

# Xin Yao

## List of Publications by Year in descending order

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689  
papers

42,891  
citations

3731

89  
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3579

181  
g-index

715  
all docs

715  
docs citations

715  
times ranked

19266  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evolutionary programming made faster. IEEE Transactions on Evolutionary Computation, 1999, 3, 82-102.	10.0	3,092
2	Evolving artificial neural networks. Proceedings of the IEEE, 1999, 87, 1423-1447.	21.3	2,137
3	Stochastic ranking for constrained evolutionary optimization. IEEE Transactions on Evolutionary Computation, 2000, 4, 284-294.	10.0	1,410
4	A Survey on Evolutionary Computation Approaches to Feature Selection. IEEE Transactions on Evolutionary Computation, 2016, 20, 606-626.	10.0	1,225
5	Large scale evolutionary optimization using cooperative coevolution. Information Sciences, 2008, 178, 2985-2999.	6.9	834
6	Diversity creation methods: a survey and categorisation. Information Fusion, 2005, 6, 5-20.	19.1	786
7	MWMOTE--Majority Weighted Minority Oversampling Technique for Imbalanced Data Set Learning. IEEE Transactions on Knowledge and Data Engineering, 2014, 26, 405-425.	5.7	759
8	A new evolutionary system for evolving artificial neural networks. IEEE Transactions on Neural Networks, 1997, 8, 694-713.	4.2	751
9	Cooperative Co-Evolution With Differential Grouping for Large Scale Optimization. IEEE Transactions on Evolutionary Computation, 2014, 18, 378-393.	10.0	616
10	Ensemble learning via negative correlation. Neural Networks, 1999, 12, 1399-1404.	5.9	604
11	Many-Objective Evolutionary Algorithms. ACM Computing Surveys, 2015, 48, 1-35.	23.0	592
12	Cooperatively Coevolving Particle Swarms for Large Scale Optimization. IEEE Transactions on Evolutionary Computation, 2012, 16, 210-224.	10.0	578
13	A New Dominance Relation-Based Evolutionary Algorithm for Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2016, 20, 16-37.	10.0	573
14	Two_Arch2: An Improved Two-Archive Algorithm for Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2015, 19, 524-541.	10.0	542
15	Using Class Imbalance Learning for Software Defect Prediction. IEEE Transactions on Reliability, 2013, 62, 434-443.	4.6	424
16	Evolutionary Programming Using Mutations Based on the Levy Probability Distribution. IEEE Transactions on Evolutionary Computation, 2004, 8, 1-13.	10.0	414
17	Multiclass Imbalance Problems: Analysis and Potential Solutions. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 1119-1130.	5.0	413
18	A review of evolutionary artificial neural networks. International Journal of Intelligent Systems, 1993, 8, 539-567.	5.7	373

#	ARTICLE	IF	CITATIONS
19	Evolutionary ensembles with negative correlation learning. IEEE Transactions on Evolutionary Computation, 2000, 4, 380-387.	10.0	363
20	Search Biases in Constrained Evolutionary Optimization. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2005, 35, 233-243.	2.9	363
21	Drift analysis and average time complexity of evolutionary algorithms. Artificial Intelligence, 2001, 127, 57-85.	5.8	358
22	An analysis of diversity measures. Machine Learning, 2006, 65, 247-271.	5.4	343
23	The Impact of Diversity on Online Ensemble Learning in the Presence of Concept Drift. IEEE Transactions on Knowledge and Data Engineering, 2010, 22, 730-742.	5.7	342
24	DDD: A New Ensemble Approach for Dealing with Concept Drift. IEEE Transactions on Knowledge and Data Engineering, 2012, 24, 619-633.	5.7	338
25	Balancing Convergence and Diversity in Decomposition-Based Many-Objective Optimizers. IEEE Transactions on Evolutionary Computation, 2016, 20, 180-198.	10.0	329
26	Diversity analysis on imbalanced data sets by using ensemble models. , 2009, , .		316
27	A benchmark test suite for evolutionary many-objective optimization. Complex & Intelligent Systems, 2017, 3, 67-81.	6.5	311
28	Software Module Clustering as a Multi-Objective Search Problem. IEEE Transactions on Software Engineering, 2011, 37, 264-282.	5.6	288
29	Two-Archive Evolutionary Algorithm for Constrained Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2019, 23, 303-315.	10.0	285
30	Resampling-Based Ensemble Methods for Online Class Imbalance Learning. IEEE Transactions on Knowledge and Data Engineering, 2015, 27, 1356-1368.	5.7	280
31	Decomposition-Based Memetic Algorithm for Multiobjective Capacitated Arc Routing Problem. IEEE Transactions on Evolutionary Computation, 2011, 15, 151-165.	10.0	264
32	A novel evolutionary data mining algorithm with applications to churn prediction. IEEE Transactions on Evolutionary Computation, 2003, 7, 532-545.	10.0	247
33	A constructive algorithm for training cooperative neural network ensembles. IEEE Transactions on Neural Networks, 2003, 14, 820-834.	4.2	245
34	DG2: A Faster and More Accurate Differential Grouping for Large-Scale Black-Box Optimization. IEEE Transactions on Evolutionary Computation, 2017, 21, 929-942.	10.0	241
35	Experimental study on population-based incremental learning algorithms for dynamic optimization problems. Soft Computing, 2005, 9, 815-834.	3.6	233
36	Population-Based Incremental Learning With Associative Memory for Dynamic Environments. IEEE Transactions on Evolutionary Computation, 2008, 12, 542-561.	10.0	232

