

# Carlos A Coello Coello

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

463 papers	22,117 citations	58 h-index	141 g-index
508 ext. papers	26,091 ext. citations	4.2 avg, IF	7.58 L-index

#	Paper	IF	Citations
463	An Overall Characterization of the Project Portfolio Optimization Problem and an Approach Based on Evolutionary Algorithms to Address It. <i>Adaptation, Learning, and Optimization</i> , <b>2022</b> , 65-88	0.7	0
462	Preference incorporation into many-objective optimization: An Ant colony algorithm based on interval outranking. <i>Swarm and Evolutionary Computation</i> , <b>2022</b> , 69, 101024	9.8	3
461	Multi-objective Ant Colony Optimization: An Updated Review of Approaches and Applications. <i>Intelligent Systems Reference Library</i> , <b>2022</b> , 1-32	0.8	
460	VSD-MOEA: A Dominance-Based Multi-Objective Evolutionary Algorithm with Explicit Variable Space Diversity Management. <i>Evolutionary Computation</i> , <b>2021</b> , 1-24	4.3	0
459	. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2021</b> , 1-1	15.6	0
458	Adaptive Multilevel Prediction Method for Dynamic Multimodal Optimization. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2021</b> , 25, 463-477	15.6	2
457	Multimodal Multiobjective Evolutionary Optimization With Dual Clustering in Decision and Objective Spaces. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2021</b> , 25, 130-144	15.6	22
456	Decomposition-based multiobjective optimization with bicriteria assisted adaptive operator selection. <i>Swarm and Evolutionary Computation</i> , <b>2021</b> , 60, 100790	9.8	5
455	A parallel naive approach for non-dominated sorting: a theoretical study considering PRAM CREW model. <i>Soft Computing</i> , <b>2021</b> , 25, 73-84	3.5	0
454	An Elite Gene Guided Reproduction Operator for Many-Objective Optimization. <i>IEEE Transactions on Cybernetics</i> , <b>2021</b> , 51, 765-778	10.2	7
453	The Importance of Diversity in Multi-objective Evolutionary Algorithms. <i>Algorithms for Intelligent Systems</i> , <b>2021</b> , 291-298	0.5	
452	An Ensemble Surrogate-based Framework for Expensive Multiobjective Evolutionary Optimization. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2021</b> , 1-1	15.6	2
451	Multi-Objective Evolutionary Algorithms: Past, Present, and Future. <i>Springer Optimization and Its Applications</i> , <b>2021</b> , 137-162	0.4	0
450	Enhancing Robustness and Resilience of Multiplex Networks Against Node-Community Cascading Failures. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , <b>2021</b> , 1-14	7.3	1
449	AdaSwarm: Augmenting Gradient-Based Optimizers in Deep Learning With Swarm Intelligence. <i>IEEE Transactions on Emerging Topics in Computational Intelligence</i> , <b>2021</b> , 1-12	4.1	8
448	A Tutorial On the design, experimentation and application of metaheuristic algorithms to real-World optimization problems. <i>Swarm and Evolutionary Computation</i> , <b>2021</b> , 64, 100888	9.8	33
447	On the Effect of the Cooperation of Indicator-Based Multiobjective Evolutionary Algorithms. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2021</b> , 25, 681-695	15.6	6

446	A Novel Parametric benchmark generator for dynamic multimodal optimization. <i>Swarm and Evolutionary Computation</i> , <b>2021</b> , 65, 100924	9.8	3
445	Uniform mixture design via evolutionary multi-objective optimization. <i>Swarm and Evolutionary Computation</i> , <b>2021</b> , 100979	9.8	1
444	Parallel Multi-Objective Evolutionary Algorithms: A Comprehensive Survey. <i>Swarm and Evolutionary Computation</i> , <b>2021</b> , 67, 100960	9.8	3
443	COARSE-EMOA: An indicator-based evolutionary algorithm for solving equality constrained multi-objective optimization problems. <i>Swarm and Evolutionary Computation</i> , <b>2021</b> , 67, 100983	9.8	1
442	An Overview of Pair-Potential Functions for Multi-objective Optimization. <i>Lecture Notes in Computer Science</i> , <b>2021</b> , 401-412	0.9	2
441	The Influence of Swarm Topologies in Many-Objective Optimization Problems. <i>Lecture Notes in Computer Science</i> , <b>2021</b> , 387-398	0.9	
440	Pro-Reactive Approach for Project Scheduling Under Unpredictable Disruptions. <i>IEEE Transactions on Cybernetics</i> , <b>2021</b> , PP,	10.2	1
439	Evolutionary approach for large-Scale mine scheduling. <i>Information Sciences</i> , <b>2020</b> , 523, 77-90	7.7	6
438	Hybrid evolutionary multi-objective optimisation using outranking-based ordinal classification methods. <i>Swarm and Evolutionary Computation</i> , <b>2020</b> , 54, 100652	9.8	7
437	Using evolutionary computation to infer the decision maker's preference model in presence of imperfect knowledge: A case study in portfolio optimization. <i>Swarm and Evolutionary Computation</i> , <b>2020</b> , 54, 100648	9.8	10
436	SNEGAN: Signed Network Embedding by Using Generative Adversarial Nets. <i>IEEE Transactions on Emerging Topics in Computational Intelligence</i> , <b>2020</b> , 1-14	4.1	1
435	Indicator-based Multi-objective Evolutionary Algorithms. <i>ACM Computing Surveys</i> , <b>2020</b> , 53, 1-35	13.4	37
434	A Self-Guided Reference Vector Strategy for Many-Objective Optimization. <i>IEEE Transactions on Cybernetics</i> , <b>2020</b> ,	10.2	4
433	Cooperative Co-Evolutionary Genetic Programming for High Dimensional Problems. <i>Lecture Notes in Computer Science</i> , <b>2020</b> , 48-62	0.9	2
432	Generation of New Scalarizing Functions Using Genetic Programming. <i>Lecture Notes in Computer Science</i> , <b>2020</b> , 3-17	0.9	0
431	A SHADE-Based Algorithm for Large Scale Global Optimization. <i>Lecture Notes in Computer Science</i> , <b>2020</b> , 650-663	0.9	0
430	An Ensemble Indicator-Based Density Estimator for Evolutionary Multi-objective Optimization. <i>Lecture Notes in Computer Science</i> , <b>2020</b> , 201-214	0.9	2
429	A Study of Swarm Topologies and Their Influence on the Performance of Multi-Objective Particle Swarm Optimizers. <i>Lecture Notes in Computer Science</i> , <b>2020</b> , 285-298	0.9	1

428	Cost-Aware Robust Control of Signed Networks by Using a Memetic Algorithm. <i>IEEE Transactions on Cybernetics</i> , <b>2020</b> , 50, 4430-4443	10.2	11
427	Approximating Complex Pareto Fronts With Predefined Normal-Boundary Intersection Directions. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2020</b> , 24, 809-823	15.6	6
426	Evolutionary Black-Box Topology Optimization: Challenges and Promises. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2020</b> , 24, 613-633	15.6	10
425	Riesz s-energy-based Reference Sets for Multi-Objective optimization <b>2020</b> ,		5
424	A spatial land-use planning support system based on game theory. <i>Land Use Policy</i> , <b>2020</b> , 99, 105013	5.6	13
423	A Fuzzy Decomposition-Based Multi/Many-Objective Evolutionary Algorithm. <i>IEEE Transactions on Cybernetics</i> , <b>2020</b> , PP,	10.2	3
422	A Hybrid Leader Selection Strategy for Many-Objective Particle Swarm Optimization. <i>IEEE Access</i> , <b>2020</b> , 8, 189527-189545	3.5	7
421	A Parallel Island Model for Hypervolume-Based Many-Objective Optimization. <i>Studies in Computational Intelligence</i> , <b>2020</b> , 247-273	0.8	
420	Dynamic urban land-use change management using multi-objective evolutionary algorithms. <i>Soft Computing</i> , <b>2020</b> , 24, 4165-4190	3.5	8
419	Evolutionary multiobjective optimization: open research areas and some challenges lying ahead. <i>Complex &amp; Intelligent Systems</i> , <b>2020</b> , 6, 221-236	7.1	57
418	Evolutionary Algorithm for Project Scheduling under Irregular Resource Changes <b>2019</b> ,		3
417	An Approach for Non-domination Level Update Problem in Steady-State Evolutionary Algorithms With Parallelism <b>2019</b> ,		1
416	Convergence and diversity analysis of indicator-based multi-objective evolutionary algorithms <b>2019</b> ,		5
415	The gEdominance Relation for Preference-Based Evolutionary Multi-Objective Optimization <b>2019</b> ,		2
414	On the construction of pareto-compliant quality indicators <b>2019</b> ,		4
413	A novel multi-objective immune algorithm with a decomposition-based clonal selection. <i>Applied Soft Computing Journal</i> , <b>2019</b> , 81, 105490	7.5	19
412	Bio-inspired computation: Where we stand and what's next. <i>Swarm and Evolutionary Computation</i> , <b>2019</b> , 48, 220-250	9.8	264
411	A novel multi-objective evolutionary algorithm with dynamic decomposition strategy. <i>Swarm and Evolutionary Computation</i> , <b>2019</b> , 48, 182-200	9.8	14

