Yaochu Jin

List of Publications by Year
in descending order

454 papers	29,160 citations	6254 80 h-index	6654 156 g-index
467 all docs	467 docs citations	467 times ranked	11208 citing authors

#	Article	IF	Citations
1	PlatEMO: A MATLAB Platform for Evolutionary Multi-Objective Optimization [Educational Forum]. IEEE Computational Intelligence Magazine, 2017, 12, 73-87.	3.2	1,366
2	Evolutionary Optimization in Uncertain Environments—A Survey. IEEE Transactions on Evolutionary Computation, 2005, 9, 303-317.	10.0	1,269
3	A Reference Vector Guided Evolutionary Algorithm for Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2016, 20, 773-791.	10.0	1,140
4	Surrogate-assisted evolutionary computation: Recent advances and future challenges. Swarm and Evolutionary Computation, 2011, 1, 61-70.	8.1	1,020
5	A Competitive Swarm Optimizer for Large Scale Optimization. IEEE Transactions on Cybernetics, 2015, 45, 191-204.	9.5	686
6	A Knee Point-Driven Evolutionary Algorithm for Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2015, 19, 761-776.	10.0	631
7	RM-MEDA: A Regularity Model-Based Multiobjective Estimation of Distribution Algorithm. IEEE Transactions on Evolutionary Computation, 2008, 12, 41-63.	10.0	626
8	A social learning particle swarm optimization algorithm for scalable optimization. Information Sciences, 2015, 291, 43-60.	6.9	563
9	A framework for evolutionary optimization with approximate fitness functions. IEEE Transactions on Evolutionary Computation, 2002, 6, 481-494.	10.0	502
10	An Indicator-Based Multiobjective Evolutionary Algorithm With Reference Point Adaptation for Better Versatility. IEEE Transactions on Evolutionary Computation, 2018, 22, 609-622.	10.0	446
11	An Efficient Approach to Nondominated Sorting for Evolutionary Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2015, 19, 201-213.	10.0	403
12	Fuzzy modeling of high-dimensional systems: complexity reduction and interpretability improvement. IEEE Transactions on Fuzzy Systems, 2000, 8, 212-221.	9.8	402
13	Generalizing Surrogate-Assisted Evolutionary Computation. IEEE Transactions on Evolutionary Computation, 2010, 14, 329-355.	10.0	387
14	A Decision Variable Clustering-Based Evolutionary Algorithm for Large-Scale Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2018, 22, 97-112.	10.0	381
15	A Surrogate-Assisted Reference Vector Guided Evolutionary Algorithm for Computationally Expensive Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2018, 22, 129-142.	10.0	368
16	Data-Driven Evolutionary Optimization: An Overview and Case Studies. IEEE Transactions on Evolutionary Computation, 2019, 23, 442-458.	10.0	348
17	A Population Prediction Strategy for Evolutionary Dynamic Multiobjective Optimization. IEEE Transactions on Cybernetics, 2014, 44, 40-53.	9.5	325
18	A benchmark test suite for evolutionary many-objective optimization. Complex & Intelligent Systems, 2017, 3, 67-81.	6.5	311