#	ARTICLE	IF	CITATIONS
37	Simultaneous training of negatively correlated neural networks in an ensemble. IEEE Transactions on Systems, Man, and Cybernetics, 1999, 29, 716-725.	5.0	225
38	EVOLUTIONARY ARTIFICIAL NEURAL NETWORKS. International Journal of Neural Systems, 1993, 04, 203-222.	5.2	220
39	Promises and challenges of evolvable hardware. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 1999, 29, 87-97.	2.9	213
40	Making use of population information in evolutionary artificial neural networks. IEEE Transactions on Systems, Man, and Cybernetics, 1998, 28, 417-425.	5.0	203
41	A study of drift analysis for estimating computation time of evolutionary algorithms. Natural Computing, 2004, 3, 21-35.	3.0	203
42	Quality Evaluation of Solution Sets in Multiobjective Optimisation. ACM Computing Surveys, 2020, 52, 1-38.	23.0	198
43	Evolutionary Generative Adversarial Networks. IEEE Transactions on Evolutionary Computation, 2019, 23, 921-934.	10.0	196
44	Evolving Diverse Ensembles Using Genetic Programming for Classification With Unbalanced Data. IEEE Transactions on Evolutionary Computation, 2013, 17, 368-386.	10.0	186
45	Stochastic Ranking Algorithm for Many-Objective Optimization Based on Multiple Indicators. IEEE Transactions on Evolutionary Computation, 2016, 20, 924-938.	10.0	186
46	A Systematic Study of Online Class Imbalance Learning With Concept Drift. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 4802-4821.	11.3	185
47	A Survey of Automatic Parameter Tuning Methods for Metaheuristics. IEEE Transactions on Evolutionary Computation, 2020, 24, 201-216.	10.0	185
48	Cooperative Co-evolution with delta grouping for large scale non-separable function optimization. , 2010, , .		184
49	Accelerating Large-Scale Multiobjective Optimization via Problem Reformulation. IEEE Transactions on Evolutionary Computation, 2019, 23, 949-961.	10.0	181
50	Memetic Algorithm With Extended Neighborhood Search for Capacitated Arc Routing Problems. IEEE Transactions on Evolutionary Computation, 2009, 13, 1151-1166.	10.0	176
51	Diversity Assessment in Many-Objective Optimization. IEEE Transactions on Cybernetics, 2017, 47, 1510-1522.	9.5	174
52	A Competitive Divide-and-Conquer Algorithm for Unconstrained Large-Scale Black-Box Optimization. ACM Transactions on Mathematical Software, 2016, 42, 1-24.	2.9	172
53	Time complexity of evolutionary algorithms for combinatorial optimization: A decade of results. International Journal of Automation and Computing, 2007, 4, 281-293.	4.5	167
54	A novel co-evolutionary approach to automatic software bug fixing. , 2008, , .		166