410	A Co-Evolutionary Scheme for Multi-Objective Evolutionary Algorithms Based on $\epsilon$ -Dominance. <i>IEEE Access</i> , <b>2019</b> , 7, 18267-18283	3.5	6
409	Parallelism in divide-and-conquer non-dominated sorting: a theoretical study considering the PRAM-CREW model. <i>Journal of Heuristics</i> , <b>2019</b> , 25, 455-483	1.9	3
408	A novel approach to select the best portfolio considering the preferences of the decision maker. <i>Swarm and Evolutionary Computation</i> , <b>2019</b> , 46, 140-153	9.8	17
407	Evolutionary-based tailoring of synthetic instances for the Knapsack problem. <i>Soft Computing</i> , <b>2019</b> , 23, 12711-12728	3.5	11
406	A Review of Features and Limitations of Existing Scalable Multiobjective Test Suites. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2019</b> , 23, 130-142	15.6	22
405	A Clustering-Based Evolutionary Algorithm for Many-Objective Optimization Problems. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2019</b> , 23, 391-405	15.6	45
404	Parallel Best Order Sort for Non-dominated Sorting: A Theoretical Study Considering the PRAM-CREW Model <b>2019</b> ,		1
403	On the Cooperation of Multiple Indicator-based Multi-Objective Evolutionary Algorithms <b>2019</b> ,		4
402	Operational decomposition for large scale multi-objective optimization problems <b>2019</b> ,		4
401	Divide-and-conquer based non-dominated sorting with Reduced Comparisons. <i>Swarm and Evolutionary Computation</i> , <b>2019</b> , 51, 100580	9.8	1
400	CRI-EMOA: A Pareto-Front Shape Invariant Evolutionary Multi-objective Algorithm. <i>Lecture Notes in Computer Science</i> , <b>2019</b> , 307-318	0.9	5
399	A hybridized angle-encouragement-based decomposition approach for many-objective optimization problems. <i>Applied Soft Computing Journal</i> , <b>2019</b> , 78, 355-372	7.5	8
398	Reliable Link Inference for Network Data With Community Structures. <i>IEEE Transactions on Cybernetics</i> , <b>2019</b> , 49, 3347-3361	10.2	13
397	Handling uncertainty through confidence intervals in portfolio optimization. <i>Swarm and Evolutionary Computation</i> , <b>2019</b> , 44, 774-787	9.8	14
396	A divide-and-conquer based efficient non-dominated sorting approach. <i>Swarm and Evolutionary Computation</i> , <b>2019</b> , 44, 748-773	9.8	11
395	An Effective Ensemble Framework for Multiobjective Optimization. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2019</b> , 23, 645-659	15.6	15
394	Multi-method based algorithm for multi-objective problems under uncertainty. <i>Information Sciences</i> , <b>2019</b> , 481, 81-109	7.7	10
393	Fuzzy Rule-Based Design of Evolutionary Algorithm for Optimization. <i>IEEE Transactions on Cybernetics</i> , <b>2019</b> , 49, 301-314	10.2	8

392	Evolutionary many-objective optimization based on linear assignment problem transformations. <i>Soft Computing</i> , <b>2018</b> , 22, 5491-5512	3.5	5
391	Enhancing Selection Hyper-Heuristics via Feature Transformations. <i>IEEE Computational Intelligence Magazine</i> , <b>2018</b> , 13, 30-41	5.6	13
390	MC2ESVM: Multiclass Classification Based on Cooperative Evolution of Support Vector Machines. <i>IEEE Computational Intelligence Magazine</i> , <b>2018</b> , 13, 18-29	5.6	13
389	Particle Swarm Optimization With a Balanceable Fitness Estimation for Many-Objective Optimization Problems. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2018</b> , 22, 32-46	15.6	116
388	Finding short and implementation-friendly addition chains with evolutionary algorithms. <i>Journal of Heuristics</i> , <b>2018</b> , 24, 457-481	1.9	2
387	Coevolutionary Multiobjective Evolutionary Algorithms: Survey of the State-of-the-Art. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2018</b> , 22, 851-865	15.6	87
386	A Diversity-Enhanced Resource Allocation Strategy for Decomposition-Based Multiobjective Evolutionary Algorithm. <i>IEEE Transactions on Cybernetics</i> , <b>2018</b> , 48, 2388-2401	10.2	25
385	Towards a more general many-objective evolutionary optimizer using multi-indicator density estimation <b>2018</b> ,		1
384	A multi-objective evolutionary hyper-heuristic based on multiple indicator-based density estimators <b>2018</b> ,		8
383	Constraint-handling techniques used with evolutionary algorithms <b>2018</b> ,		5
382	GBOS: Generalized Best Order Sort algorithm for non-dominated sorting. <i>Swarm and Evolutionary Computation</i> , <b>2018</b> , 43, 244-264	9.8	13
381	Multi-objective Optimization <b>2018</b> , 1-28		3
380	Tailoring Instances of the 1D Bin Packing Problem for Assessing Strengths and Weaknesses of Its Solvers. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 373-384	0.9	6
379	An adaptive immune-inspired multi-objective algorithm with multiple differential evolution strategies. <i>Information Sciences</i> , <b>2018</b> , 430-431, 46-64	7.7	40
378	Adaptation of operators and continuous control parameters in differential evolution for constrained optimization. <i>Soft Computing</i> , <b>2018</b> , 22, 6595-6616	3.5	11
377	Multiobjective Personalized Recommendation Algorithm Using Extreme Point Guided Evolutionary Computation. <i>Complexity</i> , <b>2018</b> , 2018, 1-18	1.6	13
376	Collaborative and Adaptive Strategies of Different Scalarizing Functions in MOEA/D <b>2018</b> ,		1
375	P-ENS: Parallelism in Efficient Non-Dominated Sorting <b>2018</b> ,		2

374	Multi-objective Optimization <b>2018</b> , 177-204		2
373	A Cooperative Opposite-Inspired Learning Strategy for Ant-Based Algorithms. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 317-324	0.9	1
372	Towards a More General Many-objective Evolutionary Optimizer. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 335-346	0.9	4
371	Use of Reference Point Sets in a Decomposition-Based Multi-Objective Evolutionary Algorithm. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 372-383	0.9	
370	Extending the Speed-Constrained Multi-objective PSO (SMPSO) with Reference Point Based Preference Articulation. <i>Lecture Notes in Computer Science</i> , <b>2018</b> , 298-310	0.9	3
369	An improved version of a reference-based multi-objective evolutionary algorithm based on IGD + <b>2018</b> ,		2
368	Advances in Evolutionary Multi-objective Optimization. <i>Swarm and Evolutionary Computation</i> , <b>2018</b> , 40, 155-157	9.8	2
367	Fundamentals of Evolutionary Optimization: Single- and Multiobjective Problems <b>2018</b> , 1-16		0
366	A Multiobjective Teaching-Learning Algorithm for Power Losses Reduction in Power Systems <b>2018</b> , 505-542		1
365	An alternative hypervolume-based selection mechanism for multi-objective evolutionary algorithms. <i>Soft Computing</i> , <b>2017</b> , 21, 861-884	3.5	11
364	Comparison of metamodeling techniques in evolutionary algorithms. <i>Soft Computing</i> , <b>2017</b> , 21, 5647-5663	9.5	33
363	A new indicator-based many-objective ant colony optimizer for continuous search spaces. <i>Swarm Intelligence</i> , <b>2017</b> , 11, 71-100	3	23
362	An External Archive-Guided Multiobjective Particle Swarm Optimization Algorithm. <i>IEEE Transactions on Cybernetics</i> , <b>2017</b> , 47, 2794-2808	10.2	58
361	. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2017</b> , 21, 863-877	15.6	36
360	Sequence-Based Deterministic Initialization for Evolutionary Algorithms. <i>IEEE Transactions on Cybernetics</i> , <b>2017</b> , 47, 2911-2923	10.2	13
359	Constraint-handling techniques used with evolutionary algorithms <b>2017</b> ,		4
358	A hyper-heuristic of scalarizing functions <b>2017</b> ,		9
357	Consolidated optimization algorithm for resource-constrained project scheduling problems. <i>Information Sciences</i> , <b>2017</b> , 418-419, 346-362	7.7	43



