

Global and Local Surrogate-Assisted Differential Evolution Optimization Problems With Inequality Constraints

IEEE Transactions on Cybernetics

49, 1642-1656

DOI: [10.1109/tcyb.2018.2809430](https://doi.org/10.1109/tcyb.2018.2809430)

Citation Report

#	ARTICLE	IF	CITATIONS
1	A Statistical Study on Parameter Selection of Operators in Continuous State Transition Algorithm. IEEE Transactions on Cybernetics, 2019, 49, 3722-3730.	9.5	59
2	Evolutionary dynamic constrained optimization: Test suite construction and algorithm comparisons. Swarm and Evolutionary Computation, 2019, 50, 100559.	8.1	19
3	Underestimation-Assisted Global-Local Cooperative Differential Evolution and the Application to Protein Structure Prediction. IEEE Transactions on Evolutionary Computation, 2019, 24, 1-1.	10.0	22
4	Location-Sensitive Resource optimization for Profit Maximization in Distributed Data Centers. , 2019, , .		0
5	Hyper-Parameter Optimization Using MARS Surrogate for Machine-Learning Algorithms. IEEE Transactions on Emerging Topics in Computational Intelligence, 2020, 4, 287-297.	4.9	12
6	Efficient Generalized Surrogate-Assisted Evolutionary Algorithm for High-Dimensional Expensive Problems. IEEE Transactions on Evolutionary Computation, 2020, 24, 365-379.	10.0	96
7	A Bilevel Optimization Approach for Joint Offloading Decision and Resource Allocation in Cooperative Mobile Edge Computing. IEEE Transactions on Cybernetics, 2020, 50, 4228-4241.	9.5	74
8	Global and Local Surrogate-Model-Assisted Differential Evolution for Waterflooding Production Optimization. SPE Journal, 2020, 25, 105-118.	3.1	66
9	Multiscale-Network Structure Inversion of Fractured Media Based on a Hierarchical-Parameterization and Data-Driven Evolutionary-Optimization Method. SPE Journal, 2020, 25, 2729-2748.	3.1	23
10	WiSM: Windowing Surrogate Model for Evaluation of Curvature-Constrained Tours With Dubins Vehicle. IEEE Transactions on Cybernetics, 2022, 52, 1302-1311.	9.5	8
11	A Novel TRUST-TECH-Enabled Trajectory-Unified Methodology for Computing Multiple Optimal Solutions of Constrained Nonlinear Optimization: Theory and Computation. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 473-484.	9.3	4
12	Truncation-learning-driven surrogate assisted social learning particle swarm optimization for computationally expensive problem. Applied Soft Computing Journal, 2020, 97, 106812.	7.2	3
13	Novel Multitask Conditional Neural-Network Surrogate Models for Expensive Optimization. IEEE Transactions on Cybernetics, 2022, 52, 3984-3997.	9.5	7
14	Data-Driven Evolutionary Algorithm With Perturbation-Based Ensemble Surrogates. IEEE Transactions on Cybernetics, 2021, 51, 3925-3937.	9.5	65
15	An efficient surrogate-assisted quasi-affine transformation evolutionary algorithm for expensive optimization problems. Knowledge-Based Systems, 2020, 209, 106418.	7.1	41
16	Surrogate-assisted differential evolution for production optimization with nonlinear state constraints. Journal of Petroleum Science and Engineering, 2020, 194, 107441.	4.2	15
17	Rapidly Tuning the PID Controller Based on the Regional Surrogate Model Technique in the UAV Formation. Entropy, 2020, 22, 527.	2.2	3
18	A modified surrogate-assisted multi-swarm artificial bee colony for complex numerical optimization problems. Microprocessors and Microsystems, 2020, 76, 103050.	2.8	8