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55	Fast evolution strategies. Lecture Notes in Computer Science, 1997, , 149-161.	1.3	162
56	Mathematical modeling and multi-objective evolutionary algorithms applied to dynamic flexible job shop scheduling problems. Information Sciences, 2015, 298, 198-224.	6.9	159
57	Population-Based Algorithm Portfolios for Numerical Optimization. IEEE Transactions on Evolutionary Computation, 2010, 14, 782-800.	10.0	157
58	Cooperative Co-evolution for large scale optimization through more frequent random grouping. , 2010, , .		154
59	Towards an analytic framework for analysing the computation time of evolutionary algorithms. Artificial Intelligence, 2003, 145, 59-97.	5.8	153
60	A Survey on Problem Models and Solution Approaches to Rescheduling in Railway Networks. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 2997-3016.	8.0	153
61	Ensemble Learning Using Multi-Objective Evolutionary Algorithms. Mathematical Modelling and Algorithms, 2006, 5, 417-445.	0.5	151
62	From an individual to a population: an analysis of the first hitting time of population-based evolutionary algorithms. IEEE Transactions on Evolutionary Computation, 2002, 6, 495-511.	10.0	135
63	Self-adaptive differential evolution with neighborhood search. , 2008, , .		132
64	Evolving hybrid ensembles of learning machines for better generalisation. Neurocomputing, 2006, 69, 686-700.	5.9	131
65	Dynamic Sampling Approach to Training Neural Networks for Multiclass Imbalance Classification. IEEE Transactions on Neural Networks and Learning Systems, 2013, 24, 647-660.	11.3	131
66	A framework for finding robust optimal solutions over time. Memetic Computing, 2013, 5, 3-18.	4.0	130
67	Online Ensemble Learning of Data Streams with Gradually Evolved Classes. IEEE Transactions on Knowledge and Data Engineering, 2016, 28, 1532-1545.	5.7	130
68	A Memetic Algorithm for VLSI Floorplanning. IEEE Transactions on Systems, Man, and Cybernetics, 2007, 37, 62-69.	5.0	129
69	Towards designing artificial neural networks by evolution. Applied Mathematics and Computation, 1998, 91, 83-90.	2.2	126
70	Empirical analysis of evolutionary algorithms with immigrants schemes for dynamic optimization. Memetic Computing, 2009, 1, 3-24.	4.0	119
71	Short-Term Load Forecasting with Neural Network Ensembles: A Comparative Study [Application Notes]. IEEE Computational Intelligence Magazine, 2011, 6, 47-56.	3.2	118
72	Multiobjective Neural Network Ensembles Based on Regularized Negative Correlation Learning. IEEE Transactions on Knowledge and Data Engineering, 2010, 22, 1738-1751.	5.7	116

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73	Regularized Negative Correlation Learning for Neural Network Ensembles. IEEE Transactions on Neural Networks, 2009, 20, 1962-1979.	4.2	114
74	Corner Sort for Pareto-Based Many-Objective Optimization. IEEE Transactions on Cybernetics, 2014, 44, 92-102.	9.5	111
75	An Evolutionary Multiobjective Approach to Sparse Reconstruction. IEEE Transactions on Evolutionary Computation, 2014, 18, 827-845.	10.0	110
76	A Learning-to-Rank Approach to Software Defect Prediction. IEEE Transactions on Reliability, 2015, 64, 234-246.	4.6	107
77	Dynamic Multiobjectives Optimization With a Changing Number of Objectives. IEEE Transactions on Evolutionary Computation, 2018, 22, 157-171.	10.0	106
78	Evolving artificial neural network ensembles. IEEE Computational Intelligence Magazine, 2008, 3, 31-42.	3.2	105
79	Cooperative Coevolution With Route Distance Grouping for Large-Scale Capacitated Arc Routing Problems. IEEE Transactions on Evolutionary Computation, 2014, 18, 435-449.	10.0	105
80	Ensembles and locality: Insight on improving software effort estimation. Information and Software Technology, 2013, 55, 1512-1528.	4.4	104
81	An evolutionary approach to materialized views selection in a data warehouse environment. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2001, 31, 282-294.	2.9	102
82	Interaction dynamics of neuronal oscillations analysed using wavelet transforms. Journal of Neuroscience Methods, 2007, 160, 178-185.	2.5	102
83	A New Adaptive Merging and Growing Algorithm for Designing Artificial Neural Networks. IEEE Transactions on Systems, Man, and Cybernetics, 2009, 39, 705-722.	5.0	102
84	Thermodynamic Pareto optimization of turbojet engines using multi-objective genetic algorithms. International Journal of Thermal Sciences, 2005, 44, 1061-1071.	4.9	100
85	Probabilistic Classification Vector Machines. IEEE Transactions on Neural Networks, 2009, 20, 901-914.	4.2	99
86	Evolutionary Path Control Strategy for Solving Many-Objective Optimization Problem. IEEE Transactions on Cybernetics, 2015, 45, 702-715.	9.5	99
87	Recent Advances in Evolutionary Computation. Journal of Computer Science and Technology, 2006, 21, 1-18.	1.5	97
88	A large population size can be unhelpful in evolutionary algorithms. Theoretical Computer Science, 2012, 436, 54-70.	0.9	96
89	Relationships between Diversity of Classification Ensembles and Single-Class Performance Measures. IEEE Transactions on Knowledge and Data Engineering, 2013, 25, 206-219.	5.7	96
90	A Scalable Indicator-Based Evolutionary Algorithm for Large-Scale Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2019, 23, 525-537.	10.0	96