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19	A Survey of Deep Learning Applications to Autonomous Vehicle Control. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 712-733.	8.0	310
20	Pareto-Based Multiobjective Machine Learning: An Overview and Case Studies. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2008, 38, 397-415.	2.9	304
21	A Multiobjective Evolutionary Algorithm Using Gaussian Process-Based Inverse Modeling. IEEE Transactions on Evolutionary Computation, 2015, 19, 838-856.	10.0	295
22	Communication-Efficient Federated Deep Learning With Layerwise Asynchronous Model Update and Temporally Weighted Aggregation. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 4229-4238.	11.3	293
23	Committee-Based Active Learning for Surrogate-Assisted Particle Swarm Optimization of Expensive Problems. IEEE Transactions on Cybernetics, 2017, 47, 2664-2677.	9.5	286
24	Surrogate-Assisted Cooperative Swarm Optimization of High-Dimensional Expensive Problems. IEEE Transactions on Evolutionary Computation, 2017, 21, 644-660.	10.0	284
25	Federated learning on non-IID data: A survey. Neurocomputing, 2021, 465, 371-390.	5.9	277
26	Feature selection for high-dimensional classification using a competitive swarm optimizer. Soft Computing, 2018, 22, 811-822.	3.6	257
27	Introduction to Evolutionary Algorithms. Decision Engineering, 2010, , .	2.0	256
28	A competitive mechanism based multi-objective particle swarm optimizer with fast convergence. Information Sciences, 2018, 427, 63-76.	6.9	250
29	A Classification-Based Surrogate-Assisted Evolutionary Algorithm for Expensive Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2019, 23, 74-88.	10.0	250
30	A Strengthened Dominance Relation Considering Convergence and Diversity for Evolutionary Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2019, 23, 331-345.	10.0	237
31	A Coevolutionary Framework for Constrained Multiobjective Optimization Problems. IEEE Transactions on Evolutionary Computation, 2021, 25, 102-116.	10.0	230
32	Approximating the Set of Pareto-Optimal Solutions in Both the Decision and Objective Spaces by an Estimation of Distribution Algorithm. IEEE Transactions on Evolutionary Computation, 2009, 13, 1167-1189.	10.0	227
33	Test Problems for Large-Scale Multiobjective and Many-Objective Optimization. IEEE Transactions on Cybernetics, 2017, 47, 4108-4121.	9.5	220
34	An Evolutionary Algorithm for Large-Scale Sparse Multiobjective Optimization Problems. IEEE Transactions on Evolutionary Computation, 2020, 24, 380-393.	10.0	208
35	A Many-Objective Evolutionary Algorithm Using A One-by-One Selection Strategy. IEEE Transactions on Cybernetics, 2017, 47, 2689-2702.	9.5	206
36	Big Data Opportunities and Challenges: Discussions from Data Analytics Perspectives [Discussion Forum]. IEEE Computational Intelligence Magazine, 2014, 9, 62-74.	3.2	204

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37	Surrogate-assisted hierarchical particle swarm optimization. Information Sciences, 2018, 454-455, 59-72.	6.9	202
38	Efficient Large-Scale Multiobjective Optimization Based on a Competitive Swarm Optimizer. IEEE Transactions on Cybernetics, 2020, 50, 3696-3708.	9.5	195
39	Accelerating Large-Scale Multiobjective Optimization via Problem Reformulation. IEEE Transactions on Evolutionary Computation, 2019, 23, 949-961.	10.0	181
40	Data-Driven Surrogate-Assisted Multiobjective Evolutionary Optimization of a Trauma System. IEEE Transactions on Evolutionary Computation, 2016, 20, 939-952.	10.0	178
41	Optimization of micro heat exchanger: CFD, analytical approach and multi-objective evolutionary algorithms. International Journal of Heat and Mass Transfer, 2006, 49, 1090-1099.	4.8	174
42	Diversity Assessment in Many-Objective Optimization. IEEE Transactions on Cybernetics, 2017, 47, 1510-1522.	9.5	174
43	A Survey of Evolutionary Algorithms for Multi-Objective Optimization Problems With Irregular Pareto Fronts. IEEE/CAA Journal of Automatica Sinica, 2021, 8, 303-318.	13.1	174
44	Generalized Multitasking for Evolutionary Optimization of Expensive Problems. IEEE Transactions on Evolutionary Computation, 2019, 23, 44-58.	10.0	168
45	Efficient Hierarchical Parallel Genetic Algorithms using Grid computing. Future Generation Computer Systems, 2007, 23, 658-670.	7.5	164
46	Multi-objective hierarchical genetic algorithm for interpretable fuzzy rule-based knowledge extraction. Fuzzy Sets and Systems, 2005, 149, 149-186.	2.7	161
47	On generating FC/sup 3/ fuzzy rule systems from data using evolution strategies. IEEE Transactions on Systems, Man, and Cybernetics, 1999, 29, 829-845.	5.0	157
48	A two-layer surrogate-assisted particle swarm optimization algorithm. Soft Computing, 2015, 19, 1461-1475.	3.6	152
49	Surrogate-Assisted Evolutionary Deep Learning Using an End-to-End Random Forest-Based Performance Predictor. IEEE Transactions on Evolutionary Computation, 2020, 24, 350-364.	10.0	150
50	Multi-Objective Evolutionary Federated Learning. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 1310-1322.	11.3	149
51	Offline Data-Driven Evolutionary Optimization Using Selective Surrogate Ensembles. IEEE Transactions on Evolutionary Computation, 2019, 23, 203-216.	10.0	148
52	Efficient search for robust solutions by means of evolutionary algorithms and fitness approximation. IEEE Transactions on Evolutionary Computation, 2006, 10, 405-420.	10.0	146
53	A systems approach to evolutionary multiobjective structural optimization and beyond. IEEE Computational Intelligence Magazine, 2009, 4, 62-76.	3.2	145
54	Multidirectional Prediction Approach for Dynamic Multiobjective Optimization Problems. IEEE Transactions on Cybernetics, 2019, 49, 3362-3374.	9.5	144