356	Recent Results and Open Problems in Evolutionary Multiobjective Optimization. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 3-21	0.9	6
355	Improving hyper-heuristic performance through feature transformation <b>2017</b> ,		5
354	Evolutionary multilabel hyper-heuristic design <b>2017</b> ,		2
353	Applying automatic heuristic-filtering to improve hyper-heuristic performance <b>2017</b> ,		2
352	Improving the integration of the IGD+ indicator into the selection mechanism of a Multi-objective Evolutionary Algorithm <b>2017</b> ,		4
351	Incorporation of implicit decision-maker preferences in multi-objective evolutionary optimization using a multi-criteria classification method. <i>Applied Soft Computing Journal</i> , <b>2017</b> , 50, 48-57	7.5	21
350	Generalized Differential Evolution for Numerical and Evolutionary Optimization. <i>Studies in Computational Intelligence</i> , <b>2017</b> , 253-279	0.8	6
349	An Overview of Weighted and Unconstrained Scalarizing Functions. <i>Lecture Notes in Computer Science</i> , <b>2017</b> , 499-513	0.9	15
348	The directed search method for multi-objective memetic algorithms. <i>Computational Optimization and Applications</i> , <b>2016</b> , 63, 305-332	1.4	38
347	MONSS: A multi-objective nonlinear simplex search approach. <i>Engineering Optimization</i> , <b>2016</b> , 48, 16-38	2	11
346	Distributed Multi-Objective Metaheuristics for Real-World Structural Optimization Problems. <i>Computer Journal</i> , <b>2016</b> , 59, 777-792	1.3	6
345	iMOACO( $\mathbb{R}$ ): A New Indicator-Based Multi-objective Ant Colony Optimization Algorithm for Continuous Search Spaces. <i>Lecture Notes in Computer Science</i> , <b>2016</b> , 389-398	0.9	1
344	Constraint-Handling Techniques used with Evolutionary Algorithms <b>2016</b> ,		11
343	$\beta$ -MOEA: A new multi-objective evolutionary algorithm based on the $\beta$ indicator <b>2016</b> ,		5
342	Adaptive composite operator selection and parameter control for multiobjective evolutionary algorithm. <i>Information Sciences</i> , <b>2016</b> , 339, 332-352	7.7	49
341	A Novel Diversity-Based Replacement Strategy for Evolutionary Algorithms. <i>IEEE Transactions on Cybernetics</i> , <b>2016</b> , 46, 3233-3246	10.2	29
340	Selection mechanisms based on the maximin fitness function to solve multi-objective optimization problems. <i>Information Sciences</i> , <b>2016</b> , 332, 131-152	7.7	12
339	Structural design using multi-objective metaheuristics. Comparative study and application to a real-world problem. <i>Structural and Multidisciplinary Optimization</i> , <b>2016</b> , 53, 545-566	3.6	10



338	Using multi-objective evolutionary algorithms for single-objective constrained and unconstrained optimization. <i>Annals of Operations Research</i> , <b>2016</b> , 240, 217-250	3.2	43
337	Limiting the Velocity in the Particle Swarm Optimization Algorithm. <i>Computacion Y Sistemas</i> , <b>2016</b> , 20,	1.4	8
336	A Parallel Multi-objective Memetic Algorithm Based on the IGD+ Indicator. <i>Lecture Notes in Computer Science</i> , <b>2016</b> , 473-482	0.9	
335	<b>2016</b> ,		11
334	IGD+-EMOA: A multi-objective evolutionary algorithm based on IGD+ <b>2016</b> ,		24
333	EMOPG+FS: Evolutionary multi-objective prototype generation and feature selection. <i>Intelligent Data Analysis</i> , <b>2016</b> , 20, S37-S51	1.1	3
332	Applying exponential weighting moving average control parameter adaptation technique with generalized differential evolution <b>2016</b> ,		4
331	Indicator-based cooperative coevolution for multi-objective optimization <b>2016</b> ,		11
330	Evolutionary Algorithms for Finding Short Addition Chains: Going the Distance. <i>Lecture Notes in Computer Science</i> , <b>2016</b> , 121-137	0.9	4
329	Decomposition-Based Approach for Solving Large Scale Multi-objective Problems. <i>Lecture Notes in Computer Science</i> , <b>2016</b> , 525-534	0.9	6
328	A Parallel Version of SMS-EMOA for Many-Objective Optimization Problems. <i>Lecture Notes in Computer Science</i> , <b>2016</b> , 568-577	0.9	7
327	A Multi-Objective Evolutionary Algorithm based on Parallel Coordinates <b>2016</b> ,		10
326	Improved Metaheuristic Based on the R2 Indicator for Many-Objective Optimization <b>2015</b> ,		71
325	Constraint-Handling Techniques used with Evolutionary Algorithms <b>2015</b> ,		2
324	Improving the vector generation strategy of Differential Evolution for large-scale optimization. <i>Information Sciences</i> , <b>2015</b> , 323, 106-129	7.7	32
323	GD-MOEA: A New Multi-Objective Evolutionary Algorithm Based on the Generational Distance Indicator. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 156-170	0.9	14
322	Particle Swarm Optimization Based on Linear Assignment Problem Transformations <b>2015</b> ,		1
321	Algorithms and models for complex natural systems. <i>Natural Computing</i> , <b>2015</b> , 14, 339-340	1.3	

320	Surrogate-assisted multi-objective model selection for support vector machines. <i>Neurocomputing</i> , <b>2015</b> , 150, 163-172	5.4	20
319	On the adaptation of the mutation scale factor in differential evolution. <i>Optimization Letters</i> , <b>2015</b> , 9, 189-198	1.1	20
318	On the low-discrepancy sequences and their use in MOEA/D for high-dimensional objective spaces <b>2015</b> ,		13
317	Evolutionary Many-Objective Optimization Based on Kuhn-Munkres Algorithm. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 3-17	0.9	10
316	Many-Objective Problems: Challenges and Methods <b>2015</b> , 1033-1046		8
315	GDE-MOEA: A new MOEA based on the generational distance indicator and $\epsilon$ -dominance <b>2015</b> ,		5
314	. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2015</b> , 1-1	15.6	12
313	A non-cooperative game for faster convergence in cooperative coevolution for multi-objective optimization <b>2015</b> ,		6
312	Multi-objective Evolutionary Algorithms in Real-World Applications: Some Recent Results and Current Challenges. <i>Computational Methods in Applied Sciences (Springer)</i> , <b>2015</b> , 3-18	0.4	19
311	A GPU-Based Algorithm for a Faster Hypervolume Contribution Computation. <i>Lecture Notes in Computer Science</i> , <b>2015</b> , 80-94	0.9	5
310	A survey of multi-objective metaheuristics applied to structural optimization. <i>Structural and Multidisciplinary Optimization</i> , <b>2014</b> , 49, 537-558	3.6	124
309	Decomposition-based modern metaheuristic algorithms for multi-objective optimal power flow [A comparative study. <i>Engineering Applications of Artificial Intelligence</i> , <b>2014</b> , 32, 10-20	7.2	45
308	Survey of Multiobjective Evolutionary Algorithms for Data Mining: Part II. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2014</b> , 18, 20-35	15.6	138
307	Multi-objective model type selection. <i>Neurocomputing</i> , <b>2014</b> , 146, 83-94	5.4	17
306	. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2014</b> , 18, 1-3	15.6	6
305	Including preferences into a multiobjective evolutionary algorithm to deal with many-objective engineering optimization problems. <i>Information Sciences</i> , <b>2014</b> , 277, 1-20	7.7	37
304	A comparative study of variation operators used for evolutionary multi-objective optimization. <i>Information Sciences</i> , <b>2014</b> , 273, 33-48	7.7	6
303	Objective space partitioning using conflict information for solving many-objective problems. <i>Information Sciences</i> , <b>2014</b> , 268, 305-327	7.7	17

