55	An External Archive-Guided Multiobjective Particle Swarm Optimization Algorithm. IEEE Transactions on Cybernetics, 2017, 47, 2794-2808.	6.2	96
56	A Clustering-Based Evolutionary Algorithm for Many-Objective Optimization Problems. IEEE Transactions on Evolutionary Computation, 2019, 23, 391-405.	7.5	91
57	Using Clustering Techniques to Improve the Performance of a Multi-objective Particle Swarm Optimizer. Lecture Notes in Computer Science, 2004, , 225-237.	1.0	90
58	Indicator-based Multi-objective Evolutionary Algorithms. ACM Computing Surveys, 2021, 53, 1-35.	16.1	89
59	A simple genetic algorithm for the design of reinforced concrete beams. Engineering With Computers, 1997, 13, 185-196.	3.5	88
60	Recent Trends in Evolutionary Multiobjective Optimization. , 2005, , 7-32.		85
61	A hybrid Differential Evolutionâ€”Tabu Search algorithm for the solution of Job-Shop Scheduling Problems. Applied Soft Computing Journal, 2013, 13, 462-474.	4.1	82
62	A multi-objective particle swarm optimizer based on decomposition. , 2011, , .		81
63	Multiobjective Location of Automatic Voltage Regulators in a Radial Distribution Network Using a Micro Genetic Algorithm. IEEE Transactions on Power Systems, 2007, 22, 404-412.	4.6	78
64	Multimodal Multiobjective Evolutionary Optimization With Dual Clustering in Decision and Objective Spaces. IEEE Transactions on Evolutionary Computation, 2021, 25, 130-144.	7.5	78
65	MOMBI: A new metaheuristic for many-objective optimization based on the R2 indicator. , 2013, , .		76
66	On the use of particle swarm optimization with multimodal functions. , 0, , .		75
67	Ranking Methods for Many-Objective Optimization. Lecture Notes in Computer Science, 2009, , 633-645.	1.0	72
68	Optimal design of reinforced concrete beams using genetic algorithms. Expert Systems With Applications, 1997, 12, 101-108.	4.4	68
69	Comparison of metamodeling techniques in evolutionary algorithms. Soft Computing, 2017, 21, 5647-5663.	2.1	65
70	Design of combinational logic circuits through an evolutionary multiobjective optimization approach. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2002, 16, 39-53.	0.7	64
71	Computing the Set of Epsilon-Efficient Solutions in Multiobjective Space Mission Design. Journal of Aerospace Computing, Information, and Communication, 2011, 8, 53-70.	0.8	63
72	Use of an Artificial Immune System for Job Shop Scheduling. Lecture Notes in Computer Science, 2003, , 1-10.	1.0	62

#	ARTICLE	IF	CITATIONS
73	A Review of Techniques for Handling Expensive Functions in Evolutionary Multi-Objective Optimization. <i>Adaptation, Learning, and Optimization</i> , 2010, , 29-59.	0.5	62
74	An Algorithm Based on Differential Evolution for Multi-Objective Problems. <i>International Journal of Computational Intelligence Research</i> , 2005, 1, .	0.3	62
75	Increasing selective pressure towards the best compromise in evolutionary multiobjective optimization: The extended NOSGA method. <i>Information Sciences</i> , 2011, 181, 44-56.	4.0	61
76	Consolidated optimization algorithm for resource-constrained project scheduling problems. <i>Information Sciences</i> , 2017, 418-419, 346-362.	4.0	61
77	DEMORS: A hybrid multi-objective optimization algorithm using differential evolution and rough set theory for constrained problems. <i>Computers and Operations Research</i> , 2010, 37, 470-480.	2.4	60
78	Adaptive composite operator selection and parameter control for multiobjective evolutionary algorithm. <i>Information Sciences</i> , 2016, 339, 332-352.	4.0	60
79	Using multi-objective evolutionary algorithms for single-objective constrained and unconstrained optimization. <i>Annals of Operations Research</i> , 2016, 240, 217-250.	2.6	59
80	Computing Gap Free Pareto Front Approximations with Stochastic Search Algorithms. <i>Evolutionary Computation</i> , 2010, 18, 65-96.	2.3	57
81	Parallel Approaches for Multiobjective Optimization. <i>Lecture Notes in Computer Science</i> , 2008, , 349-372.	1.0	57
82	Using multi-objective evolutionary algorithms for single-objective optimization. <i>4or</i> , 2013, 11, 201-228.	1.0	55
