

Ran Cheng

List of Publications by Year in descending order

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85
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86
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86
times ranked

4105
citing authors

#	ARTICLE	IF	CITATIONS
1	RelativeNAS: Relative Neural Architecture Search via Slow-Fast Learning. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 475-489.	7.2	12
2	Accelerating multi-objective neural architecture search by random-weight evaluation. Complex & Intelligent Systems, 2023, 9, 1183-1192.	4.0	4
3	RL-CSL: A Combinatorial Optimization Method Using Reinforcement Learning and Contrastive Self-Supervised Learning. IEEE Transactions on Emerging Topics in Computational Intelligence, 2023, 7, 1010-1024.	3.4	6
4	Evolutionary Large-Scale Dynamic Optimization Using Bilevel Variable Grouping. IEEE Transactions on Cybernetics, 2023, 53, 6937-6950.	6.2	2
5	Adaptive Offspring Generation for Evolutionary Large-Scale Multiobjective Optimization. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 786-798.	5.9	99
6	Benchmarking Continuous Dynamic Optimization: Survey and Generalized Test Suite. IEEE Transactions on Cybernetics, 2022, 52, 3380-3393.	6.2	20
7	Ternary Compression for Communication-Efficient Federated Learning. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 1162-1176.	7.2	64
8	Adaptive Control of Subpopulations in Evolutionary Dynamic Optimization. IEEE Transactions on Cybernetics, 2022, 52, 6476-6489.	6.2	3
9	An inverse design method for supercritical airfoil based on conditional generative models. Chinese Journal of Aeronautics, 2022, 35, 62-74.	2.8	23
10	Adaptive dropout for high-dimensional expensive multiobjective optimization. Complex & Intelligent Systems, 2022, 8, 271-285.	4.0	26
11	Evolutionary Large-Scale Multi-Objective Optimization: A Survey. ACM Computing Surveys, 2022, 54, 1-34.	16.1	67
12	Memory-based variable neighborhood search for green vehicle routing problem with passing-by drivers: a comprehensive perspective. Complex & Intelligent Systems, 2022, 8, 2507-2525.	4.0	6
13	Reference Vector-Assisted Adaptive Model Management for Surrogate-Assisted Many-Objective Optimization. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 7760-7773.	5.9	10
14	Adaptive multiobjective evolutionary algorithm for large-scale transformer ratio error estimation. Memetic Computing, 2022, 14, 237-251.	2.7	1
15	SoloGAN: Multi-domain Multimodal Unpaired Image-to-Image Translation via a Single Generative Adversarial Network. IEEE Transactions on Artificial Intelligence, 2022, 3, 722-737.	3.4	6
16	A Multistage Evolutionary Algorithm for Better Diversity Preservation in Multiobjective Optimization. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 5880-5894.	5.9	54
17	Evolutionary Multiobjective Optimization Driven by Generative Adversarial Networks (GANs). IEEE Transactions on Cybernetics, 2021, 51, 3129-3142.	6.2	90
18	Adaptive simulated binary crossover for rotated multi-objective optimization. Swarm and Evolutionary Computation, 2021, 60, 100759.	4.5	42