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55	Bio-inspired self-organising multi-robot pattern formation: A review. Robotics and Autonomous Systems, 2017, 91, 83-100.	5.1	142
56	Artificial intelligence in recommender systems. Complex & Intelligent Systems, 2021, 7, 439-457.	6.5	134
57	Evolutionary Multiobjective Blocking Lot-Streaming Flow Shop Scheduling With Machine Breakdowns. IEEE Transactions on Cybernetics, 2019, 49, 184-197.	9.5	133
58	A critical survey of performance indices for multi-objective optimisation. , 0, , .		132
59	A framework for finding robust optimal solutions over time. Memetic Computing, 2013, 5, 3-18.	4.0	130
60	Heterogeneous Ensemble-Based Infill Criterion for Evolutionary Multiobjective Optimization of Expensive Problems. IEEE Transactions on Cybernetics, 2019, 49, 1012-1025.	9.5	129
61	Solving Large-Scale Multiobjective Optimization Problems With Sparse Optimal Solutions via Unsupervised Neural Networks. IEEE Transactions on Cybernetics, 2021, 51, 3115-3128.	9.5	121
62	Prediction-Based Population Re-initialization for Evolutionary Dynamic Multi-objective Optimization. , 2007, , 832-846.		120
63	Stacking-based ensemble learning of decision trees for interpretable prostate cancer detection. Applied Soft Computing Journal, 2019, 77, 188-204.	7.2	120
64	Multiobjective Infill Criterion Driven Gaussian Process-Assisted Particle Swarm Optimization of High-Dimensional Expensive Problems. IEEE Transactions on Evolutionary Computation, 2019, 23, 459-472.	10.0	119
65	Trade-Off between Performance and Robustness: An Evolutionary Multiobjective Approach. Lecture Notes in Computer Science, 2003, , 237-251.	1.3	118
66	An improved ($Î¼+Î»$)-constrained differential evolution for constrained optimization. Information Sciences, 2013, 222, 302-322.	6.9	114
67	A Clustering-Based Adaptive Evolutionary Algorithm for Multiobjective Optimization With Irregular Pareto Fronts. IEEE Transactions on Cybernetics, 2019, 49, 2758-2770.	9.5	114
68	A New Surrogate-Assisted Interactive Genetic Algorithm With Weighted Semisupervised Learning. IEEE Transactions on Cybernetics, 2013, 43, 685-698.	9.5	111
69	Reducing Fitness Evaluations Using Clustering Techniques and Neural Network Ensembles. Lecture Notes in Computer Science, 2004, , 688-699.	1.3	109
70	A Random Forest-Assisted Evolutionary Algorithm for Data-Driven Constrained Multiobjective Combinatorial Optimization of Trauma Systems. IEEE Transactions on Cybernetics, 2020, 50, 536-549.	9.5	109
71	A directed search strategy for evolutionary dynamic multiobjective optimization. Soft Computing, 2015, 19, 3221-3235.	3.6	106
72	Combining Model-based and Genetics-based Offspring Generation for Multi-objective Optimization Using a Convergence Criterion. , 0, , .		104