83	Convergence of stochastic search algorithms to finite size pareto set approximations. <i>Journal of Global Optimization</i> , 2008, 41, 559-577.	1.1	54
84	Decomposition-based modern metaheuristic algorithms for multi-objective optimal power flow – A comparative study. <i>Engineering Applications of Artificial Intelligence</i> , 2014, 32, 10-20.	4.3	54
85	An Evolutionary Multiobjective Model and Instance Selection for Support Vector Machines With Pareto-Based Ensembles. <i>IEEE Transactions on Evolutionary Computation</i> , 2017, 21, 863-877.	7.5	54
86	Simple Feasibility Rules and Differential Evolution for Constrained Optimization. <i>Lecture Notes in Computer Science</i> , 2004, , 707-716.	1.0	53
87	An adaptive immune-inspired multi-objective algorithm with multiple differential evolution strategies. <i>Information Sciences</i> , 2018, 430-431, 46-64.	4.0	53
88	Evolutionary multiobjective optimization using an outranking-based dominance generalization. <i>Computers and Operations Research</i> , 2010, 37, 390-395.	2.4	52
89	Use of Particle Swarm Optimization to Design Combinational Logic Circuits. <i>Lecture Notes in Computer Science</i> , 2003, , 398-409.	1.0	50
90	Solving constrained optimization problems with a hybrid particle swarm optimization algorithm. <i>Engineering Optimization</i> , 2011, 43, 843-866.	1.5	50

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91	Differential Evolution performances for the solution of mixed-integer constrained process engineering problems. Applied Soft Computing Journal, 2011, 11, 399-409.	4.1	50
92	Constrained Optimization via Multiobjective Evolutionary Algorithms. Natural Computing Series, 2008, , 53-75.	2.2	50
93	Application of the non-outranked sorting genetic algorithm to public project portfolio selection. Information Sciences, 2013, 228, 131-149.	4.0	49
94	Including preferences into a multiobjective evolutionary algorithm to deal with many-objective engineering optimization problems. Information Sciences, 2014, 277, 1-20.	4.0	49
95	Towards automated evolutionary design of combinational circuits. Computers and Electrical Engineering, 2000, 27, 1-28.	3.0	48
96	Applications of multi-objective evolutionary algorithms in economics and finance: A survey. , 2007, , .		47
97	Online Objective Reduction to Deal with Many-Objective Problems. Lecture Notes in Computer Science, 2009, , 423-437.	1.0	46
98	Promising infeasibility and multiple offspring incorporated to differential evolution for constrained optimization. , 2005, , .		44
99	Boundary Search for Constrained Numerical Optimization Problems With an Algorithm Inspired by the Ant Colony Metaphor. IEEE Transactions on Evolutionary Computation, 2009, 13, 350-368.	7.5	43
100	Evolutionary multiobjective optimization in dynamic environments: A set of novel benchmark functions. , 2014, , .		43
101	A Review of Features and Limitations of Existing Scalable Multiobjective Test Suites. IEEE Transactions on Evolutionary Computation, 2019, 23, 130-142.	7.5	42
102	Using a new GA-based multiobjective optimization technique for the design of robot arms. Robotica, 1998, 16, 401-414.	1.3	41
103	Evolutionary multiobjective optimization using a cultural algorithm. , 0, , .		41
104	The directed search method for multi-objective memetic algorithms. Computational Optimization and Applications, 2016, 63, 305-332.	0.9	41
105	Multi-Objective Combinatorial Optimization: Problematic and Context. Studies in Computational Intelligence, 2010, , 1-21.	0.7	41
106	Hybridizing evolutionary strategies with continuation methods for solving multi-objective problems. Engineering Optimization, 2008, 40, 383-402.	1.5	40
107	Solving timetabling problems using a cultural algorithm. Applied Soft Computing Journal, 2011, 11, 337-344.	4.1	40
108	Improving the vector generation strategy of Differential Evolution for large-scale optimization. Information Sciences, 2015, 323, 106-129.	4.0	39

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109	Evolutionary multiobjective design of combinational logic circuits. , 0, , .		38
