Yaochu Jin

List of Publications by Citations

417 papers	17,536 citations	65 h-index	123 g-index
466 ext. papers	22,530 ext. citations	5.9 avg, IF	7.82 L-index

#	Paper	IF	Citations
417	Evolutionary optimization in uncertain environments-a survey. *IEEE Transactions on Evolutionary Computation*, **2005**, 9, 303-317	15.6	1044
416	Surrogate-assisted evolutionary computation: Recent advances and future challenges. *Swarm and Evolutionary Computation*, **2011**, 1, 61-70	9.8	702
415	A Reference Vector Guided Evolutionary Algorithm for Many-Objective Optimization. *IEEE Transactions on Evolutionary Computation*, **2016**, 20, 773-791	15.6	693
414	PlatEMO: A MATLAB Platform for Evolutionary Multi-Objective Optimization [Educational Forum]. *IEEE Computational Intelligence Magazine*, **2017**, 12, 73-87	5.6	645
413	RM-MEDA: A Regularity Model-Based Multiobjective Estimation of Distribution Algorithm. *IEEE Transactions on Evolutionary Computation*, **2008**, 12, 41-63	15.6	473
412	A Knee Point-Driven Evolutionary Algorithm for Many-Objective Optimization. *IEEE Transactions on Evolutionary Computation*, **2015**, 19, 761-776	15.6	449
411	A competitive swarm optimizer for large scale optimization. *IEEE Transactions on Cybernetics*, **2015**, 45, 191-204	10.2	416
410	A social learning particle swarm optimization algorithm for scalable optimization. *Information Sciences*, **2015**, 291, 43-60	7.7	401
409	A framework for evolutionary optimization with approximate fitness functions. *IEEE Transactions on Evolutionary Computation*, **2002**, 6, 481-494	15.6	399
408	. *IEEE Transactions on Fuzzy Systems*, **2000**, 8, 212-221	8.3	314
407	An Efficient Approach to Nondominated Sorting for Evolutionary Multiobjective Optimization. *IEEE Transactions on Evolutionary Computation*, **2015**, 19, 201-213	15.6	296
406	Generalizing Surrogate-Assisted Evolutionary Computation. *IEEE Transactions on Evolutionary Computation*, **2010**, 14, 329-355	15.6	291
405	An Indicator-Based Multiobjective Evolutionary Algorithm With Reference Point Adaptation for Better Versatility. *IEEE Transactions on Evolutionary Computation*, **2018**, 22, 609-622	15.6	251
404	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		230
403	A Decision Variable Clustering-Based Evolutionary Algorithm for Large-Scale Many-Objective Optimization. *IEEE Transactions on Evolutionary Computation*, **2018**, 22, 97-112	15.6	203
402	A Population Prediction Strategy for Evolutionary Dynamic Multiobjective Optimization. *IEEE Transactions on Cybernetics*, **2014**, 44, 40-53	10.2	198
401	A Surrogate-Assisted Reference Vector Guided Evolutionary Algorithm for Computationally Expensive Many-Objective Optimization. *IEEE Transactions on Evolutionary Computation*, **2018**, 22, 129-142	15.6	194

400	A benchmark test suite for evolutionary many-objective optimization. *Complex & Intelligent Systems* , **2017**, 3, 67-81	7.1	187
399	Introduction to Evolutionary Algorithms. *Decision Engineering*, **2010**,	0.1	187
398	Surrogate-Assisted Cooperative Swarm Optimization of High-Dimensional Expensive Problems. *IEEE Transactions on Evolutionary Computation*, **2017**, 21, 644-660	15.6	185
397	A Multiobjective Evolutionary Algorithm Using Gaussian Process-Based Inverse Modeling. *IEEE Transactions on Evolutionary Computation*, **2015**, 19, 838-856	15.6	176
396	Feature selection for high-dimensional classification using a competitive swarm optimizer. *Soft Computing*, **2018**, 22, 811-822	3.5	174
395	Committee-Based Active Learning for Surrogate-Assisted Particle Swarm Optimization of Expensive Problems. *IEEE Transactions on Cybernetics*, **2017**, 47, 2664-2677	10.2	171
394	Data-Driven Evolutionary Optimization: An Overview and Case Studies. *IEEE Transactions on Evolutionary Computation*, **2019**, 23, 442-458	15.6	160
393	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	15.6	149
392	Optimization of micro heat exchanger: CFD, analytical approach and multi-objective evolutionary algorithms. *International Journal of Heat and Mass Transfer*, **2006**, 49, 1090-1099	4.9	144
391	Big Data Opportunities and Challenges: Discussions from Data Analytics Perspectives [Discussion Forum]. *IEEE Computational Intelligence Magazine*, **2014**, 9, 62-74	5.6	143
390	A Many-Objective Evolutionary Algorithm Using A One-by-One Selection Strategy. *IEEE Transactions on Cybernetics*, **2017**, 47, 2689-2702	10.2	138
389	A competitive mechanism based multi-objective particle swarm optimizer with fast convergence. *Information Sciences*, **2018**, 427, 63-76	7.7	138
388	Efficient Hierarchical Parallel Genetic Algorithms using Grid computing. *Future Generation Computer Systems*, **2007**, 23, 658-670	7.5	138
387	A Classification-Based Surrogate-Assisted Evolutionary Algorithm for Expensive Many-Objective Optimization. *IEEE Transactions on Evolutionary Computation*, **2019**, 23, 74-88	15.6	134
386	Multi-objective hierarchical genetic algorithm for interpretable fuzzy rule-based knowledge extraction. *Fuzzy Sets and Systems*, **2005**, 149, 149-186	3.7	132
385	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	10.3	122
384	Diversity Assessment in Many-Objective Optimization. *IEEE Transactions on Cybernetics*, **2017**, 47, 1510-1522	10.2	120
383	On generating FC(3) fuzzy rule systems from data using evolution strategies. *IEEE Transactions on Systems, Man, and Cybernetics*, **1999**, 29, 829-45		120