302	Use of a multi-objective teaching-learning algorithm for reduction of power losses in a power test system. <i>DYNA (Colombia)</i> , <b>2014</b> , 81, 196	0.6	2
301	MOPSOhv: A new hypervolume-based multi-objective particle swarm optimizer <b>2014</b> ,		16
300	An evolutionary multi-objective approach for prototype generation <b>2014</b> ,		5
299	A multi-objective evolutionary algorithm based on decomposition for constrained multi-objective optimization <b>2014</b> ,		20
298	Evolutionary multiobjective optimization in dynamic environments: A set of novel benchmark functions <b>2014</b> ,		31
297	Multiobjective Optimization for Space Mission Design Problems <b>2014</b> , 1-46		
296	Constrained multi-objective aerodynamic shape optimization via swarm intelligence <b>2014</b> ,		4
295	Multi-objective compact differential evolution <b>2014</b> ,		2
294	Memetic Modified Artificial Bee Colony for constrained optimization <b>2014</b> ,		1
293	MD-MOEA : A new MOEA based on the maximin fitness function and Euclidean distances between solutions <b>2014</b> ,		3
292	An analysis of the automatic adaptation of the crossover rate in differential evolution <b>2014</b> ,		3
291	An empirical comparison of two crossover operators in real-coded genetic algorithms for constrained numerical optimization problems <b>2014</b> ,		2
290	A Survey of Multiobjective Evolutionary Algorithms for Data Mining: Part I. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2014</b> , 18, 4-19	15.6	244
289	Using a Family of Curves to Approximate the Pareto Front of a Multi-Objective Optimization Problem. <i>Lecture Notes in Computer Science</i> , <b>2014</b> , 682-691	0.9	12
288	A More Efficient Selection Scheme in iSMS-EMOA. <i>Lecture Notes in Computer Science</i> , <b>2014</b> , 371-380	0.9	2
287	A hybrid surrogate-based approach for evolutionary multi-objective optimization <b>2013</b> ,		16
286	Constraint-handling techniques used with evolutionary algorithms <b>2013</b> ,		1
285	Dynamic Constrained Optimization with offspring repair based Gravitational Search Algorithm <b>2013</b> ,		26

284	Reactive Power Handling by a Multi-Objective Teaching Learning Optimizer Based on Decomposition. <i>IEEE Transactions on Power Systems</i> , <b>2013</b> , 28, 3629-3637	7	22
283	Application of the non-outranked sorting genetic algorithm to public project portfolio selection. <i>Information Sciences</i> , <b>2013</b> , 228, 131-149	7.7	38
282	A ranking method based on the R2 indicator for many-objective optimization <b>2013</b> ,		25
281	Analysis of leader selection strategies in a multi-objective Particle Swarm Optimizer <b>2013</b> ,		18
280	A new selection mechanism based on hypervolume and its locality property <b>2013</b> ,		10
279	A novel multi-objective optimizer for handling reactive power <b>2013</b> ,		1
278	A hybrid Differential EvolutionTabu Search algorithm for the solution of Job-Shop Scheduling Problems. <i>Applied Soft Computing Journal</i> , <b>2013</b> , 13, 462-474	7.5	66
277	An evolutionary algorithm with a history mechanism for tuning a chess evaluation function. <i>Applied Soft Computing Journal</i> , <b>2013</b> , 13, 3234-3247	7.5	1
276	A Survey on Multiobjective Evolutionary Algorithms for the Solution of the Portfolio Optimization Problem and Other Finance and Economics Applications. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2013</b> , 17, 321-344	15.6	181
275	Interactive Approaches Applied to Multiobjective Evolutionary Algorithms <b>2013</b> , 189-207		3
274	MOEA/D assisted by rbf networks for expensive multi-objective optimization problems <b>2013</b> ,		22
273	Improving the diversity preservation of multi-objective approaches used for single-objective optimization <b>2013</b> ,		14
272	Using multi-objective evolutionary algorithms for single-objective optimization. <i>4or</i> , <b>2013</b> , 11, 201-228	1.4	38
271	A Study of the Combination of Variation Operators in the NSGA-II Algorithm. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 269-278	0.9	7
270	MOMBI: A new metaheuristic for many-objective optimization based on the R2 indicator <b>2013</b> ,		61
269	A hybridization of MOEA/D with the nonlinear simplex search algorithm <b>2013</b> ,		5
268	Combining surrogate models and local search for dealing with expensive multi-objective optimization problems <b>2013</b> ,		14
267	Use of cooperative coevolution for solving large scale multiobjective optimization problems <b>2013</b> ,		89

266	Conference Report for 2013 IEEE Congress on Evolutionary Computation (IEEE CEC 2013) [Conference Reports]. <i>IEEE Computational Intelligence Magazine</i> , <b>2013</b> , 8, 8-9	5.6	
265	Artificial Immune System for Solving Dynamic Constrained Optimization Problems. <i>Studies in Computational Intelligence</i> , <b>2013</b> , 225-263	0.8	7
264	The Gradient Free Directed Search Method as Local Search within Multi-Objective Evolutionary Algorithms. <i>Advances in Intelligent Systems and Computing</i> , <b>2013</b> , 153-168	0.4	10
263	On Gradient-Based Local Search to Hybridize Multi-objective Evolutionary Algorithms. <i>Studies in Computational Intelligence</i> , <b>2013</b> , 305-332	0.8	4
262	Selection Operators Based on Maximin Fitness Function for Multi-Objective Evolutionary Algorithms. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 215-229	0.9	6
261	An Alternative Preference Relation to Deal with Many-Objective Optimization Problems. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 291-306	0.9	12
260	Bias and Variance Multi-objective Optimization for Support Vector Machines Model Selection. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 108-116	0.9	4
259	Flame Classification through the Use of an Artificial Neural Network Trained with a Genetic Algorithm. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 172-184	0.9	2
258	Using the Averaged Hausdorff Distance as a Performance Measure in Evolutionary Multiobjective Optimization. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2012</b> , 16, 504-522	15.6	360
257	A Multi-Objective Evolutionary approach for linear antenna array design and synthesis <b>2012</b> ,		4
256	Multi-objective airfoil shape optimization using a multiple-surrogate approach <b>2012</b> ,		12
255	A new multi-objective evolutionary algorithm based on a performance assessment indicator <b>2012</b> ,		23
254	Multiobjective Evolutionary Algorithms in Aeronautical and Aerospace Engineering. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2012</b> , 16, 662-694	15.6	95
253	An Introduction to the Use of Evolutionary Computation Techniques for Dealing with ECG Signals <b>2012</b> , 135-153		
252	A Multi-Objective Artificial Immune System Based on Hypervolume. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 14-27	0.9	3
251	Solving multi-objective optimization problems using differential evolution and a maximin selection criterion <b>2012</b> ,		9
250	Constraint-handling techniques used with evolutionary algorithms <b>2012</b> ,		8
249	Are State-of-the-Art Fine-Tuning Algorithms Able to Detect a Dummy Parameter?. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 306-315	0.9	2