110	A Review of Particle Swarm Optimization Methods Used for Multimodal Optimization. Studies in Computational Intelligence, 2009, , 9-37.	0.7	38
111	A coevolutionary multi-objective evolutionary algorithm. , 0, , .		36
112	A Novel Diversity-Based Replacement Strategy for Evolutionary Algorithms. IEEE Transactions on Cybernetics, 2016, 46, 3233-3246.	6.2	36
113	Handling Constraints in Global Optimization Using an Artificial Immune System. Lecture Notes in Computer Science, 2005, , 234-247.	1.0	36
114	MOEA/D assisted by rbf networks for expensive multi-objective optimization problems. , 2013, , .		35
115	A Diversity-Enhanced Resource Allocation Strategy for Decomposition-Based Multiobjective Evolutionary Algorithm. IEEE Transactions on Cybernetics, 2018, 48, 2388-2401.	6.2	35
116	An Artificial Immune System Heuristic for Generating Short Addition Chains. IEEE Transactions on Evolutionary Computation, 2008, 12, 1-24.	7.5	34
117	Handling Constraints in Genetic Algorithms Using Dominance-based Tournaments. , 2002, , 273-284.		34
118	Multiobjective Optimization Using Ideas from the Clonal Selection Principle. Lecture Notes in Computer Science, 2003, , 158-170.	1.0	33
119	A new multi-objective evolutionary algorithm based on a performance assessment indicator. , 2012, , .		33
120	The Micro Genetic Algorithm 2: Towards Online Adaptation in Evolutionary Multiobjective Optimization. Lecture Notes in Computer Science, 2003, , 252-266.	1.0	33
121	Convergence Analysis of a Multiobjective Artificial Immune System Algorithm. Lecture Notes in Computer Science, 2004, , 226-235.	1.0	32
122	MRMOGA: a new parallel multi-objective evolutionary algorithm based on the use of multiple resolutions. Concurrency Computation Practice and Experience, 2007, 19, 397-441.	1.4	32
123	Convergence speed in multi-objective metaheuristics: Efficiency criteria and empirical study. International Journal for Numerical Methods in Engineering, 2010, 84, 1344-1375.	1.5	32
124	Dynamic Constrained Optimization with offspring repair based Gravitational Search Algorithm. , 2013, , .		32
125	A new proposal for multi-objective optimization using differential evolution and rough sets theory. , 2006, , .		31
126	Evolutionary hidden information detection by granulation-based fitness approximation. Applied Soft Computing Journal, 2010, 10, 719-729.	4.1	31



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127	Incorporation of implicit decision-maker preferences in multi-objective evolutionary optimization using a multi-criteria classification method. <i>Applied Soft Computing Journal</i> , 2017, 50, 48-57.	4.1	31
128	Self-adaptive penalties for GA-based optimization. , 0, , .		30
129	Solving Hard Multiobjective Optimization Problems Using $\hat{\mu}$ -Constraint with Cultured Differential Evolution. <i>Lecture Notes in Computer Science</i> , 2006, , 543-552.	1.0	30
130	A multi-objective evolutionary algorithm based on decomposition for constrained multi-objective optimization. , 2014, , .		30
131	TWO NEW GA-BASED METHODS FOR MULTIOBJECTIVE OPTIMIZATION. <i>Civil Engineering and Environmental Systems</i> , 1998, 15, 207-243.	0.4	29
132	Optimization with constraints using a cultured differential evolution approach. , 2005, , .		29
133	Asymptotic convergence of metaheuristics for multiobjective optimization problems. <i>Soft Computing</i> , 2006, 10, 1001-1005.	2.1	29
134	A ranking method based on the R2 indicator for many-objective optimization. , 2013, , .		29
135	IGD <sup>+</sup> -EMOA: A multi-objective evolutionary algorithm based on IGD <sup>+</sup> . , 2016, , .		29
136	A new indicator-based many-objective ant colony optimizer for continuous search spaces. <i>Swarm Intelligence</i> , 2017, 11, 71-100.	1.3	29
137	Study of preference relations in many-objective optimization. , 2009, , .		28
138	A Hybrid Evolutionary Immune Algorithm for Multiobjective Optimization Problems. <i>IEEE Transactions on Evolutionary Computation</i> , 2015, , 1-1.	7.5	28
139	A novel multi-objective immune algorithm with a decomposition-based clonal selection. <i>Applied Soft Computing Journal</i> , 2019, 81, 105490.	4.1	28