382	. *IEEE Transactions on Evolutionary Computation*, **2016**, 20, 939-952	15.6	119
381	Efficient search for robust solutions by means of evolutionary algorithms and fitness approximation. *IEEE Transactions on Evolutionary Computation*, **2006**, 10, 405-420	15.6	119
380	A two-layer surrogate-assisted particle swarm optimization algorithm. *Soft Computing*, **2015**, 19, 1461-1475	3.5	117
379	Surrogate-assisted hierarchical particle swarm optimization. *Information Sciences*, **2018**, 454-455, 59-72	7.7	116
378	Test Problems for Large-Scale Multiobjective and Many-Objective Optimization. *IEEE Transactions on Cybernetics*, **2017**, 47, 4108-4121	10.2	111
377	A critical survey of performance indices for multi-objective optimisation		108
376	A Survey of Deep Learning Applications to Autonomous Vehicle Control. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 22, 712-733	6.1	106
375	A Strengthened Dominance Relation Considering Convergence and Diversity for Evolutionary Many-Objective Optimization. *IEEE Transactions on Evolutionary Computation*, **2019**, 23, 331-345	15.6	101
374	An improved (□+□)-constrained differential evolution for constrained optimization. *Information Sciences*, **2013**, 222, 302-322	7.7	101
373	Trade-Off between Performance and Robustness: An Evolutionary Multiobjective Approach. *Lecture Notes in Computer Science*, **2003**, 237-251	0.9	97
372	A systems approach to evolutionary multiobjective structural optimization and beyond. *IEEE Computational Intelligence Magazine*, **2009**, 4, 62-76	5.6	95
371	Generalized Multitasking for Evolutionary Optimization of Expensive Problems. *IEEE Transactions on Evolutionary Computation*, **2019**, 23, 44-58	15.6	94
370	A new fitness estimation strategy for particle swarm optimization. *Information Sciences*, **2013**, 221, 355-370	7.7	88
369	A New Surrogate-Assisted Interactive Genetic Algorithm With Weighted Semisupervised Learning. *IEEE Transactions on Cybernetics*, **2013**, 43, 685-98	10.2	87
368	Prediction-Based Population Re-initialization for Evolutionary Dynamic Multi-objective Optimization **2007**, 832-846		85
367	Reducing Fitness Evaluations Using Clustering Techniques and Neural Network Ensembles. *Lecture Notes in Computer Science*, **2004**, 688-699	0.9	85
366	. *IEEE Transactions on Evolutionary Computation*, **2019**, 23, 203-216	15.6	82
365	Bio-inspired self-organising multi-robot pattern formation: A review. *Robotics and Autonomous Systems*, **2017**, 91, 83-100	3.5	81