#	ARTICLE	IF	CITATIONS
19	Semisupervised Approach to Surrogate-Assisted Multiobjective Kernel Intuitionistic Fuzzy Clustering Algorithm for Color Image Segmentation. <i>IEEE Transactions on Fuzzy Systems</i> , 2020, 28, 1023-1034.	9.8	29
20	Kriging-assisted teaching-learning-based optimization (KTLBO) to solve computationally expensive constrained problems. <i>Information Sciences</i> , 2021, 556, 404-435.	6.9	43
21	ExperienceThinking: Constrained hyperparameter optimization based on knowledge and pruning. <i>Knowledge-Based Systems</i> , 2021, 223, 106602.	7.1	6
22	Multi-parameters optimization for electromagnetic acoustic transducers using surrogate-assisted particle swarm optimizer. <i>Mechanical Systems and Signal Processing</i> , 2021, 152, 107337.	8.0	13
23	An efficient surrogate-assisted hybrid optimization algorithm for expensive optimization problems. <i>Information Sciences</i> , 2021, 561, 304-325.	6.9	86
24	A Classifier-Assisted Level-Based Learning Swarm Optimizer for Expensive Optimization. <i>IEEE Transactions on Evolutionary Computation</i> , 2021, 25, 219-233.	10.0	67
25	A Three-Level Radial Basis Function Method for Expensive Optimization. <i>IEEE Transactions on Cybernetics</i> , 2022, 52, 5720-5731.	9.5	23
26	Dimension Dropout for Evolutionary High-Dimensional Expensive Multiobjective Optimization. <i>Lecture Notes in Computer Science</i> , 2021, , 567-579.	1.3	1
27	Instance Selection-Based Surrogate-Assisted Genetic Programming for Feature Learning in Image Classification. <i>IEEE Transactions on Cybernetics</i> , 2023, 53, 1118-1132.	9.5	10
28	Multisurrogate-Assisted Ant Colony Optimization for Expensive Optimization Problems With Continuous and Categorical Variables. <i>IEEE Transactions on Cybernetics</i> , 2022, 52, 11348-11361.	9.5	9
29	An Ensemble Surrogate-Based Framework for Expensive Multiobjective Evolutionary Optimization. <i>IEEE Transactions on Evolutionary Computation</i> , 2022, 26, 631-645.	10.0	19
30	A random forest assisted evolutionary algorithm using competitive neighborhood search for expensive constrained combinatorial optimization. <i>Memetic Computing</i> , 2021, 13, 19-30.	4.0	15
32	Adaptive dropout for high-dimensional expensive multiobjective optimization. <i>Complex & Intelligent Systems</i> , 2022, 8, 271-285.	6.5	26
33	A Collaborative Beetle Antennae Search Algorithm Using Memory Based Adaptive Learning. <i>Applied Artificial Intelligence</i> , 2021, 35, 440-475.	3.2	4
34	Differential evolution using novel individual evaluation and constraint handling techniques for constrained optimization. <i>Soft Computing</i> , 2021, 25, 9025-9044.	3.6	1
35	An Improved Adaptive Differential Evolution Approach for Constrained Optimization Problems. , 2021, , .		2
36	A multi-model assisted differential evolution algorithm for computationally expensive optimization problems. <i>Complex & Intelligent Systems</i> , 2021, 7, 2347-2371.	6.5	6
37	An efficient operation optimization method for the series-parallel fractionation system of industrial hydrocracking. <i>Chemical Engineering Research and Design</i> , 2021, 171, 111-124.	5.6	1

#	ARTICLE	IF	CITATIONS
38	Multiple Penalties and Multiple Local Surrogates for Expensive Constrained Optimization. IEEE Transactions on Evolutionary Computation, 2021, 25, 769-778.	10.0	40
39	An aRBF surrogate-assisted neighborhood field optimizer for expensive problems. Swarm and Evolutionary Computation, 2022, 68, 100972.	8.1	8
40	An efficient constrained global optimization algorithm with a clustering-assisted multiobjective infill criterion using Gaussian process regression for expensive problems. Information Sciences, 2021, 569, 728-745.	6.9	25
41	Metamodel-based multidisciplinary design optimization methods for aerospace system. Astrodynamic, 2021, 5, 185-215.	2.4	27
42	SMGO: A set membership approach to data-driven global optimization. Automatica, 2021, 133, 109890.	5.0	12
43	A double-model differential evolution for constrained waterflooding production optimization. Journal of Petroleum Science and Engineering, 2021, 207, 109059.	4.2	10
44	Partial Evaluation Strategies for Expensive Evolutionary Constrained Optimization. IEEE Transactions on Evolutionary Computation, 2021, 25, 1103-1117.	10.0	21
45	A Local Search with a Surrogate Assisted Option for Instance Reduction. Lecture Notes in Computer Science, 2020, , 578-594.	1.3	1
46	An Enhanced MSIQDE Algorithm With Novel Multiple Strategies for Global Optimization Problems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 1578-1587.	9.3	275
47	Two-Stage Data-Driven Evolutionary Optimization for High-Dimensional Expensive Problems. IEEE Transactions on Cybernetics, 2023, 53, 2368-2379.	9.5	11
48	Solving Expensive Multimodal Optimization Problem by a Decomposition Differential Evolution Algorithm. IEEE Transactions on Cybernetics, 2023, 53, 2236-2246.	9.5	6
49	Surrogate-Assisted Differential Evolution With Region Division for Expensive Optimization Problems With Discontinuous Responses. IEEE Transactions on Evolutionary Computation, 2022, 26, 780-792.	10.0	8
50	On the use of Set Membership theory for global optimization of black-box functions. , 2020, , .		4
51	Revisiting Population Models in Differential Evolution on a Limited Budget of Evaluations. Lecture Notes in Computer Science, 2020, , 257-272.	1.3	0
52	A twofold infill criterion-driven heterogeneous ensemble surrogate-assisted evolutionary algorithm for computationally expensive problems. Knowledge-Based Systems, 2022, 236, 107747.	7.1	15
53	Surrogate-Assisted Differential Evolution Using Knowledge-Transfer-Based Sampling for Expensive Optimization Problems. AIAA Journal, 0, , 1-16.	2.6	0
54	Investigating the Correlation Amongst the Objective and Constraints in Gaussian Process-Assisted Highly Constrained Expensive Optimization. IEEE Transactions on Evolutionary Computation, 2022, 26, 872-885.	10.0	8
55	Multisurrogate-Assisted Multitasking Particle Swarm Optimization for Expensive Multimodal Problems. IEEE Transactions on Cybernetics, 2023, 53, 2516-2530.	9.5	23