140	A spatial land-use planning support system based on game theory. <i>Land Use Policy</i> , 2020, 99, 105013.	2.5	28
141	Guest editorial: special issue on evolutionary multiobjective optimization. <i>IEEE Transactions on Evolutionary Computation</i> , 2003, 7, 97-99.	7.5	27
142	Handling Constraints in Particle Swarm Optimization Using a Small Population Size. , 2007, , 41-51.		27
143	Multi-objective Evolutionary Algorithms in Real-World Applications: Some Recent Results and Current Challenges. <i>Computational Methods in Applied Sciences (Springer)</i> , 2015, , 3-18.	0.1	27
144	Sequence-Based Deterministic Initialization for Evolutionary Algorithms. <i>IEEE Transactions on Cybernetics</i> , 2017, 47, 2911-2923.	6.2	27

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145	A proposal to use stripes to maintain diversity in a multi-objective particle swarm optimizer. , 0, , .		26
146	Seeding the initial population of a multi-objective evolutionary algorithm using gradient-based information. , 2008, , .		26
147	Guest Editorial Special Issue on Differential Evolution. IEEE Transactions on Evolutionary Computation, 2011, 15, 1-3.	7.5	26
148	Surrogate-assisted multi-objective model selection for support vector machines. Neurocomputing, 2015, 150, 163-172.	3.5	26
149	A novel multi-objective evolutionary algorithm with dynamic decomposition strategy. Swarm and Evolutionary Computation, 2019, 48, 182-200.	4.5	26
150	An Effective Ensemble Framework for Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2019, 23, 645-659.	7.5	26
151	A modified version of a Tê€Cell Algorithm for constrained optimization problems. International Journal for Numerical Methods in Engineering, 2010, 84, 351-378.	1.5	25
152	On the adaptation of the mutation scale factor in differential evolution. Optimization Letters, 2015, 9, 189-198.	0.9	25
153	An Overview of Weighted and Unconstrained Scalarizing Functions. Lecture Notes in Computer Science, 2017, , 499-513.	1.0	25
154	A Self-Guided Reference Vector Strategy for Many-Objective Optimization. IEEE Transactions on Cybernetics, 2022, 52, 1164-1178.	6.2	25
155	Reactive Power Handling by a Multi-Objective Teaching Learning Optimizer Based on Decomposition. IEEE Transactions on Power Systems, 2013, 28, 3629-3637.	4.6	24
156	Analysis of leader selection strategies in a multi-objective Particle Swarm Optimizer. , 2013, , .		24
157	Multi-objective model type selection. Neurocomputing, 2014, 146, 83-94.	3.5	24
158	Objective space partitioning using conflict information for solving many-objective problems. Information Sciences, 2014, 268, 305-327.	4.0	24
159	Approximating Complex Pareto Fronts With Predefined Normal-Boundary Intersection Directions. IEEE Transactions on Evolutionary Computation, 2020, 24, 809-823.	7.5	24
160	A comparative study of the effect of parameter scalability in multi-objective metaheuristics. , 2008, , .		23
161	Parametric reconfiguration improvement in non-iterative concurrent mechatronic design using an evolutionary-based approach. Engineering Applications of Artificial Intelligence, 2011, 24, 757-771.	4.3	23
162	MB-GNG: Addressing drawbacks in multi-objective optimization estimation of distribution algorithms. Operations Research Letters, 2011, 39, 150-154.	0.5	23

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163	MOPSOhv: A new hypervolume-based multi-objective particle swarm optimizer. , 2014, , .		23
164	A novel approach to select the best portfolio considering the preferences of the decision maker. Swarm and Evolutionary Computation, 2019, 46, 140-153.	4.5	23
165	Approximating the Knee of an MOP with Stochastic Search Algorithms. Lecture Notes in Computer Science, 2008, , 795-804.	1.0	23
166	Adding a diversity mechanism to a simple evolution strategy to solve constrained optimization problems. , 0, , .		22
167	GD-MOEA: A New Multi-Objective Evolutionary Algorithm Based on the Generational Distance Indicator. Lecture Notes in Computer Science, 2015, , 156-170.	1.0	22
168	MC2ESVM: Multiclass Classification Based on Cooperative Evolution of Support Vector Machines. IEEE Computational Intelligence Magazine, 2018, 13, 18-29.	3.4	22