364	Evolutionary Multiobjective Blocking Lot-Streaming Flow Shop Scheduling With Machine Breakdowns. *IEEE Transactions on Cybernetics*, **2019**, 49, 184-197	10.2	81
363	An Evolutionary Algorithm for Large-Scale Sparse Multiobjective Optimization Problems. *IEEE Transactions on Evolutionary Computation*, **2020**, 24, 380-393	15.6	81
362	Accelerating Large-Scale Multiobjective Optimization via Problem Reformulation. *IEEE Transactions on Evolutionary Computation*, **2019**, 23, 949-961	15.6	78
361	Multi-Objective Evolutionary Federated Learning. *IEEE Transactions on Neural Networks and Learning Systems*, **2020**, 31, 1310-1322	10.3	77
360	A framework for finding robust optimal solutions over time. *Memetic Computing*, **2013**, 5, 3-18	3.4	76
359	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	4.1	75
358	Adapting Weighted Aggregation for Multiobjective Evolution Strategies. *Lecture Notes in Computer Science*, **2001**, 96-110	0.9	75
357	A directed search strategy for evolutionary dynamic multiobjective optimization. *Soft Computing*, **2015**, 19, 3221-3235	3.5	74
356	Surrogate-Assisted Evolutionary Deep Learning Using an End-to-End Random Forest-Based Performance Predictor. *IEEE Transactions on Evolutionary Computation*, **2020**, 24, 350-364	15.6	74
355	Multidirectional Prediction Approach for Dynamic Multiobjective Optimization Problems. *IEEE Transactions on Cybernetics*, **2019**, 49, 3362-3374	10.2	73
354	Evolutionary multi-objective generation of recurrent neural network ensembles for time series prediction. *Neurocomputing*, **2014**, 143, 302-311	5.4	71
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350	A radial space division based evolutionary algorithm for many-objective optimization. *Applied Soft Computing Journal*, **2017**, 61, 603-621	7.5	64
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346	Combining Model-based and Genetics-based Offspring Generation for Multi-objective Optimization Using a Convergence Criterion		62
345	Stacking-based ensemble learning of decision trees for interpretable prostate cancer detection. *Applied Soft Computing Journal*, **2019**, 77, 188-204	7.5	60
344	The security challenges in the IoT enabled cyber-physical systems and opportunities for evolutionary computing & other computational intelligence **2016**,		60
343	Advanced Fuzzy Systems Design and Applications. *Studies in Fuzziness and Soft Computing*, **2003**,	0.7	60
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340	A Coevolutionary Framework for Constrained Multiobjective Optimization Problems. *IEEE Transactions on Evolutionary Computation*, **2021**, 25, 102-116	15.6	59
339	Constructing Dynamic Optimization Test Problems Using the Multi-objective Optimization Concept. *Lecture Notes in Computer Science*, **2004**, 525-536	0.9	58
338	Evolutionary multi-objective blocking lot-streaming flow shop scheduling with interval processing time. *Applied Soft Computing Journal*, **2016**, 42, 229-245	7.5	57
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331	Evolution by adapting surrogates. *Evolutionary Computation*, **2013**, 21, 313-40	4.3	51
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329	A Clustering-Based Adaptive Evolutionary Algorithm for Multiobjective Optimization With Irregular Pareto Fronts. *IEEE Transactions on Cybernetics*, **2019**, 49, 2758-2770	10.2	50

328	Autonomous Self-Reconfiguration of Modular Robots by Evolving a Hierarchical Mechanochemical Model. *IEEE Computational Intelligence Magazine*, **2011**, 6, 43-54	5.6	45
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326	A multi-objective evolutionary algorithm based on an enhanced inverted generational distance metric **2016**,		44
325	Endocrine-based coevolutionary multi-swarm for multi-objective workflow scheduling in a cloud system. *Soft Computing*, **2017**, 21, 4309-4322	3.5	43
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321	Diversity Assessment of Multi-Objective Evolutionary Algorithms: Performance Metric and Benchmark Problems [Research Frontier]. *IEEE Computational Intelligence Magazine*, **2019**, 14, 61-74	5.6	41
320	Approximate non-dominated sorting for evolutionary many-objective optimization. *Information Sciences*, **2016**, 369, 14-33	7.7	40
319	A Survey of Evolutionary Algorithms for Multi-Objective Optimization Problems With Irregular Pareto Fronts. *IEEE/CAA Journal of Automatica Sinica*, **2021**, 8, 303-318	7	40
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317	Model-based evolutionary algorithms: a short survey. *Complex & Intelligent Systems*, **2018**, 4, 283-292	7.1	39
316	Self-organized swarm robot for target search and trapping inspired by bacterial chemotaxis. *Robotics and Autonomous Systems*, **2015**, 72, 83-92	3.5	39
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302	A fitness approximation assisted competitive swarm optimizer for large scale expensive optimization problems. *Memetic Computing*, **2018**, 10, 123-134	3.4	32
301	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	0.9	32
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291	A tree ensemble-based two-stage model for advanced-stage colorectal cancer survival prediction. *Information Sciences*, **2019**, 474, 106-124	7.7	28
290	Sampling Reference Points on the Pareto Fronts of Benchmark Multi-Objective Optimization Problems **2018**,		28
289	A Generic Test Suite for Evolutionary Multifidelity Optimization. *IEEE Transactions on Evolutionary Computation*, **2018**, 22, 836-850	15.6	27
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