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73	A new fitness estimation strategy for particle swarm optimization. Information Sciences, 2013, 221, 355-370.	6.9	103
74	Effectiveness and efficiency of non-dominated sorting for evolutionary multi- and many-objective optimization. Complex & Intelligent Systems, 2017, 3, 247-263.	6.5	102
75	A mini-review on preference modeling and articulation in multi-objective optimization: current status and challenges. Complex & Intelligent Systems, 2017, 3, 233-245.	6.5	102
76	Diversity Assessment of Multi-Objective Evolutionary Algorithms: Performance Metric and Benchmark Problems [Research Frontier]. IEEE Computational Intelligence Magazine, 2019, 14, 61-74.	3.2	99
77	Evolutionary Many-Objective Optimization of Hybrid Electric Vehicle Control: From General Optimization to Preference Articulation. IEEE Transactions on Emerging Topics in Computational Intelligence, 2017, 1, 97-111.	4.9	98
78	A data-driven surrogate-assisted evolutionary algorithm applied to a many-objective blast furnace optimization problem. Materials and Manufacturing Processes, 2017, 32, 1172-1178.	4.7	98
79	Evolutionary multi-objective generation of recurrent neural network ensembles for time series prediction. Neurocomputing, 2014, 143, 302-311.	5.9	97
80	A Kriging-Assisted Two-Archive Evolutionary Algorithm for Expensive Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2021, 25, 1013-1027.	10.0	95
81	Evolutionary Multiobjective Optimization Driven by Generative Adversarial Networks (GANs). IEEE Transactions on Cybernetics, 2021, 51, 3129-3142.	9.5	90
82	A radial space division based evolutionary algorithm for many-objective optimization. Applied Soft Computing Journal, 2017, 61, 603-621.	7.2	89
83	Adapting Weighted Aggregation for Multiobjective Evolution Strategies. Lecture Notes in Computer Science, 2001, , 96-110.	1.3	86
84	A Network Reduction-Based Multiobjective Evolutionary Algorithm for Community Detection in Large-Scale Complex Networks. IEEE Transactions on Cybernetics, 2020, 50, 703-716.	9.5	83
85	Balancing Objective Optimization and Constraint Satisfaction in Constrained Evolutionary Multiobjective Optimization. IEEE Transactions on Cybernetics, 2022, 52, 9559-9572.	9.5	83
86	Agent-Based Evolutionary Approach for Interpretable Rule-Based Knowledge Extraction. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2005, 35, 143-155.	2.9	82
87	An improved support vector machine-based diabetic readmission prediction. Computer Methods and Programs in Biomedicine, 2018, 166, 123-135.	4.7	81
88	The security challenges in the IoT enabled cyber-physical systems and opportunities for evolutionary computing & other computational intelligence. , 2016, , .		80
89	Decentralized adaptive fuzzy control of robot manipulators. IEEE Transactions on Systems, Man, and Cybernetics, 1998, 28, 47-57.	5.0	79
90	An improved random forest-based rule extraction method for breast cancer diagnosis. Applied Soft Computing Journal, 2020, 86, 105941.	7.2	79

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91	From federated learning to federated neural architecture search: a survey. Complex & Intelligent Systems, 2021, 7, 639-657.	6.5	77
92	A two-stage R2 indicator based evolutionary algorithm for many-objective optimization. Applied Soft Computing Journal, 2018, 67, 245-260.	7.2	76
93	An adaptive Bayesian approach to surrogate-assisted evolutionary multi-objective optimization. Information Sciences, 2020, 519, 317-331.	6.9	76
94	Constructing Dynamic Optimization Test Problems Using the Multi-objective Optimization Concept. Lecture Notes in Computer Science, 2004, , 525-536.	1.3	75
95	Reduction strategies for hierarchical multi-label classification in protein function prediction. BMC Bioinformatics, 2016, 17, 373.	2.6	75
96	Lamarckian memetic algorithms: local optimum and connectivity structure analysis. Memetic Computing, 2009, 1, 175-190.	4.0	74
97	Large-Scale Evolutionary Multiobjective Optimization Assisted by Directed Sampling. IEEE Transactions on Evolutionary Computation, 2021, 25, 724-738.	10.0	74
98	High-Dimensional Robust Multi-Objective Optimization for Order Scheduling: A Decision Variable Classification Approach. IEEE Transactions on Industrial Informatics, 2019, 15, 293-304.	11.3	73
99	Surrogate-assisted multicriteria optimization: Complexities, prospective solutions, and business case. Journal of Multi-Criteria Decision Analysis, 2017, 24, 5-24.	1.9	70
100	An Enhanced Competitive Swarm Optimizer With Strongly Convex Sparse Operator for Large-Scale Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2022, 26, 859-871.	10.0	69
101	On Test Functions for Evolutionary Multi-objective Optimization. Lecture Notes in Computer Science, 2004, , 792-802.	1.3	68
102	Evolutionary multi-objective blocking lot-streaming flow shop scheduling with interval processing time. Applied Soft Computing Journal, 2016, 42, 229-245.	7.2	68
103	A cellular mechanism for multi-robot construction via evolutionary multi-objective optimization of a gene regulatory network. BioSystems, 2009, 98, 193-203.	2.0	67
104	Evolutionary Large-Scale Multi-Objective Optimization: A Survey. ACM Computing Surveys, 2022, 54, 1-34.	23.0	67
105	Extracting Interpretable Fuzzy Rules from RBF Networks. Neural Processing Letters, 2003, 17, 149-164.	3.2	66
106	A study on metamodeling techniques, ensembles, and multi-surrogates in evolutionary computation. , 2007, , .		66
107	A multi-objective evolutionary algorithm based on an enhanced inverted generational distance metric. , 2016, , .		66
108	Multitasking Multiobjective Evolutionary Operational Indices Optimization of Beneficiation Processes. IEEE Transactions on Automation Science and Engineering, 2019, 16, 1046-1057.	5.2	64