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91	Scalability of generalized adaptive differential evolution for large-scale continuous optimization. <i>Soft Computing</i> , 2011, 15, 2141-2155.	3.6	95
92	A novel evolutionary algorithm for determining unified creep damage constitutive equations. <i>International Journal of Mechanical Sciences</i> , 2002, 44, 987-1002.	6.7	94
93	Continuous Dynamic Constrained Optimization—The Challenges. <i>IEEE Transactions on Evolutionary Computation</i> , 2012, 16, 769-786.	10.0	94
94	Speciation as automatic categorical modularization. <i>IEEE Transactions on Evolutionary Computation</i> , 1997, 1, 101-108.	10.0	92
95	Multilevel cooperative coevolution for large scale optimization. , 2008, , .		92
96	Predictive Ensemble Pruning by Expectation Propagation. <i>IEEE Transactions on Knowledge and Data Engineering</i> , 2009, 21, 999-1013.	5.7	92
97	Efficient Resource Allocation in Cooperative Co-Evolution for Large-Scale Global Optimization. <i>IEEE Transactions on Evolutionary Computation</i> , 2017, 21, 493-505.	10.0	92
98	Linear dimensionality reduction using relevance weighted LDA. <i>Pattern Recognition</i> , 2005, 38, 485-493.	8.1	91
99	Making a Difference to Differential Evolution. , 2007, , 397-414.		90
100	Evolutionary Multiobjective Optimization-Based Multimodal Optimization: Fitness Landscape Approximation and Peak Detection. <i>IEEE Transactions on Evolutionary Computation</i> , 2018, 22, 692-706.	10.0	90
101	Robust Online Time Series Prediction with Recurrent Neural Networks. , 2016, , .		88
102	An evolutionary clustering algorithm for gene expression microarray data analysis. <i>IEEE Transactions on Evolutionary Computation</i> , 2006, 10, 296-314.	10.0	87
103	Tackling high dimensional nonseparable optimization problems by cooperatively coevolving particle swarms. , 2009, , .		87
104	A cooperative coevolutionary algorithm with Correlation based Adaptive Variable Partitioning. , 2009, , .		86
105	Dynamic combinatorial optimisation problems: an analysis of the subset sum problem. <i>Soft Computing</i> , 2011, 15, 1723-1734.	3.6	86
106	Convex Hull-Based Multiobjective Genetic Programming for Maximizing Receiver Operating Characteristic Performance. <i>IEEE Transactions on Evolutionary Computation</i> , 2015, 19, 188-200.	10.0	86
107	Differential evolution for high-dimensional function optimization. , 2007, , .		85
108	Multiple Choices and Reputation in Multiagent Interactions. <i>IEEE Transactions on Evolutionary Computation</i> , 2007, 11, 689-711.	10.0	84

