Arnaud Liefooghe

List of Publications by Year in Descending Order

84 papers	792 citations	15 h-index	24 g-index
101 ext. papers	944 ext. citations	2 avg, IF	4.25 L-index

#	Paper	IF	Citations
84	What if we increase the number of objectives? Theoretical and empirical implications for many-objective combinatorial optimization. *Computers and Operations Research*, **2022**, 105857	4.6	1
83	A model of anytime algorithm performance for bi-objective optimization. *Journal of Global Optimization*, **2021**, 79, 329-350	1.5	3
82	Decomposition-Based Multi-objective Landscape Features and Automated Algorithm Selection. *Lecture Notes in Computer Science*, **2021**, 34-50	0.9	1
81	Understanding Population Dynamics in Multi- and Many-Objective Evolutionary Algorithms for High-Resolution Approximations. *Advances in Operations Research*, **2021**, 2021, 1-16	1.3	
80	Algorithm selection of anytime algorithms **2020**,		5
79	On the Design of a Partition Crossover for the Quadratic Assignment Problem. *Lecture Notes in Computer Science*, **2020**, 303-316	0.9	
78	On Stochastic Fitness Landscapes: Local Optimality and Fitness Landscape Analysis for Stochastic Search Operators. *Lecture Notes in Computer Science*, **2020**, 97-110	0.9	
77	Surrogate assisted evolutionary algorithm for medium scale multi-objective optimisation problems **2020**,		2
76	Dynamic Compartmental Models for Large Multi-objective Landscapes and Performance Estimation. *Lecture Notes in Computer Science*, **2020**, 99-113	0.9	
75	On the Combined Impact of Population Size and Sub-problem Selection in MOEA/D. *Lecture Notes in Computer Science*, **2020**, 131-147	0.9	3
74	Dominance, Indicator and Decomposition Based Search for Multi-objective QAP: Landscape Analysis and Automated Algorithm Selection. *Lecture Notes in Computer Science*, **2020**, 33-47	0.9	1
73	An Ensemble Indicator-Based Density Estimator for Evolutionary Multi-objective Optimization. *Lecture Notes in Computer Science*, **2020**, 201-214	0.9	2
72	Landscape-Aware Performance Prediction for Evolutionary Multiobjective Optimization. *IEEE Transactions on Evolutionary Computation*, **2020**, 24, 1063-1077	15.6	17
71	A Parallel Tabu Search for the Large-scale Quadratic Assignment Problem **2019**,		1
70	New features for continuous exploratory landscape analysis based on the SOO tree **2019**,		15
69	Dynamic compartmental models for algorithm analysis and population size estimation **2019**,		1
68	Surrogate-assisted multiobjective optimization based on decomposition **2019**,		3

67	Estimating Relevance of Variables for Effective Recombination. *Lecture Notes in Computer Science*, **2019**, 411-423	0.9	
66	Approximating Pareto Set Topology by Cubic Interpolation on Bi-objective Problems. *Lecture Notes in Computer Science*, **2019**, 386-398	0.9	
65	Dominance, epsilon, and hypervolume local optimal sets in multi-objective optimization, and how to tell the difference **2018**,		2
64	Parallel pareto local search revisited **2018**,		1
63	Pareto dominance-based MOEAs on problems with difficult pareto set topologies **2018**,		1
62	On Pareto Local Optimal Solutions Networks. *Lecture Notes in Computer Science*, **2018**, 232-244	0.9	6
61	A Surrogate Model Based on Walsh Decomposition for Pseudo-Boolean Functions. *Lecture Notes in Computer Science*, **2018**, 181-193	0.9	7
60	A Fitness Landscape Analysis of Pareto Local Search on Bi-objective Permutation Flowshop Scheduling Problems. *Lecture Notes in Computer Science*, **2017**, 422-437	0.9	1
59	Closed state model for understanding the dynamics of MOEAs **2017**,		2
58	Problem Features versus Algorithm Performance on Rugged Multiobjective Combinatorial Fitness Landscapes. *Evolutionary Computation*, **2017**, 25, 555-585	4.3	16
57	Learning Variable Importance to Guide Recombination on Many-Objective Optimization **2017**,		2
56	An Approach for the Local Exploration of Discrete Many Objective Optimization Problems. *Lecture Notes in Computer Science*, **2017**, 135-150	0.9	4
55	Towards Landscape-Aware Automatic Algorithm Configuration: Preliminary Experiments on Neutral and Rugged Landscapes. *Lecture Notes in Computer Science*, **2017**, 215-232	0.9	9
54	Using Parallel Strategies to Speed up Pareto Local Search. *Lecture Notes in Computer Science*, **2017**, 62-74	0.9	3
53	Approaches for Many-Objective Optimization: Analysis and Comparison on MNK-Landscapes. *Lecture Notes in Computer Science*, **2016**, 14-28	0.9	3
52	Learning variable importance to guide recombination **2016**,		4
51	Multi-objective Local Search Based on Decomposition. *Lecture Notes in Computer Science*, **2016**, 431-441	0.9	4
50	A Correlation Analysis of Set Quality Indicator Values in Multiobjective Optimization **2016**,		15