#	ARTICLE	IF	CITATIONS
56	A radial basis function surrogate model assisted evolutionary algorithm for high-dimensional expensive optimization problems. Applied Soft Computing Journal, 2022, 116, 108353.	7.2	35
57	Evolutionary Computation for Expensive Optimization: A Survey. , 2022, 19, 3-23.		48
58	A constrained cooperative adaptive multi-population differential evolutionary algorithm for economic load dispatch problems. Applied Soft Computing Journal, 2022, 121, 108719.	7.2	12
59	Learning Boosts Optimisation: Surrogate-Assisted Real Engine Calibration. , 2021, , .		0
60	GL-DDEA: Global and Local Surrogate Based Framework for Solving Offline Data-Driven Evolutionary Optimization. , 2021, , .		0
61	Active Sets for Explicitly Constrained Evolutionary Optimization. Evolutionary Computation, 2022, 30, 531-553.	3.0	1
62	A Stochastic Simulation Optimization-Based Range Gate Pull-Off Jamming Method. IEEE Transactions on Evolutionary Computation, 2023, 27, 580-594.	10.0	20
63	Distributed and Expensive Evolutionary Constrained Optimization With On-Demand Evaluation. IEEE Transactions on Evolutionary Computation, 2023, 27, 671-685.	10.0	17
64	Objective-Constraint Mutual-Guided Surrogate-Based Particle Swarm Optimization for Expensive Constrained Multimodal Problems. IEEE Transactions on Evolutionary Computation, 2023, 27, 908-922.	10.0	4
65	A Surrogate-Assisted Differential Evolution Algorithm for High-Dimensional Expensive Optimization Problems. IEEE Transactions on Cybernetics, 2023, 53, 2685-2697.	9.5	17
66	A Surrogate-Assisted Evolutionary Algorithm for Space Component Thermal Layout Optimization. Space: Science & Technology, 2022, 2022, .	2.5	2
67	Radial basis function-assisted adaptive differential evolution using cooperative dual-phase sampling for high-dimensional expensive optimization problems. Structural and Multidisciplinary Optimization, 2022, 65, .	3.5	2
68	An efficient global optimization algorithm for expensive constrained black-box problems by reducing candidate infilling region. Information Sciences, 2022, 609, 1641-1669.	6.9	6
69	Incremental learning-inspired mating restriction strategy for Evolutionary Multiobjective Optimization. Applied Soft Computing Journal, 2022, 127, 109430.	7.2	2
70	Expensive Multiobjective Optimization Based on Information Transfer Surrogate. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2023, 53, 1684-1696.	9.3	1
71	Edge-Cloud Co-Evolutionary Algorithms for Distributed Data-Driven Optimization Problems. IEEE Transactions on Cybernetics, 2023, 53, 6598-6611.	9.5	13
72	Multi population-based chaotic differential evolution for multi-modal and multi-objective optimization problems. Applied Soft Computing Journal, 2023, 132, 109909.	7.2	5
73	Variable surrogate model-based particle swarm optimization for high-dimensional expensive problems. Complex & Intelligent Systems, 2023, 9, 3887-3935.	6.5	35