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109	Behavioral Diversity, Choices and Noise in the Iterated Prisoner's Dilemma. IEEE Transactions on Evolutionary Computation, 2005, 9, 540-551.	10.0	83
110	Learning in the Model Space for Cognitive Fault Diagnosis. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 124-136.	11.3	83
111	How to Read Many-Objective Solution Sets in Parallel Coordinates [Educational Forum]. IEEE Computational Intelligence Magazine, 2017, 12, 88-100.	3.2	83
112	An empirical study of genetic operators in genetic algorithms. Microprocessing and Microprogramming, 1993, 38, 707-714.	0.2	82
113	Neural-Based Learning Classifier Systems. IEEE Transactions on Knowledge and Data Engineering, 2008, 20, 26-39.	5.7	82
114	Analysis of the $(1+1)$ -EA for Finding Approximate Solutions to Vertex Cover Problems. IEEE Transactions on Evolutionary Computation, 2009, 13, 1006-1029.	10.0	82
115	Concept Drift Adaptation by Exploiting Historical Knowledge. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 4822-4832.	11.3	82
116	Search based software testing of object-oriented containers. Information Sciences, 2008, 178, 3075-3095.	6.9	81
117	Smart use of computational resources based on contribution for cooperative co-evolutionary algorithms. , 2011, , .		81
118	What Weights Work for You? Adapting Weights for Any Pareto Front Shape in Decomposition-Based Evolutionary Multiobjective Optimisation. Evolutionary Computation, 2020, 28, 227-253.	3.0	81
119	A Survey of Self-Awareness and Its Application in Computing Systems. , 2011, , .		80
120	Materialized view selection as constrained evolutionary optimization. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2003, 33, 458-467.	2.9	79
121	Scaling Up Estimation of Distribution Algorithms for Continuous Optimization. IEEE Transactions on Evolutionary Computation, 2013, 17, 797-822.	10.0	79
122	A Hybrid Hopfield Network-Genetic Algorithm Approach for the Terminal Assignment Problem. IEEE Transactions on Systems, Man, and Cybernetics, 2004, 34, 2343-2353.	5.0	77
123	Gene selection algorithms for microarray data based on least squares support vector machine. BMC Bioinformatics, 2006, 7, 95.	2.6	77
124	Reusing Genetic Programming for Ensemble Selection in Classification of Unbalanced Data. IEEE Transactions on Evolutionary Computation, 2014, 18, 893-908.	10.0	76
125	Multi-Objective Approaches to Optimal Testing Resource Allocation in Modular Software Systems. IEEE Transactions on Reliability, 2010, 59, 563-575.	4.6	75
126	Metaheuristics for agricultural land use optimization. A review. Agronomy for Sustainable Development, 2015, 35, 975-998.	5.3	75

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127	Meta-Heuristic Algorithms in Car Engine Design: A Literature Survey. IEEE Transactions on Evolutionary Computation, 2015, 19, 609-629.	10.0	75
128	Bagging and Boosting Negatively Correlated Neural Networks. IEEE Transactions on Systems, Man, and Cybernetics, 2008, 38, 771-784.	5.0	73
129	Analysis of Computational Time of Simple Estimation of Distribution Algorithms. IEEE Transactions on Evolutionary Computation, 2010, 14, 1-22.	10.0	73
130	A New Multi-objective Evolutionary Optimisation Algorithm: The Two-Archive Algorithm. , 2006, , .		72
131	Dynamical characteristics of pre-epileptic seizures in rats with recurrence quantification analysis. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 333, 164-171.	2.1	71
132	Fractal spectral analysis of pre-epileptic seizures in terms of criticality. Journal of Neural Engineering, 2005, 2, 11-16.	3.5	71
133	A learning framework for online class imbalance learning. , 2013, , .		71
134	Software effort estimation as a multiobjective learning problem. ACM Transactions on Software Engineering and Methodology, 2013, 22, 1-32.	6.0	70
135	Clustering and Learning Gaussian Distribution for Continuous Optimization. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2005, 35, 195-204.	2.9	69
136	Negative correlation learning for classification ensembles. , 2010, , .		68
137	A new evolutionary approach to cutting stock problems with and without contiguity. Computers and Operations Research, 2002, 29, 1641-1659.	4.0	67
138	Synchronization Measurement of Multiple Neuronal Populations. Journal of Neurophysiology, 2007, 98, 3341-3348.	1.8	67
139	Universal multi-objective function for optimising superplastic-damage constitutive equations. Journal of Materials Processing Technology, 2002, 125-126, 199-205.	6.3	66
140	Turning High-Dimensional Optimization Into Computationally Expensive Optimization. IEEE Transactions on Evolutionary Computation, 2018, 22, 143-156.	10.0	66
141	A Survey and Taxonomy of Self-Aware and Self-Adaptive Cloud Autoscaling Systems. ACM Computing Surveys, 2019, 51, 1-40.	23.0	66
142	R-Metric: Evaluating the Performance of Preference-Based Evolutionary Multiobjective Optimization Using Reference Points. IEEE Transactions on Evolutionary Computation, 2018, 22, 821-835.	10.0	65
143	Inverse modelling of multi-objective thermodynamically optimized turbojet engines using GMDH-type neural networks and evolutionary algorithms. Engineering Optimization, 2005, 37, 437-462.	2.6	64
144	Negatively Correlated Search. IEEE Journal on Selected Areas in Communications, 2016, 34, 542-550.	14.0	64