248	An evolutionary algorithm coupled with the Hooke-Jeeves algorithm for tuning a chess evaluation function <b>2012</b> ,		2
247	A direct local search mechanism for decomposition-based multi-objective evolutionary algorithms <b>2012</b> ,		17
246	A new mechanism to maintain diversity in multi-objective metaheuristics. <i>Optimization</i> , <b>2012</b> , 61, 823-854.	4.2	4
245	A Fitness Granulation Approach for Large-Scale Structural Design Optimization <b>2012</b> , 245-280		6
244	Adaptive Control of the Number of Crossed Genes in Many-Objective Evolutionary Optimization. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 478-484	0.9	2
243	A Multi-objective Particle Swarm Optimizer Enhanced with a Differential Evolution Scheme. <i>Lecture Notes in Computer Science</i> , <b>2012</b> , 169-180	0.9	3
242	Constraint-handling in nature-inspired numerical optimization: Past, present and future. <i>Swarm and Evolutionary Computation</i> , <b>2011</b> , 1, 173-194	9.8	637
241	Solving constrained optimization problems with a hybrid particle swarm optimization algorithm. <i>Engineering Optimization</i> , <b>2011</b> , 43, 843-866	2	44
240	A multi-objective particle swarm optimizer based on decomposition <b>2011</b> ,		50
239	Evolutionary Algorithms Applied to Multi-Objective Aerodynamic Shape Optimization. <i>Studies in Computational Intelligence</i> , <b>2011</b> , 211-240	0.8	9
238	Multi-Objective Ant Colony Optimization: A Taxonomy and Review of Approaches. <i>Series in Machine Perception and Artificial Intelligence</i> , <b>2011</b> , 67-94	0.3	7
237	On the Influence of the Number of Objectives on the Hardness of a Multiobjective Optimization Problem. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2011</b> , 15, 444-455	15.6	141
236	Guest Editorial Special Issue on Differential Evolution. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2011</b> , 15, 1-3	15.6	15
235	Smiling at evolution. <i>Applied Soft Computing Journal</i> , <b>2011</b> , 11, 5724-5734	7.5	6
234	Evolutionary multiobjective optimization. <i>Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery</i> , <b>2011</b> , 1, 444-447	6.9	11
233	Increasing selective pressure towards the best compromise in evolutionary multiobjective optimization: The extended NOSGA method. <i>Information Sciences</i> , <b>2011</b> , 181, 44-56	7.7	51
232	A T-cell algorithm for solving dynamic optimization problems. <i>Information Sciences</i> , <b>2011</b> , 181, 3614-3637.	7.7	15
231	Parametric reconfiguration improvement in non-iterative concurrent mechatronic design using an evolutionary-based approach. <i>Engineering Applications of Artificial Intelligence</i> , <b>2011</b> , 24, 757-771	7.2	18

230	Improving the efficiency of $\gamma$ -dominance based grids. <i>Information Sciences</i> , <b>2011</b> , 181, 3101-3129	7.7	8
229	A nonlinear simplex search approach for multi-objective optimization <b>2011</b> ,		8
228	Differential Evolution performances for the solution of mixed-integer constrained process engineering problems. <i>Applied Soft Computing Journal</i> , <b>2011</b> , 11, 399-409	7.5	39
227	Solving timetabling problems using a cultural algorithm. <i>Applied Soft Computing Journal</i> , <b>2011</b> , 11, 337-344	7.5	31
226	MB-GNG: Addressing drawbacks in multi-objective optimization estimation of distribution algorithms. <i>Operations Research Letters</i> , <b>2011</b> , 39, 150-154	1	17
225	Effective ranking + speciation = Many-objective optimization <b>2011</b> ,		5
224	Preference incorporation to solve many-objective airfoil design problems <b>2011</b> ,		17
223	A fast particle swarm algorithm for solving smooth and non-smooth economic dispatch problems. <i>Engineering Optimization</i> , <b>2011</b> , 43, 485-505	2	12
222	Computing the Set of Epsilon-Efficient Solutions in Multiobjective Space Mission Design. <i>Journal of Aerospace Computing, Information, and Communication</i> , <b>2011</b> , 8, 53-70		42
221	<b>2011</b> ,		3
220	Adaptive Objective Space Partitioning Using Conflict Information for Many-Objective Optimization. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 151-165	0.9	10
219	Evolutionary Multi-Objective Optimization: Basic Concepts and Some Applications in Pattern Recognition. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 22-33	0.9	6
218	Self-adaptation Techniques Applied to Multi-Objective Evolutionary Algorithms. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 567-581	0.9	0
217	A multi-objective meta-model assisted memetic algorithm with non gradient-based local search <b>2010</b> ,		3
216	Two novel approaches for many-objective optimization <b>2010</b> ,		15
215	Highly reliable optimal solutions to multi-objective problems and their evolution by means of worst-case analysis. <i>Engineering Optimization</i> , <b>2010</b> , 42, 1095-1117	2	5
214	An archiving strategy based on the Convex Hull of Individual Minima for MOEAs <b>2010</b> ,		4
213	A painless gradient-assisted multi-objective memetic mechanism for solving continuous bi-objective optimization problems <b>2010</b> ,		5



212	Computing gap free Pareto front approximations with stochastic search algorithms. <i>Evolutionary Computation</i> , <b>2010</b> , 18, 65-96	4.3	54
211	Some comments on GD and IGD and relations to the Hausdorff distance <b>2010</b> ,		4
210	New challenges for memetic algorithms on continuous multi-objective problems <b>2010</b> ,		1
209	Constraint-handling techniques used with evolutionary algorithms <b>2010</b> ,		6
208	Using gradient information for multi-objective problems in the evolutionary context <b>2010</b> ,		3
207	A novel diversification strategy for multi-objective evolutionary algorithms <b>2010</b> ,		5
206	An Alternative ACO( $\mathbb{R}$ ) Algorithm for Continuous Optimization Problems. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 48-59	0.9	10
205	A hybrid Memory-based ACO algorithm for the QAP <b>2010</b> ,		1
204	A Review of Techniques for Handling Expensive Functions in Evolutionary Multi-Objective Optimization. <i>Adaptation, Learning, and Optimization</i> , <b>2010</b> , 29-59	0.7	45
203	The Turing-850 Project: Developing a Personal Computer in the Early 1980s in Mexico. <i>IEEE Annals of the History of Computing</i> , <b>2010</b> , 32, 60-71	0.2	4
202	MODE-LD+SS: A novel Differential Evolution algorithm incorporating local dominance and scalar selection mechanisms for multi-objective optimization <b>2010</b> ,		9
201	HCS: A New Local Search Strategy for Memetic Multiobjective Evolutionary Algorithms. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2010</b> , 14, 112-132	15.6	136
200	. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2010</b> , 14, 618-635	15.6	83
199	A modified version of a T-Cell Algorithm for constrained optimization problems. <i>International Journal for Numerical Methods in Engineering</i> , <b>2010</b> , 84, n/a-n/a	2.4	11
198	Convergence speed in multi-objective metaheuristics: Efficiency criteria and empirical study. <i>International Journal for Numerical Methods in Engineering</i> , <b>2010</b> , 84, 1344-1375	2.4	24
197	Evolutionary hidden information detection by granulation-based fitness approximation. <i>Applied Soft Computing Journal</i> , <b>2010</b> , 10, 719-729	7.5	23
196	DEMORS: A hybrid multi-objective optimization algorithm using differential evolution and rough set theory for constrained problems. <i>Computers and Operations Research</i> , <b>2010</b> , 37, 470-480	4.6	52
195	Evolutionary multiobjective optimization using an outranking-based dominance generalization. <i>Computers and Operations Research</i> , <b>2010</b> , 37, 390-395	4.6	48