#	ARTICLE	IF	CITATIONS
19	Efficient Evolutionary Search of Attention Convolutional Networks via Sampled Training and Node Inheritance. IEEE Transactions on Evolutionary Computation, 2021, 25, 371-385.	7.5	38
20	Solving Many-Objective Optimization Problems via Multistage Evolutionary Search. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 3552-3564.	5.9	32
21	Manifold Learning-Inspired Mating Restriction for Evolutionary Multiobjective Optimization With Complicated Pareto Sets. IEEE Transactions on Cybernetics, 2021, 51, 3325-3337.	6.2	25
22	Dimension Dropout for Evolutionary High-Dimensional Expensive Multiobjective Optimization. Lecture Notes in Computer Science, 2021, , 567-579.	1.0	1
23	Manifold Learning Inspired Mating Restriction for Evolutionary Constrained Multiobjective Optimization. Lecture Notes in Computer Science, 2021, , 296-307.	1.0	1
24	Paired Offspring Generation for Constrained Large-Scale Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2021, 25, 448-462.	7.5	34
25	A multi-stage evolutionary algorithm for multi-objective optimization with complex constraints. Information Sciences, 2021, 560, 68-91.	4.0	79
26	Efficient evolutionary neural architecture search by modular inheritable crossover. Swarm and Evolutionary Computation, 2021, 64, 100894.	4.5	7
27	A Survey of Evolutionary Continuous Dynamic Optimization Over Two Decadesâ€™Part A. IEEE Transactions on Evolutionary Computation, 2021, 25, 609-629.	7.5	45
28	A Survey of Evolutionary Continuous Dynamic Optimization Over Two Decadesâ€™Part B. IEEE Transactions on Evolutionary Computation, 2021, 25, 630-650.	7.5	48
29	Operator-Adapted Evolutionary Large-Scale Multiobjective Optimization for Voltage Transformer Ratio Error Estimation. Lecture Notes in Computer Science, 2021, , 672-683.	1.0	1
30	Population Sizing of Evolutionary Large-Scale Multiobjective Optimization. Lecture Notes in Computer Science, 2021, , 41-52.	1.0	2
31	Solving large-scale many-objective optimization problems by covariance matrix adaptation evolution strategy with scalable small subpopulations. Information Sciences, 2020, 509, 457-469.	4.0	110
32	Guiding Evolutionary Multiobjective Optimization With Generic Front Modeling. IEEE Transactions on Cybernetics, 2020, 50, 1106-1119.	6.2	47
33	Techniques for Accelerating Multi-Objective Evolutionary Algorithms in PlatEMO. , 2020, , .		3
34	Iterated Problem Reformulation for Evolutionary Large-Scale Multiobjective Optimization. , 2020, , .		14
35	Reformulating preferences into constraints for evolutionary multi- and many-objective optimization. Information Sciences, 2020, 541, 1-15.	4.0	15
36	Constructing an automatic diagnosis and severity-classification model for acromegaly using facial photographs by deep learning. Journal of Hematology and Oncology, 2020, 13, 88.	6.9	10

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37	Evolutionary Large-Scale Multiobjective Optimization for Ratio Error Estimation of Voltage Transformers. IEEE Transactions on Evolutionary Computation, 2020, 24, 868-881.	7.5	59
38	Efficient Evolutionary Deep Neural Architecture Search (NAS) by Noisy Network Morphism Mutation. Communications in Computer and Information Science, 2020, , 497-508.	0.4	0
39	Efficient Evolutionary Neural Architecture Search (NAS) by Modular Inheritable Crossover. Communications in Computer and Information Science, 2020, , 761-769.	0.4	1
40	A Strengthened Dominance Relation Considering Convergence and Diversity for Evolutionary Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2019, 23, 331-345.	7.5	237
41	A Hybrid Surrogate-Assisted Evolutionary Algorithm for Computationally Expensive Many-Objective Optimization. , 2019, , .		4
42	Surrogate-Assisted Expensive Many-Objective Optimization by Model Fusion. , 2019, , .		5
43	Diversity Assessment of Multi-Objective Evolutionary Algorithms: Performance Metric and Benchmark Problems [Research Frontier]. IEEE Computational Intelligence Magazine, 2019, 14, 61-74.	3.4	99
44	Accelerating Large-Scale Multiobjective Optimization via Problem Reformulation. IEEE Transactions on Evolutionary Computation, 2019, 23, 949-961.	7.5	181
45	Particle swarm optimization for network-based data classification. Neural Networks, 2019, 110, 243-255.	3.3	36
46	Hydrodynamic coefficients identification of pitch and heave using multi-objective evolutionary algorithm. Ocean Engineering, 2019, 171, 33-48.	1.9	9
47	Solving Incremental Optimization Problems via Cooperative Coevolution. IEEE Transactions on Evolutionary Computation, 2019, 23, 762-775.	7.5	11
48	Evolutionary Multiobjective Optimization-Based Multimodal Optimization: Fitness Landscape Approximation and Peak Detection. IEEE Transactions on Evolutionary Computation, 2018, 22, 692-706.	7.5	90
49	A two-stage R2 indicator based evolutionary algorithm for many-objective optimization. Applied Soft Computing Journal, 2018, 67, 245-260.	4.1	76
50	An Indicator-Based Multiobjective Evolutionary Algorithm With Reference Point Adaptation for Better Versatility. IEEE Transactions on Evolutionary Computation, 2018, 22, 609-622.	7.5	446
51	A Decision Variable Clustering-Based Evolutionary Algorithm for Large-Scale Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2018, 22, 97-112.	7.5	381
52	Feature selection for high-dimensional classification using a competitive swarm optimizer. Soft Computing, 2018, 22, 811-822.	2.1	257
53	A competitive mechanism based multi-objective particle swarm optimizer with fast convergence. Information Sciences, 2018, 427, 63-76.	4.0	250
54	Computational Intelligence-Assisted Understanding of Nature-Inspired Superhydrophobic Behavior. Advanced Science, 2018, 5, 1700520.	5.6	19