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145	On the Impact of Mutation-Selection Balance on the Runtime of Evolutionary Algorithms. IEEE Transactions on Evolutionary Computation, 2012, 16, 225-241.	10.0	63
146	Estimation of the Distribution Algorithm With a Stochastic Local Search for Uncertain Capacitated Arc Routing Problems. IEEE Transactions on Evolutionary Computation, 2016, 20, 96-109.	10.0	63
147	A new simulated annealing algorithm. International Journal of Computer Mathematics, 1995, 56, 161-168.	1.8	62
148	Benchmarking Optimization Algorithms: An Open Source Framework for the Traveling Salesman Problem. IEEE Computational Intelligence Magazine, 2014, 9, 40-52.	3.2	62
149	Model-based evolutionary algorithms: a short survey. Complex & Intelligent Systems, 2018, 4, 283-292.	6.5	62
150	Simulated annealing with extended neighbourhood. International Journal of Computer Mathematics, 1991, 40, 169-189.	1.8	60
151	Applications notes - Robust route optimization for gritting/salting trucks: A CERCIA experience. IEEE Computational Intelligence Magazine, 2006, 1, 6-9.	3.2	60
152	Model-based kernel for efficient time series analysis. , 2013, , .		60
153	Population-based Algorithm Portfolios with automated constituent algorithms selection. Information Sciences, 2014, 279, 94-104.	6.9	60
154	Static, Dynamic, and Adaptive Heterogeneity in Distributed Smart Camera Networks. ACM Transactions on Autonomous and Adaptive Systems, 2015, 10, 1-30.	0.8	59
155	Evolutionary Large-Scale Multiobjective Optimization for Ratio Error Estimation of Voltage Transformers. IEEE Transactions on Evolutionary Computation, 2020, 24, 868-881.	10.0	59
156	A Memetic Algorithm for Periodic Capacitated Arc Routing Problem. IEEE Transactions on Systems, Man, and Cybernetics, 2011, 41, 1654-1667.	5.0	58
157	Dynamic adaptive search based software engineering. , 2012, , .		58
158	A Note on Problem Difficulty Measures in Black-Box Optimization: Classification, Realizations and Predictability. Evolutionary Computation, 2007, 15, 435-443.	3.0	57
159	The impact of parameter tuning on software effort estimation using learning machines. , 2013, , .		57
160	Objective reduction based on nonlinear correlation information entropy. Soft Computing, 2016, 20, 2393-2407.	3.6	57
161	Unified eigen analysis on multivariate Gaussian based estimation of distribution algorithms. Information Sciences, 2008, 178, 3000-3023.	6.9	56
162	A New Approach for Analyzing Average Time Complexity of Population-Based Evolutionary Algorithms on Unimodal Problems. IEEE Transactions on Systems, Man, and Cybernetics, 2009, 39, 1092-1106.	5.0	56