194	Micro-MOPSO: A Multi-Objective Particle Swarm Optimizer That Uses a Very Small Population Size. <i>Studies in Computational Intelligence</i> , <b>2010</b> , 83-104	0.8	13
193	Multi-Objective Combinatorial Optimization: Problematic and Context. <i>Studies in Computational Intelligence</i> , <b>2010</b> , 1-21	0.8	29
192	Alternative Fitness Assignment Methods for Many-Objective Optimization Problems. <i>Lecture Notes in Computer Science</i> , <b>2010</b> , 146-157	0.9	11
191	A Memetic Algorithm with Non Gradient-Based Local Search Assisted by a Meta-model <b>2010</b> , 576-585		6
190	Objective Space Partitioning Using Conflict Information for Many-Objective Optimization <b>2010</b> , 657-666		7
189	Using a Gradient Based Method to Seed an EMO Algorithm. <i>Lecture Notes in Economics and Mathematical Systems</i> , <b>2010</b> , 327-337	0.4	
188	Computing and Selecting Efficient Solutions of {0, 1}-Knapsack Problems. <i>Lecture Notes in Economics and Mathematical Systems</i> , <b>2010</b> , 379-389	0.4	3
187	pMODE-LD+SS: An Effective and Efficient Parallel Differential Evolution Algorithm for Multi-Objective Optimization <b>2010</b> , 21-30		
186	Testing the Permutation Space Based Geometric Differential Evolution on the Job-Shop Scheduling Problem <b>2010</b> , 250-259		
185	Using gradient-based information to deal with scalability in multi-objective evolutionary algorithms <b>2009</b> ,		5
184	Evolutionary continuation methods for optimization problems <b>2009</b> ,		5
183	A new proposal to hybridize the Nelder-Mead method to a differential evolution algorithm for constrained optimization <b>2009</b> ,		10
182	Ranking Methods for Many-Objective Optimization. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 633-645	0.9	54
181	Study of preference relations in many-objective optimization <b>2009</b> ,		21
180	Boundary Search for Constrained Numerical Optimization Problems With an Algorithm Inspired by the Ant Colony Metaphor. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2009</b> , 13, 350-368	15.6	30
179	g-dominance: Reference point based dominance for multiobjective metaheuristics. <i>European Journal of Operational Research</i> , <b>2009</b> , 197, 685-692	5.6	174
178	Design of a motorcycle frame using neuroacceleration strategies in MOEAs. <i>Journal of Heuristics</i> , <b>2009</b> , 15, 177-196	1.9	10
177	Evolutionary multi-objective optimization: some current research trends and topics that remain to be explored. <i>Frontiers of Computer Science</i> , <b>2009</b> , 3, 18-30		90

176	An optimal power flow plus transmission costs solution. <i>Electric Power Systems Research</i> , <b>2009</b> , 79, 1240-1246	3.46	9
175	Evolutionary Multiobjective Optimization in Materials Science and Engineering. <i>Materials and Manufacturing Processes</i> , <b>2009</b> , 24, 119-129	4.1	90
174	SMPSO: A new PSO-based metaheuristic for multi-objective optimization <b>2009</b> ,		276
173	Multi-Objective Particle Swarm Optimizers: An Experimental Comparison. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 495-509	0.9	73
172	Solving Permutation Problems with Differential Evolution: An Application to the Jobshop Scheduling Problem <b>2009</b> ,		9
171	Microgenetic multiobjective reconfiguration algorithm considering power losses and reliability indices for medium voltage distribution network. <i>IET Generation, Transmission and Distribution</i> , <b>2009</b> , 3, 825-840	2.5	84
170	Multiobjective Optimization and Artificial Immune Systems <b>2009</b> , 1-21		8
169	Ranking Methods in Many-Objective Evolutionary Algorithms. <i>Studies in Computational Intelligence</i> , <b>2009</b> , 413-434	0.8	14
168	Online Objective Reduction to Deal with Many-Objective Problems. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 423-437	0.9	40
167	Applications of Parallel Platforms and Models in Evolutionary Multi-Objective Optimization. <i>Studies in Computational Intelligence</i> , <b>2009</b> , 23-49	0.8	8
166	An Introduction to Swarm Intelligence for Multi-objective Problems. <i>Studies in Computational Intelligence</i> , <b>2009</b> , 1-17	0.8	4
165	A Discrete Particle Swarm for Multi-objective Problems in Polynomial Neural Networks used for Classification: A Data Mining Perspective. <i>Studies in Computational Intelligence</i> , <b>2009</b> , 115-155	0.8	1
164	A Review of Particle Swarm Optimization Methods Used for Multimodal Optimization. <i>Studies in Computational Intelligence</i> , <b>2009</b> , 9-37	0.8	26
163	A Particle Swarm Optimization Method for Multimodal Optimization Based on Electrostatic Interaction. <i>Lecture Notes in Computer Science</i> , <b>2009</b> , 622-632	0.9	10
162	Detecting Hidden Information from Watermarked Signal Using Granulation Based Fitness Approximation. <i>Advances in Intelligent and Soft Computing</i> , <b>2009</b> , 463-472		0
161	Boundary Search for Constrained Numerical Optimization Problems. <i>Studies in Computational Intelligence</i> , <b>2009</b> , 25-49	0.8	0
160	Optimal Power Flow Subject to Security Constraints Solved With a Particle Swarm Optimizer. <i>IEEE Transactions on Power Systems</i> , <b>2008</b> , 23, 33-40	7	99
159	An Artificial Immune System Heuristic for Generating Short Addition Chains. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2008</b> , 12, 1-24	15.6	23

158	Seeding the initial population of a multi-objective evolutionary algorithm using gradient-based information <b>2008</b> ,		19
157	Hybridizing evolutionary strategies with continuation methods for solving multi-objective problems. <i>Engineering Optimization</i> , <b>2008</b> , 40, 383-402	2	35
156	An empirical study about the usefulness of evolution strategies to solve constrained optimization problems. <i>International Journal of General Systems</i> , <b>2008</b> , 37, 443-473	2.1	284
155	Surrogate-based Multi-Objective Particle Swarm Optimization <b>2008</b> ,		3
154	Multi-objective Optimization Using Differential Evolution: A Survey of the State-of-the-Art. <i>Studies in Computational Intelligence</i> , <b>2008</b> , 173-196	0.8	81
153	On the Use of Projected Gradients for Constrained Multiobjective Optimization Problems. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 712-721	0.9	2
152	Constraint-handling techniques used with evolutionary algorithms <b>2008</b> ,		5
151	Solving constrained multi-objective problems by objective space analysis <b>2008</b> ,		2
150	Hybridizing surrogate techniques, rough sets and evolutionary algorithms to efficiently solve multi-objective optimization problems <b>2008</b> ,		4
149	A new memetic strategy for the numerical treatment of multi-objective optimization problems <b>2008</b> ,		14
148	Computing finite size representations of the set of approximate solutions of an MOP with stochastic search algorithms <b>2008</b> ,		9
147	Auto-tuning fuzzy granulation for evolutionary optimization <b>2008</b> ,		4
146	A comparative study of the effect of parameter scalability in multi-objective metaheuristics <b>2008</b> ,		15
145	Convergence of stochastic search algorithms to finite size pareto set approximations. <i>Journal of Global Optimization</i> , <b>2008</b> , 41, 559-577	1.5	43
144	Multi-Objective Evolutionary Algorithms: A Review of the State-of-the-Art and some of their Applications in Chemical Engineering. <i>Advances in Process Systems Engineering</i> , <b>2008</b> , 61-90		4
143	Constrained Optimization via Multiobjective Evolutionary Algorithms <b>2008</b> , 53-75		41
142	Knowledge Incorporation in Multi-objective Evolutionary Algorithms. <i>Studies in Computational Intelligence</i> , <b>2008</b> , 23-46	0.8	12
141	Rough Sets Theory for Multi-Objective Optimization Problems. <i>Studies in Computational Intelligence</i> , <b>2008</b> , 81-98	0.8	3

140	An Introduction to Multi-Objective Evolutionary Algorithms and Some of Their Potential Uses in Biology. <i>Studies in Computational Intelligence</i> , <b>2008</b> , 79-102	0.8	3
139	A Preliminary Study of Fitness Inheritance in Evolutionary Constrained Optimization. <i>Studies in Computational Intelligence</i> , <b>2008</b> , 1-14	0.8	5
138	A Study of Convergence Speed in Multi-objective Metaheuristics. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 763-772	0.9	18
137	Approximating the Knee of an MOP with Stochastic Search Algorithms. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 795-804	0.9	20
136	Approximate Solutions in Space Mission Design. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 805-814	0.9	7
135	A Proposal to Hybridize Multi-Objective Evolutionary Algorithms with Non-gradient Mathematical Programming Techniques. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 837-846	0.9	16
134	Parallel Approaches for Multiobjective Optimization. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 349-372	0.9	43
133	Use of Radial Basis Functions and Rough Sets for Evolutionary Multi-Objective Optimization <b>2007</b> ,		4
132	An ant system with steps counter for the job shop scheduling problem <b>2007</b> ,		1
131	Multiobjective Location of Automatic Voltage Regulators in a Radial Distribution Network Using a Micro Genetic Algorithm. <i>IEEE Transactions on Power Systems</i> , <b>2007</b> , 22, 404-412	7	54
130	Integration of structure and control using an evolutionary approach: an application to the optimal concurrent design of a CVT. <i>International Journal for Numerical Methods in Engineering</i> , <b>2007</b> , 71, 883-901	1.4	15
129	MRMOGA: a new parallel multi-objective evolutionary algorithm based on the use of multiple resolutions. <i>Concurrency Computation Practice and Experience</i> , <b>2007</b> , 19, 397-441	1.4	26
128	Multiple trial vectors in differential evolution for engineering design. <i>Engineering Optimization</i> , <b>2007</b> , 39, 567-589	2	84
127	Cultural algorithms, an alternative heuristic to solve the job shop scheduling problem. <i>Engineering Optimization</i> , <b>2007</b> , 39, 69-85	2	13
126	Constraint-handling techniques used with evolutionary algorithms <b>2007</b> ,		4
125	Convergence of stochastic search algorithms to gap-free pareto front approximations <b>2007</b> ,		14
124	Epsilon-constraint with an efficient cultured differential evolution <b>2007</b> ,		1
123	Alternative techniques to solve hard multi-objective optimization problems <b>2007</b> ,		7