#	ARTICLE	IF	CITATIONS
74	Population-based discrete state transition algorithm with decomposition and knowledge guidance applied to electrolytic cell maintenance decision. <i>Applied Soft Computing Journal</i> , 2023, 135, 109996.	7.2	4
75	Surrogate-assisted hybrid evolutionary algorithm with local estimation of distribution for expensive mixed-variable optimization problems. <i>Applied Soft Computing Journal</i> , 2023, 133, 109957.	7.2	9
76	A review of surrogate-assisted evolutionary algorithms for expensive optimization problems. <i>Expert Systems With Applications</i> , 2023, 217, 119495.	7.6	29
77	A Surrogate-Assisted Two-Stage Differential Evolution for Expensive Constrained Optimization. <i>IEEE Transactions on Emerging Topics in Computational Intelligence</i> , 2023, 7, 715-730.	4.9	3
78	Offline Data-Driven Particle Swarm Optimization Assisted by Selective Surrogate Ensembles and Hybrid Search Strategies. , 2022, , .		0
79	A Hybrid Regressor and Classifier-Assisted Evolutionary Algorithm for Expensive Optimization With Incomplete Constraint Information. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2023, 53, 5071-5083.	9.3	9
80	Cable force optimization of cable-stayed bridges: A surrogate model-assisted differential evolution method combined with B-Spline interpolation curves. <i>Engineering Structures</i> , 2023, 283, 115856.	5.3	7
81	Neighborhood evolutionary sampling with dynamic repulsion for expensive multimodal optimization. <i>Information Sciences</i> , 2023, 630, 82-97.	6.9	5
82	Self-adaptive teaching-learning-based optimizer with improved RBF and sparse autoencoder for high-dimensional problems. <i>Information Sciences</i> , 2023, 630, 463-481.	6.9	8
83	Multi-objective global and local Surrogate-Assisted optimization on polymer flooding. <i>Fuel</i> , 2023, 342, 127678.	6.4	5
84	An Enhanced Adaptive Differential Evolution Approach for Constrained Optimization Problems. <i>CMES - Computer Modeling in Engineering and Sciences</i> , 2023, 136, 2841-2860.	1.1	0
85	A Distributed RBF-Assisted Differential Evolution for Distributed Expensive Constrained Optimization. <i>Lecture Notes in Computer Science</i> , 2023, , 1-14.	1.3	0
86	Solving Highly Expensive Optimization Problems via Evolutionary Expected Improvement. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2023, 53, 4843-4855.	9.3	4
87	Surrogate model-driven differential evolution with multi-strategy techniques. , 2022, , .		0
88	Surrogate-assisted multi-objective evolutionary optimization with a multi-offspring method and two infill criteria. <i>Swarm and Evolutionary Computation</i> , 2023, 79, 101315.	8.1	3
89	A New Efficient Method for Computing High-Quality OPF Solutions Based on TRUST-TECH and FFHE. , 2023, , .		0
90	A Surrogate-Assisted Evolutionary Framework With Regions of Interests-Based Data Selection for Expensive Constrained Optimization. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2023, 53, 6268-6280.	9.3	1
91	Multi-surrogate-assisted stochastic fractal search algorithm for high-dimensional expensive problems. <i>Information Sciences</i> , 2023, 640, 119035.	6.9	4

#	ARTICLE	IF	CITATIONS
92	Hybrid Rocket Engine Design Using Pairwise Ranking Surrogate-assisted Differential Evolution. , 2023, , .		0
93	An Efficient Two-Stage Surrogate-Assisted Differential Evolution for Expensive Inequality Constrained Optimization. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2023, 53, 7769-7782.	9.3	1
94	Surrogate-assisted evolutionary optimisation: a novel blueprint and a state of the art survey. Evolutionary Intelligence, 0, , .	3.6	0
95	A framework of global exploration and local exploitation using surrogates for expensive optimization. Knowledge-Based Systems, 2023, 280, 111018.	7.1	0
96	A Surrogate-Ensemble Assisted Coevolutionary Algorithm for Expensive Constrained Multi-Objective Optimization Problems. , 2023, , .		0
97	A novel self-adaptive multi-population quadratic approximation guided jaya for solving real-parameter constrained optimization problems. Expert Systems With Applications, 2024, 238, 121898.	7.6	0
98	Cooperative coevolutionary surrogate ensemble-assisted differential evolution with efficient dual differential grouping for large-scale expensive optimization problems. Complex & Intelligent Systems, 0, , .	6.5	3
99	A multi-surrogate multi-tasking genetic algorithm with an adaptive training sample selection strategy for expensive optimization problems. Engineering Applications of Artificial Intelligence, 2024, 130, 107684.	8.1	0
100	A hierarchical surrogate assisted optimization algorithm using teaching-learning-based optimization and differential evolution for high-dimensional expensive problems. Applied Soft Computing Journal, 2024, 152, 111212.	7.2	0
101	A multi-objective optimization strategy based on combined meta-models: Application to a wind turbine. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 0, , .	2.5	0
102	A Surrogate-Assisted Differential Evolution with fitness-independent parameter adaptation for high-dimensional expensive optimization. Information Sciences, 2024, 662, 120246.	6.9	0
103	A Kriging-assisted multi-stage evolutionary algorithm for expensive many-objective optimization problems. Structural and Multidisciplinary Optimization, 2024, 67, .	3.5	0
104	Surrogate-assisted differential evolution using manifold learning-based sampling for high dimensional expensive constrained optimization problems. Chinese Journal of Aeronautics, 2024, , .	5.3	0