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163	A Hybrid Ant Colony Optimization Algorithm for the Extended Capacitated Arc Routing Problem. IEEE Transactions on Systems, Man, and Cybernetics, 2011, 41, 1110-1123.	5.0	56
164	Complex Coevolutionary Dynamics—Structural Stability and Finite Population Effects. IEEE Transactions on Evolutionary Computation, 2013, 17, 155-164.	10.0	56
165	Socio-economic vision graph generation and handover in distributed smart camera networks. ACM Transactions on Sensor Networks, 2014, 10, 1-24.	3.6	55
166	Multiline Distance Minimization: A Visualized Many-Objective Test Problem Suite. IEEE Transactions on Evolutionary Computation, 2018, 22, 61-78.	10.0	55
167	CO-EVOLUTION IN ITERATED PRISONER'S DILEMMA WITH INTERMEDIATE LEVELS OF COOPERATION: APPLICATION TO MISSILE DEFENSE. International Journal of Computational Intelligence and Applications, 2002, 02, 83-107.	0.8	54
168	Dynamic evolutionary optimisation. , 2009, , .		54
169	Robust optimization over time &#x2014; A new perspective on dynamic optimization problems. , 2010, , .		54
170	ONLINE CLASS IMBALANCE LEARNING AND ITS APPLICATIONS IN FAULT DETECTION. International Journal of Computational Intelligence and Applications, 2013, 12, 1340001.	0.8	54
171	Concept drift detection for online class imbalance learning. , 2013, , .		53
172	Uncertainty analysis of wind power probability density forecasting based on cubic spline interpolation and support vector quantile regression. Neurocomputing, 2021, 430, 121-137.	5.9	53
173	Architectural Aspects of Self-Aware and Self-Expressive Computing Systems: From Psychology to Engineering. Computer, 2015, 48, 62-70.	1.1	52
174	Integration of Preferences in Decomposition Multiobjective Optimization. IEEE Transactions on Cybernetics, 2018, 48, 3359-3370.	9.5	52
175	Fast Evolutionary Algorithms. Natural Computing Series, 2003, , 45-94.	2.2	52
176	A Global Repair Operator for Capacitated Arc Routing Problem. IEEE Transactions on Systems, Man, and Cybernetics, 2009, 39, 723-734.	5.0	50
177	On the approximation ability of evolutionary optimization with application to minimum set cover. Artificial Intelligence, 2012, 180-181, 20-33.	5.8	50
178	Multiobjective Learning in the Model Space for Time Series Classification. IEEE Transactions on Cybernetics, 2019, 49, 918-932.	9.5	50
179	Hybrid meta-heuristics algorithms for task assignment in heterogeneous computing systems. Computers and Operations Research, 2006, 33, 820-835.	4.0	49
180	Measuring Generalization Performance in Coevolutionary Learning. IEEE Transactions on Evolutionary Computation, 2008, 12, 479-505.	10.0	49

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181	An Evolutionary Approach to the Multidepot Capacitated Arc Routing Problem. IEEE Transactions on Evolutionary Computation, 2010, 14, 356-374.	10.0	49
182	FEMOSAA. ACM Transactions on Software Engineering and Methodology, 2018, 27, 1-50.	6.0	49
183	How to make best use of cross-company data in software effort estimation?. , 2014, , .		48
184	A New Evolutionary Algorithm with Structure Mutation for the Maximum Balanced Biclique Problem. IEEE Transactions on Cybernetics, 2015, 45, 1054-1067.	9.5	48
185	Graph-Based Approaches for Over-Sampling in the Context of Ordinal Regression. IEEE Transactions on Knowledge and Data Engineering, 2015, 27, 1233-1245.	5.7	48
186	Ensemble of Classifiers Based on Multiobjective Genetic Sampling for Imbalanced Data. IEEE Transactions on Knowledge and Data Engineering, 2020, 32, 1104-1115.	5.7	48
187	Scaling Up Dynamic Optimization Problems: A Divide-and-Conquer Approach. IEEE Transactions on Evolutionary Computation, 2020, 24, 1-15.	10.0	48
188	A Survey of Evolutionary Continuous Dynamic Optimization Over Two Decadesâ€”Part B. IEEE Transactions on Evolutionary Computation, 2021, 25, 630-650.	10.0	48
189	Capacitated arc routing problem in uncertain environments. , 2010, , .		47
190	Dynamic Software Project Scheduling through a Proactive-Rescheduling Method. IEEE Transactions on Software Engineering, 2016, 42, 658-686.	5.6	47
191	Multi-objective Improvement of Software Using Co-evolution and Smart Seeding. Lecture Notes in Computer Science, 2008, , 61-70.	1.3	46
192	A multi-objective approach to Redundancy Allocation Problem in parallel-series systems. , 2009, , .		46
193	A New Constructive Algorithm for Architectural and Functional Adaptation of Artificial Neural Networks. IEEE Transactions on Systems, Man, and Cybernetics, 2009, 39, 1590-1605.	5.0	46
194	Cognitive fault diagnosis in Tennessee Eastman Process using learning in the model space. Computers and Chemical Engineering, 2014, 67, 33-42.	3.8	46
195	A new self-adaptation scheme for differential evolution. Neurocomputing, 2014, 146, 2-16.	5.9	46
196	An Efficient Recursive Differential Grouping for Large-Scale Continuous Problems. IEEE Transactions on Evolutionary Computation, 2021, 25, 159-171.	10.0	46
197	Surrogate models in evolutionary single-objective optimization: A new taxonomy and experimental study. Information Sciences, 2021, 562, 414-437.	6.9	46
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