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109	An Adaptive Reference Vector-Guided Evolutionary Algorithm Using Growing Neural Gas for Many-Objective Optimization of Irregular Problems. IEEE Transactions on Cybernetics, 2022, 52, 2698-2711.	9.5	64
110	Ternary Compression for Communication-Efficient Federated Learning. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 1162-1176.	11.3	64
111	Morphogenetic Robotics: An Emerging New Field in Developmental Robotics. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2011, 41, 145-160.	2.9	63
112	Evolution by Adapting Surrogates. Evolutionary Computation, 2013, 21, 313-340.	3.0	62
113	Model-based evolutionary algorithms: a short survey. Complex & Intelligent Systems, 2018, 4, 283-292.	6.5	62
114	A multi-objective evolutionary algorithm guided by directed search for dynamic scheduling. Computers and Operations Research, 2017, 79, 279-290.	4.0	61
115	Sampling Reference Points on the Pareto Fronts of Benchmark Multi-Objective Optimization Problems. , 2018, , .		61
116	Evolutionary Optimization of High-Dimensional Multiobjective and Many-Objective Expensive Problems Assisted by a Dropout Neural Network. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 2084-2097.	9.3	60
117	Self-organized swarm robot for target search and trapping inspired by bacterial chemotaxis. Robotics and Autonomous Systems, 2015, 72, 83-92.	5.1	58
118	A Multipopulation Evolutionary Algorithm for Solving Large-Scale Multimodal Multiobjective Optimization Problems. IEEE Transactions on Evolutionary Computation, 2021, 25, 405-418.	10.0	58
119	Pattern Recommendation in Task-oriented Applications: A Multi-Objective Perspective [Application Notes]. IEEE Computational Intelligence Magazine, 2017, 12, 43-53.	3.2	57
120	Endocrine-based coevolutionary multi-swarm for multi-objective workflow scheduling in a cloud system. Soft Computing, 2017, 21, 4309-4322.	3.6	56
121	A Hierarchical Gene Regulatory Network for Adaptive Multirobot Pattern Formation. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 805-816.	5.0	55
122	Robust optimization over time &#x2014; A new perspective on dynamic optimization problems. , 2010, , .		54
123	Modeling neural plasticity in echo state networks for classification and regression. Information Sciences, 2016, 364-365, 184-196.	6.9	54
124	Evolutionary Multiobjective Image Feature Extraction in the Presence of Noise. IEEE Transactions on Cybernetics, 2015, 45, 1757-1768.	9.5	52
125	A tree ensemble-based two-stage model for advanced-stage colorectal cancer survival prediction. Information Sciences, 2019, 474, 106-124.	6.9	51
126	Autonomous Self-Reconfiguration of Modular Robots by Evolving a Hierarchical Mechanochemical Model. IEEE Computational Intelligence Magazine, 2011, 6, 43-54.	3.2	49