169	A Fuzzy Decomposition-Based Multi/Many-Objective Evolutionary Algorithm. IEEE Transactions on Cybernetics, 2022, 52, 3495-3509.	6.2	22
170	A Cultural Algorithm with Differential Evolution to Solve Constrained Optimization Problems. Lecture Notes in Computer Science, 2004, , 881-890.	1.0	21
171	Preference incorporation to solve many-objective airfoil design problems. , 2011, , .		21
172	A hybrid surrogate-based approach for evolutionary multi-objective optimization. , 2013, , .		21
173	Combining surrogate models and local search for dealing with expensive multi-objective optimization problems. , 2013, , .		21
174	Multiobjective Personalized Recommendation Algorithm Using Extreme Point Guided Evolutionary Computation. Complexity, 2018, 2018, 1-18.	0.9	21
175	Reliable Link Inference for Network Data With Community Structures. IEEE Transactions on Cybernetics, 2019, 49, 3347-3361.	6.2	21
176	Handling uncertainty through confidence intervals in portfolio optimization. Swarm and Evolutionary Computation, 2019, 44, 774-787.	4.5	21
177	A Study of Convergence Speed in Multi-objective Metaheuristics. Lecture Notes in Computer Science, 2008, , 763-772.	1.0	21
178	A genetic programming approach to logic function synthesis by means of multiplexers. , 0, , .		20
179	Evolutionary Black-Box Topology Optimization: Challenges and Promises. IEEE Transactions on Evolutionary Computation, 2020, 24, 613-633.	7.5	20
180	Micro-MOPSO: A Multi-Objective Particle Swarm Optimizer That Uses a Very Small Population Size. Studies in Computational Intelligence, 2010, , 83-104.	0.7	20

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181	A new multi-objective evolutionary algorithm: neighbourhood exploring evolution strategy. <i>Engineering Optimization</i> , 2005, 37, 351-379.	1.5	19
182	Convergence of stochastic search algorithms to gap-free pareto front approximations. , 2007, , .		19
183	Integration of structure and control using an evolutionary approach: an application to the optimal concurrent design of a CVT. <i>International Journal for Numerical Methods in Engineering</i> , 2007, 71, 883-901.	1.5	19
184	Evolutionary multiobjective optimization. <i>Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery</i> , 2011, 1, 444-447.	4.6	19
185	A direct local search mechanism for decomposition-based multi-objective evolutionary algorithms. , 2012, , .		19
186	Constraint-Handling Techniques used with Evolutionary Algorithms. , 2016, , .		19
187	Evolutionary-based tailoring of synthetic instances for the Knapsack problem. <i>Soft Computing</i> , 2019, 23, 12711-12728.	2.1	19
188	Fuzzy Rule-Based Design of Evolutionary Algorithm for Optimization. <i>IEEE Transactions on Cybernetics</i> , 2019, 49, 301-314.	6.2	19
189	Cost-Aware Robust Control of Signed Networks by Using a Memetic Algorithm. <i>IEEE Transactions on Cybernetics</i> , 2020, 50, 4430-4443.	6.2	19
190	An Ensemble Surrogate-Based Framework for Expensive Multiobjective Evolutionary Optimization. <i>IEEE Transactions on Evolutionary Computation</i> , 2022, 26, 631-645.	7.5	19
191	On the Effect of the Cooperation of Indicator-Based Multiobjective Evolutionary Algorithms. <i>IEEE Transactions on Evolutionary Computation</i> , 2021, 25, 681-695.	7.5	19
192	Parallel Multi-Objective Evolutionary Algorithms: A Comprehensive Survey. <i>Swarm and Evolutionary Computation</i> , 2021, 67, 100960.	4.5	19
193	An Introduction to Evolutionary Algorithms and Their Applications. <i>Lecture Notes in Computer Science</i> , 2005, , 425-442.	1.0	19
194	EMOPSO: A Multi-Objective Particle Swarm Optimizer with Emphasis on Efficiency. , 2007, , 272-285.		19
195	An Alternative Preference Relation to Deal with Many-Objective Optimization Problems. <i>Lecture Notes in Computer Science</i> , 2013, , 291-306.	1.0	19
196	Two novel approaches for many-objective optimization. , 2010, , .		18
197	Improving the diversity preservation of multi-objective approaches used for single-objective optimization. , 2013, , .		18
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