#	ARTICLE	IF	CITATIONS
55	Sampling Reference Points on the Pareto Fronts of Benchmark Multi-Objective Optimization Problems. , 2018, , .		61
56	Model-based evolutionary algorithms: a short survey. Complex & Intelligent Systems, 2018, 4, 283-292.	4.0	62
57	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.	3.4	98
58	Surrogate-Assisted Cooperative Swarm Optimization of High-Dimensional Expensive Problems. IEEE Transactions on Evolutionary Computation, 2017, 21, 644-660.	7.5	284
59	A benchmark test suite for evolutionary many-objective optimization. Complex & Intelligent Systems, 2017, 3, 67-81.	4.0	311
60	PlatEMO: A MATLAB Platform for Evolutionary Multi-Objective Optimization [Educational Forum]. IEEE Computational Intelligence Magazine, 2017, 12, 73-87.	3.4	1,366
61	Parallel peaks: A visualization method for benchmark studies of multimodal optimization. , 2017, , .		4
62	Test Problems for Large-Scale Multiobjective and Many-Objective Optimization. IEEE Transactions on Cybernetics, 2017, 47, 4108-4121.	6.2	220
63	Data-Driven Surrogate-Assisted Multi-Objective Optimization of Complex Beneficiation Operational Process. IFAC-PapersOnLine, 2017, 50, 14982-14987.	0.5	7
64	Nature-Inspired Graph Optimization for Dimensionality Reduction. , 2017, , .		3
65	Adjusting Parallel Coordinates for Investigating Multi-objective Search. Lecture Notes in Computer Science, 2017, , 224-235.	1.0	10
66	A multi-objective evolutionary algorithm based on an enhanced inverted generational distance metric. , 2016, , .		66
67	Empirical analysis of a tree-based efficient non-dominated sorting approach for many-objective optimization. , 2016, , .		7
68	Network structural optimization based on swarm intelligence for highlevel classification. , 2016, , .		6
69	A Reference Vector Guided Evolutionary Algorithm for Many-Objective Optimization. IEEE Transactions on Evolutionary Computation, 2016, 20, 773-791.	7.5	1,140
70	Multi-Objective ensemble generation. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 2015, 5, 234-245.	4.6	33
71	Reference vector based a posteriori preference articulation for evolutionary multiobjective optimization. , 2015, , .		11
72	A Competitive Swarm Optimizer for Large Scale Optimization. IEEE Transactions on Cybernetics, 2015, 45, 191-204.	6.2	686

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73	A Multiobjective Evolutionary Algorithm Using Gaussian Process-Based Inverse Modeling. IEEE Transactions on Evolutionary Computation, 2015, 19, 838-856.	7.5	295
74	A social learning particle swarm optimization algorithm for scalable optimization. Information Sciences, 2015, 291, 43-60.	4.0	563
75	An Efficient Approach to Nondominated Sorting for Evolutionary Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2015, 19, 201-213.	7.5	403
76	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.	1.0	43
77	Demonstrator selection in a social learning particle swarm optimizer. , 2014, , .		3
78	Effect of Communication Modes to Swarm Robotic Search. Open Electrical and Electronic Engineering Journal, 2014, 8, 240-244.	0.6	2
79	Simulating swarm behaviours for optimisation by learning from neighbours. , 2013, , .		0
80	A multi-swarm evolutionary framework based on a feedback mechanism. , 2013, , .		10
81	Bisexual evolution: A novel bisexual evolutionary framework based on the Fisher's runaway process. , 2012, , .		0
82	A Novel Selection Operator of Cultural Algorithm. Advances in Intelligent and Soft Computing, 2011, , 71-77.	0.2	14
83	Semantic Image Retrieval Based on Multiple-Instance Learning. , 2010, , .		2
84	A Modified Particle Swarm Optimizer with a Novel Operator. Lecture Notes in Computer Science, 2010, , 293-301.	1.0	1
85	Thematic issue on knowledge and data driven evolutionary multi-objective optimization. Memetic Computing, 0, , .	2.7	2