122	A bi-population PSO with a shake-mechanism for solving constrained numerical optimization <b>2007</b> ,		10
121	Comparative study of serial and parallel heuristics used to design combinational logic circuits. <i>Optimization Methods and Software</i> , <b>2007</b> , 22, 485-509	1.3	5
120	Pareto-adaptive epsilon-dominance. <i>Evolutionary Computation</i> , <b>2007</b> , 15, 493-517	4.3	134
119	A Memetic PSO Algorithm for Scalar Optimization Problems <b>2007</b> ,		10
118	Handling Constraints in Particle Swarm Optimization Using a Small Population Size <b>2007</b> , 41-51		13
117	Applications of multi-objective evolutionary algorithms in economics and finance: A survey <b>2007</b> ,		22
116	A boundary search based ACO algorithm coupled with stochastic ranking <b>2007</b> ,		7
115	A Genetic Representation for Dynamic System Qualitative Models on Genetic Programming: A Gene Expression Programming Approach. <i>Lecture Notes in Computer Science</i> , <b>2007</b> , 30-40	0.9	
114	Hybrid Particle Swarm Optimizers in the Single Machine Scheduling Problem: An Experimental Study. <i>Studies in Computational Intelligence</i> , <b>2007</b> , 143-164	0.8	2
113	A Study of Techniques to Improve the Efficiency of a Multi-Objective Particle Swarm Optimizer. <i>Studies in Computational Intelligence</i> , <b>2007</b> , 269-296	0.8	6
112	EMOPSO: A Multi-Objective Particle Swarm Optimizer with Emphasis on Efficiency <b>2007</b> , 272-285		16
111	Optimization to Manage Supply Chain Disruptions Using the NSGA-II <b>2007</b> , 476-485		11
110	Approximating the Efficient Set of an MOP with Stochastic Search Algorithms. <i>Lecture Notes in Computer Science</i> , <b>2007</b> , 128-138	0.9	9
109	A Novel Model of Artificial Immune System for Solving Constrained Optimization Problems with Dynamic Tolerance Factor <b>2007</b> , 19-29		4
108	Evolutionary multi-objective optimization: a historical view of the field. <i>IEEE Computational Intelligence Magazine</i> , <b>2006</b> , 1, 28-36	5.6	672
107	The EMOO repository: a resource for doing research in evolutionary multiobjective optimization. <i>IEEE Computational Intelligence Magazine</i> , <b>2006</b> , 1, 37-45	5.6	8
106	Hybrid particle swarm optimizer for a class of dynamic fitness landscape. <i>Engineering Optimization</i> , <b>2006</b> , 38, 873-888	2	9
105	Solving Hard Multiobjective Optimization Problems Using EConstraint with Cultured Differential Evolution. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 543-552	0.9	20

104	A New Proposal for Multiobjective Optimization Using Particle Swarm Optimization and Rough Sets Theory. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 483-492	0.9	11
103	A comparative study of differential evolution variants for global optimization <b>2006</b> ,		307
102	A new proposal for multi-objective optimization using differential evolution and rough sets theory <b>2006</b> ,		24
101	Cultured differential evolution for constrained optimization. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2006</b> , 195, 4303-4322	5.7	189
100	Asymptotic convergence of metaheuristics for multiobjective optimization problems. <i>Soft Computing</i> , <b>2006</b> , 10, 1001-1005	3.5	24
99	Asymptotic convergence of a simulated annealing algorithm for multiobjective optimization problems. <i>Mathematical Methods of Operations Research</i> , <b>2006</b> , 64, 353-362	1	13
98	Boundary Search for Constrained Numerical Optimization Problems in ACO Algorithms. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 108-119	0.9	6
97	A Particle Swarm Optimizer for Constrained Numerical Optimization. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 910-919	0.9	13
96	A Multi-objective Particle Swarm Optimizer Hybridized with Scatter Search. <i>Lecture Notes in Computer Science</i> , <b>2006</b> , 294-304	0.9	7
95	A simple multimembered evolution strategy to solve constrained optimization problems. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2005</b> , 9, 1-17	15.6	406
94	A new multi-objective evolutionary algorithm: neighbourhood exploring evolution strategy. <i>Engineering Optimization</i> , <b>2005</b> , 37, 351-379	2	15
93	Improving PSO-Based Multi-objective Optimization Using Crowding, Mutation and $\epsilon$ -Dominance. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 505-519	0.9	355
92	Useful Infeasible Solutions in Engineering Optimization with Evolutionary Algorithms. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 652-662	0.9	61
91	Recent Trends in Evolutionary Multiobjective Optimization <b>2005</b> , 7-32		62
90	Asymptotic Convergence of Some Metaheuristics Used for Multiobjective Optimization. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 95-111	0.9	4
89	Multiobjective structural optimization using a microgenetic algorithm. <i>Structural and Multidisciplinary Optimization</i> , <b>2005</b> , 30, 388-403	3.6	91
88	Extraction and reuse of design patterns from genetic algorithms using case-based reasoning. <i>Soft Computing</i> , <b>2005</b> , 9, 44-53	3.5	5
87	Solving Multiobjective Optimization Problems Using an Artificial Immune System. <i>Genetic Programming and Evolvable Machines</i> , <b>2005</b> , 6, 163-190	2	487



86	Optimization with constraints using a cultured differential evolution approach <b>2005</b> ,		22
85	Promising infeasibility and multiple offspring incorporated to differential evolution for constrained optimization <b>2005</b> ,		38
84	An Algorithm Based on Differential Evolution for Multi-Objective Problems. <i>International Journal of Computational Intelligence Research</i> , <b>2005</b> , 1,	0	44
83	Coevolutionary Multi-objective Optimization Using Clustering Techniques. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 603-612	0.9	
82	Human Preferences and their Applications in Evolutionary Multi-Objective Optimization. <i>Studies in Fuzziness and Soft Computing</i> , <b>2005</b> , 479-502	0.7	6
81	A Cultural Algorithm for Solving the Job Shop Scheduling Problem. <i>Studies in Fuzziness and Soft Computing</i> , <b>2005</b> , 37-55	0.7	13
80	Use of Multiobjective Optimization Concepts to Handle Constraints in Genetic Algorithms <b>2005</b> , 229-254		3
79	An Introduction to Evolutionary Algorithms and Their Applications. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 425-442	0.9	10
78	Handling Constraints in Global Optimization Using an Artificial Immune System. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 234-247	0.9	24
77	Finding Optimal Addition Chains Using a Genetic Algorithm Approach. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 208-215	0.9	14
76	A Study of the Parallelization of a Coevolutionary Multi-objective Evolutionary Algorithm. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 688-697	0.9	98
75	Convergence Analysis of a Multiobjective Artificial Immune System Algorithm. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 226-235	0.9	21
74	Using genetic programing and multiplexers for the synthesis of logic circuits. <i>Engineering Optimization</i> , <b>2004</b> , 36, 491-511	2	6
73	Hybridizing a genetic algorithm with an artificial immune system for global optimization. <i>Engineering Optimization</i> , <b>2004</b> , 36, 607-634	2	93
72	Simple Feasibility Rules and Differential Evolution for Constrained Optimization. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 707-716	0.9	34
71	Handling constraints using multiobjective optimization concepts. <i>International Journal for Numerical Methods in Engineering</i> , <b>2004</b> , 59, 1989-2017	2.4	121
70	Particle Swarm Optimization in Non-stationary Environments. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 757-766	0.9	9
69	Efficient evolutionary optimization through the use of a cultural algorithm. <i>Engineering Optimization</i> , <b>2004</b> , 36, 219-236	2	157