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127	A repository of real-world datasets for data-driven evolutionary multiobjective optimization. Complex & Intelligent Systems, 2020, 6, 189-197.	6.5	49
128	A Survey of Evolutionary Continuous Dynamic Optimization Over Two Decades—Part B. IEEE Transactions on Evolutionary Computation, 2021, 25, 630-650.	10.0	48
129	A knowledge-based evolutionary proactive scheduling approach in the presence of machine breakdown and deterioration effect. Knowledge-Based Systems, 2015, 90, 70-80.	7.1	47
130	Guiding Evolutionary Multiobjective Optimization With Generic Front Modeling. IEEE Transactions on Cybernetics, 2020, 50, 1106-1119.	9.5	47
131	Approximate non-dominated sorting for evolutionary many-objective optimization. Information Sciences, 2016, 369, 14-33.	6.9	46
132	A complete expected improvement criterion for Gaussian process assisted highly constrained expensive optimization. Information Sciences, 2019, 471, 80-96.	6.9	46
133	A Survey of Evolutionary Continuous Dynamic Optimization Over Two Decades—Part A. IEEE Transactions on Evolutionary Computation, 2021, 25, 609-629.	10.0	45
134	Reconstructing biological gene regulatory networks: where optimization meets big data. Evolutionary Intelligence, 2014, 7, 29-47.	3.6	43
135	An adaptive decomposition-based evolutionary algorithm for many-objective optimization. Information Sciences, 2019, 491, 204-222.	6.9	43
136	Finding Influential Nodes in Multiplex Networks Using a Memetic Algorithm. IEEE Transactions on Cybernetics, 2021, 51, 900-912.	9.5	43
137	Adaptive Reference Vector Generation for Inverse Model Based Evolutionary Multiobjective Optimization with Degenerate and Disconnected Pareto Fronts. Lecture Notes in Computer Science, 2015, , 127-140.	1.3	43
138	A Generic Test Suite for Evolutionary Multifidelity Optimization. IEEE Transactions on Evolutionary Computation, 2018, 22, 836-850.	10.0	41
139	Benchmark Problems and Performance Indicators for Search of Knee Points in Multiobjective Optimization. IEEE Transactions on Cybernetics, 2020, 50, 3531-3544.	9.5	41
140	Surrogate-Assisted Multipopulation Particle Swarm Optimizer for High-Dimensional Expensive Optimization. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 4671-4684.	9.3	41
141	A Bio-Inspired Self-Learning Coevolutionary Dynamic Multiobjective Optimization Algorithm for Internet of Things Services. IEEE Transactions on Evolutionary Computation, 2019, 23, 675-688.	10.0	40
142	Multi-surrogate multi-tasking optimization of expensive problems. Knowledge-Based Systems, 2020, 205, 106262.	7.1	40
143	Surrogate-Assisted Evolutionary Multitasking for Expensive Minimax Optimization in Multiple Scenarios. IEEE Computational Intelligence Magazine, 2021, 16, 34-48.	3.2	40
144	A Cluster-Based Competitive Particle Swarm Optimizer with a Sparse Truncation Operator for Multi-Objective Optimization. Swarm and Evolutionary Computation, 2022, 71, 101083.	8.1	40

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145	A fitness approximation assisted competitive swarm optimizer for large scale expensive optimization problems. Memetic Computing, 2018, 10, 123-134.	4.0	39
146	A Pattern Mining-Based Evolutionary Algorithm for Large-Scale Sparse Multiobjective Optimization Problems. IEEE Transactions on Cybernetics, 2022, 52, 6784-6797.	9.5	39
147	Comparing neural networks and Kriging for fitness approximation in evolutionary optimization. , 0, , .		38
148	A dynamic optimization approach to the design of cooperative co-evolutionary algorithms. Knowledge-Based Systems, 2016, 109, 174-186.	7.1	38
149	Efficient Evolutionary Search of Attention Convolutional Networks via Sampled Training and Node Inheritance. IEEE Transactions on Evolutionary Computation, 2021, 25, 371-385.	10.0	38
150	A multi-objective approach to robust optimization over time considering switching cost. Information Sciences, 2017, 394-395, 183-197.	6.9	37
151	An affinity propagation clustering based particle swarm optimizer for dynamic optimization. Knowledge-Based Systems, 2020, 195, 105711.	7.1	37
152	Particle swarm optimization for network-based data classification. Neural Networks, 2019, 110, 243-255.	5.9	36
153	A Recommender System for Metaheuristic Algorithms for Continuous Optimization Based on Deep Recurrent Neural Networks. IEEE Transactions on Artificial Intelligence, 2020, 1, 5-18.	4.7	36
154	Data-Driven Evolutionary Optimization. Studies in Computational Intelligence, 2021, , .	0.9	36
155	Neural network based fuzzy identification and its application to modeling and control of complex systems. IEEE Transactions on Systems, Man, and Cybernetics, 1995, 25, 990-997.	0.9	35
156	A morphogenetic approach to flexible and robust shape formation for swarm robotic systems. Robotics and Autonomous Systems, 2013, 61, 25-38.	5.1	35
157	Classifier ensembles for image identification using multi-objective Pareto features. Neurocomputing, 2017, 238, 316-327.	5.9	35
158	Multimodal Optimization Enhanced Cooperative Coevolution for Large-Scale Optimization. IEEE Transactions on Cybernetics, 2019, 49, 3507-3520.	9.5	34
159	Paired Offspring Generation for Constrained Large-Scale Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2021, 25, 448-462.	10.0	34
160	Adaptive encoding for aerodynamic shape optimization using evolution strategies. , 0, , .		33
161	Multiâ€objective ensemble generation. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 2015, 5, 234-245.	6.8	33
162	Multi-train: A semi-supervised heterogeneous ensemble classifier. Neurocomputing, 2017, 249, 202-211.	5.9	33

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163	Offline data-driven evolutionary optimization based on tri-training. Swarm and Evolutionary Computation, 2021, 60, 100800.	8.1	33
164	Inverse multi-objective robust evolutionary design. Genetic Programming and Evolvable Machines, 2006, 7, 383-404.	2.2	32
165	Balancing Population- and Individual-Level Adaptation in Changing Environments. Adaptive Behavior, 2009, 17, 153-174.	1.9	32
166	User-oriented many-objective cloud workflow scheduling based on an improved knee point driven evolutionary algorithm. Knowledge-Based Systems, 2017, 135, 113-124.	7.1	32
167	Surrogate-Assisted Robust Optimization of Large-Scale Networks Based on Graph Embedding. IEEE Transactions on Evolutionary Computation, 2020, 24, 735-749.	10.0	32
168	Solving Many-Objective Optimization Problems via Multistage Evolutionary Search. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 3552-3564.	9.3	32
169	Real-World Applications of Multiobjective Optimization. Lecture Notes in Computer Science, 2008, , 285-327.	1.3	31
170	On the Effectiveness of Sampling for Evolutionary Optimization in Noisy Environments. Evolutionary Computation, 2018, 26, 237-267.	3.0	31
171	Neural network regularization and ensembling using multi-objective evolutionary algorithms. , 0, , .		29
172	Modeling Activity-Dependent Plasticity in BCM Spiking Neural Networks With Application to Human Behavior Recognition. IEEE Transactions on Neural Networks, 2011, 22, 1952-1966.	4.2	29
173	A Developmental Approach to Structural Self-Organization in Reservoir Computing. IEEE Transactions on Autonomous Mental Development, 2012, 4, 273-289.	1.6	29
174	$$mu $$ μ JADE: adaptive differential evolution with a small population. Soft Computing, 2016, 20, 4111-4120.	3.6	29
175	Two-stage assortative mating for multi-objective multifactorial evolutionary optimization. , 2017, , .		29
176	Off-line Data-driven Multi-objective Optimization: Knowledge Transfer between Surrogates and Generation of Final Solutions. IEEE Transactions on Evolutionary Computation, 2020, , 1-1.	10.0	29
177	A Multiobjective Evolutionary Algorithm for Finding Knee Regions Using Two Localized Dominance Relationships. IEEE Transactions on Evolutionary Computation, 2021, 25, 145-158.	10.0	29
178	Interpretability-Based Multimodal Convolutional Neural Networks for Skin Lesion Diagnosis. IEEE Transactions on Cybernetics, 2022, 52, 12623-12637.	9.5	29
179	Surrogate-assisted evolutionary multiobjective shape optimization of an air intake ventilation system. , 2017, , .		28
180	Evolutionary multi-objective optimization based ensemble autoencoders for image outlier detection. Neurocomputing, 2018, 309, 192-200.	5.9	28

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181	Co-evolutionary Modular Neural Networks for Automatic Problem Decomposition. , 0, , .		27
182	Multiple-Solution Optimization Strategy for Multirobot Task Allocation. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 4283-4294.	9.3	27
183	A Model-Based Evolutionary Algorithm for Bi-objective Optimization. , 0, , .		26
184	Generating diverse and accurate classifier ensembles using multi-objective optimization. , 2014, , .		26
185	Computational modeling of neural plasticity for self-organization of neural networks. BioSystems, 2014, 125, 43-54.	2.0	25
186	Echo state networks regulated by local intrinsic plasticity rules for regression. Neurocomputing, 2019, 351, 111-122.	5.9	25
187	Evolutionary Computation and Big Data: Key Challenges and Future Directions. Lecture Notes in Computer Science, 2016, , 3-14.	1.3	24
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