68	Using Clustering Techniques to Improve the Performance of a Multi-objective Particle Swarm Optimizer. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 225-237	0.9	66
67	A Cultural Algorithm with Differential Evolution to Solve Constrained Optimization Problems. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 881-890	0.9	15
66	Handling multiple objectives with particle swarm optimization. <i>IEEE Transactions on Evolutionary Computation</i> , <b>2004</b> , 8, 256-279	15.6	2572
65	Applications of Multi-Objective Evolutionary Algorithms. <i>Advances in Natural Computation</i> , <b>2004</b> ,		230
64	Evolutionary Synthesis of Logic Circuits Using Information Theory <b>2004</b> , 285-311		0
63	On the Optimal Computation of Finite Field Exponentiation. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 747-756	0.9	4
62	Reusing Code in Genetic Programming. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 359-368	0.9	10
61	An Improved Diversity Mechanism for Solving Constrained Optimization Problems Using a Multimembered Evolution Strategy. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 700-712	0.9	10
60	IS-PAES: Multiobjective Optimization with Efficient Constraint Handling <b>2004</b> , 111-120		5
59	Job Shop Scheduling using the Clonal Selection Principle <b>2004</b> , 113-124		8
58	Extracting and re-using design patterns from genetic algorithms using case-based reasoning. <i>Engineering Optimization</i> , <b>2003</b> , 35, 121-141	2	4
57	Assessment Methodologies for Multiobjective Evolutionary Algorithms <b>2003</b> , 177-195		11
56	Use of an Artificial Immune System for Job Shop Scheduling. <i>Lecture Notes in Computer Science</i> , <b>2003</b> , 1-10	0.9	43
55	Evolutionary Algorithms and Multiple Objective Optimization. <i>Profiles in Operations Research</i> , <b>2003</b> , 277-331		5
54	Evolutionary Synthesis of Logic Circuits Using Information Theory. <i>Artificial Intelligence Review</i> , <b>2003</b> , 20, 445-471	9.7	1
53	Use of Particle Swarm Optimization to Design Combinational Logic Circuits. <i>Lecture Notes in Computer Science</i> , <b>2003</b> , 398-409	0.9	32
52	Evolutionary Multi-Objective Optimization: A Critical Review <b>2003</b> , 117-146		5
51	Multiobjective Optimization Using Ideas from the Clonal Selection Principle. <i>Lecture Notes in Computer Science</i> , <b>2003</b> , 158-170	0.9	19

50	Synthesis of Boolean Functions Using Information Theory. <i>Lecture Notes in Computer Science</i> , <b>2003</b> , 218-227	2
49	IS-PAES: A Constraint-Handling Technique Based on Multiobjective Optimization Concepts. <i>Lecture Notes in Computer Science</i> , <b>2003</b> , 73-87	0.9 2
48	Use of Multiobjective Optimization Concepts to Handle Constraints in Single-Objective Optimization. <i>Lecture Notes in Computer Science</i> , <b>2003</b> , 573-584	0.9 1
47	The Micro Genetic Algorithm 2: Towards Online Adaptation in Evolutionary Multiobjective Optimization. <i>Lecture Notes in Computer Science</i> , <b>2003</b> , 252-266	0.9 31
46	A Simple Evolution Strategy to Solve Constrained Optimization Problems. <i>Lecture Notes in Computer Science</i> , <b>2003</b> , 640-641	0.9 9
45	Constraint-handling in genetic algorithms through the use of dominance-based tournament selection. <i>Advanced Engineering Informatics</i> , <b>2002</b> , 16, 193-203	7.4 570
44	Theoretical and numerical constraint-handling techniques used with evolutionary algorithms: a survey of the state of the art. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2002</b> , 191, 1245-1287	5.7 1493
43	Design of combinational logic circuits through an evolutionary multiobjective optimization approach. <i>Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM</i> , <b>2002</b> , 16, 39-53	1.3 50
42	Automated Design of Combinational Logic Circuits Using the Ant System. <i>Engineering Optimization</i> , <b>2002</b> , 34, 109-127	2 11
41	A Cultural Algorithm for Constrained Optimization. <i>Lecture Notes in Computer Science</i> , <b>2002</b> , 98-107	0.9 3
40	Genetic Algorithms and Case-Based Reasoning as a Discovery and Learning Machine in the Optimization of Combinational Logic Circuits. <i>Lecture Notes in Computer Science</i> , <b>2002</b> , 128-137	0.9 1
39	Handling Constraints in Genetic Algorithms Using Dominance-based Tournaments <b>2002</b> , 273-284	29
38	Evolutionary Algorithms for Solving Multi-Objective Problems. <i>Genetic Algorithms and Evolutionary Computation</i> , <b>2002</b> ,	1308
37	Towards automated evolutionary design of combinational circuits. <i>Computers and Electrical Engineering</i> , <b>2000</b> , 27, 1-28	4.3 30
36	Use of a self-adaptive penalty approach for engineering optimization problems. <i>Computers in Industry</i> , <b>2000</b> , 41, 113-127	11.6 778
35	Multiobjective optimization of trusses using genetic algorithms. <i>Computers and Structures</i> , <b>2000</b> , 75, 647-660	4.5 157
34	An updated survey of GA-based multiobjective optimization techniques. <i>ACM Computing Surveys</i> , <b>2000</b> , 32, 109-143	13.4 447
33	TREATING CONSTRAINTS AS OBJECTIVES FOR SINGLE-OBJECTIVE EVOLUTIONARY OPTIMIZATION. <i>Engineering Optimization</i> , <b>2000</b> , 32, 275-308	2 182

32	CONSTRAINT-HANDLING USING AN EVOLUTIONARY MULTIOBJECTIVE OPTIMIZATION TECHNIQUE. <i>Civil Engineering and Environmental Systems</i> , <b>2000</b> , 17, 319-346	2.1	259
31	Ant Colony System for the Design of Combinational Logic Circuits. <i>Lecture Notes in Computer Science</i> , <b>2000</b> , 21-30	0.9	14
30	A Comprehensive Survey of Evolutionary-Based Multiobjective Optimization Techniques. <i>Knowledge and Information Systems</i> , <b>1999</b> , 1, 269-308	2.4	780
29	MOSES: A MULTIOBJECTIVE OPTIMIZATION TOOL FOR ENGINEERING DESIGN. <i>Engineering Optimization</i> , <b>1999</b> , 31, 337-368	2	91
28	Using the Min-Max Method to Solve Multiobjective Optimization Problems with Genetic Algorithms. <i>Lecture Notes in Computer Science</i> , <b>1998</b> , 303-313	0.9	4
27	TWO NEW GA-BASED METHODS FOR MULTIOBJECTIVE OPTIMIZATION. <i>Civil Engineering and Environmental Systems</i> , <b>1998</b> , 15, 207-243	2.1	26
26	Using a new GA-based multiobjective optimization technique for the design of robot arms. <i>Robotica</i> , <b>1998</b> , 16, 401-414	2.1	34
25	Optimal design of reinforced concrete beams using genetic algorithms. <i>Expert Systems With Applications</i> , <b>1997</b> , 12, 101-108	7.8	48
24	A simple genetic algorithm for the design of reinforced concrete beams. <i>Engineering With Computers</i> , <b>1997</b> , 13, 185-196	4.5	64
23	A GENETIC ALGORITHM FOR THE OPTIMAL DESIGN OF AXIALLY LOADED NON-PRISMATIC COLUMNS. <i>Civil Engineering and Environmental Systems</i> , <b>1996</b> , 14, 111-146		3
22	Using Genetic Algorithms for Optimal Design of Axially Loaded Non-Prismatic Columns <b>1995</b> , 460-463		1
21	Saving evaluations in differential evolution for constrained optimization		2
20	A proposal to use stripes to maintain diversity in a multi-objective particle swarm optimizer		21
19	Fitness inheritance in multi-objective particle swarm optimization		12
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2	Smiling at Evolution. <i>SSRN Electronic Journal</i> ,	1 2
1	Towards a More Efficient Multi-Objective Particle Swarm Optimizer76-105	7