49	Experiments on Greedy and Local Search Heuristics for d dimensional Hypervolume Subset Selection **2016**,		11
48	**2015**,		2
47	Injecting CMA-ES into MOEA/D **2015**,		10
46	Global vs Local Search on Multi-objective NK-Landscapes **2015**,		12
45	Experiments on Local Search for Bi-objective Unconstrained Binary Quadratic Programming. *Lecture Notes in Computer Science*, **2015**, 171-186	0.9	9
44	A Feature-Based Performance Analysis in Evolutionary Multiobjective Optimization. *Lecture Notes in Computer Science*, **2015**, 95-109	0.9	7
43	Geometric Differential Evolution in MOEA/D: A Preliminary Study. *Lecture Notes in Computer Science*, **2015**, 364-376	0.9	4
42	A hybrid metaheuristic for multiobjective unconstrained binary quadratic programming. *Applied Soft Computing Journal*, **2014**, 16, 10-19	7.5	28
41	Distributed localized bi-objective search. *European Journal of Operational Research*, **2014**, 239, 731-743	5.6	2
40	On the Impact of Multiobjective Scalarizing Functions. *Lecture Notes in Computer Science*, **2014**, 548-558	0.9	10
39	Local Optimal Sets and Bounded Archiving on Multi-objective NK-Landscapes with Correlated Objectives. *Lecture Notes in Computer Science*, **2014**, 621-630	0.9	2
38	Shake Them All!. *Lecture Notes in Computer Science*, **2014**, 641-651	0.9	5
37	What Makes an Instance Difficult for Black-Box 0-1 Evolutionary Multiobjective Optimizers?. *Lecture Notes in Computer Science*, **2014**, 3-15	0.9	3
36	An Analysis of Differential Evolution Parameters on Rotated Bi-objective Optimization Functions. *Lecture Notes in Computer Science*, **2014**, 143-154	0.9	1
35	An Analysis on Selection for High-Resolution Approximations in Many-Objective Optimization. *Lecture Notes in Computer Science*, **2014**, 487-497	0.9	6
34	Metaheuristics for Biobjective Flow Shop Scheduling **2013**, 225-252		1
33	ParadisEO-MO: from fitness landscape analysis to efficient local search algorithms. *Journal of Heuristics*, **2013**, 19, 881-915	1.9	30
32	On the structure of multiobjective combinatorial search space: MNK-landscapes with correlated objectives. *European Journal of Operational Research*, **2013**, 227, 331-342	5.6	50

31	On set-based local search for multiobjective combinatorial optimization **2013**,		3
30	Improvements on bicriteria pairwise sequence alignment: algorithms and applications. *Bioinformatics*, **2013**, 29, 996-1003	7.2	7
29	A study on population size and selection lapse in many-objective optimization **2013**,		3
28	On local search for bi-objective knapsack problems. *Evolutionary Computation*, **2013**, 21, 179-96	4.3	9
27	CoBRA: A Coevolutionary Metaheuristic for Bi-level Optimization. *Studies in Computational Intelligence*, **2013**, 95-114	0.8	3
26	Force-Based Cooperative Search Directions in Evolutionary Multi-objective Optimization. *Lecture Notes in Computer Science*, **2013**, 383-397	0.9	4
25	Effects of Population Size on Selection and Scalability in Evolutionary Many-Objective Optimization. *Lecture Notes in Computer Science*, **2013**, 450-454	0.9	
24	On dominance-based multiobjective local search: design, implementation and experimental analysis on scheduling and traveling salesman problems. *Journal of Heuristics*, **2012**, 18, 317-352	1.9	64
23	CoBRA: A cooperative coevolutionary algorithm for bi-level optimization **2012**,		36
22	On optimizing a bi-objective flowshop scheduling problem in an uncertain environment. *Computers and Mathematics With Applications*, **2012**, 64, 3747-3762	2.7	16
21	Solving a dial-a-ride problem with a hybrid evolutionary multi-objective approach: Application to demand responsive transport. *Applied Soft Computing Journal*, **2012**, 12, 1247-1258	7.5	40
20	Metaheuristics for multiobjective optimisation. *4or*, **2011**, 9, 219-222	1.4	1
19	A software framework based on a conceptual unified model for evolutionary multiobjective optimization: ParadisEO-MOEO. *European Journal of Operational Research*, **2011**, 209, 104-112	5.6	45
18	Set-based multiobjective fitness landscapes **2011**,		10
17	The road to VEGAS **2011**,		1
16	NILS: A Neutrality-Based Iterated Local Search and Its Application to Flowshop Scheduling. *Lecture Notes in Computer Science*, **2011**, 191-202	0.9	11
15	Pareto Local Optima of Multiobjective NK-Landscapes with Correlated Objectives. *Lecture Notes in Computer Science*, **2011**, 226-237	0.9	5
14	Connectedness and Local Search for Bicriteria Knapsack Problems. *Lecture Notes in Computer Science*, **2011**, 48-59	0.9	6

13	On the Neutrality of Flowshop Scheduling Fitness Landscapes. *Lecture Notes in Computer Science*, **2011**, 238-252	0.9	19
12	Analyzing the Effect of Objective Correlation on the Efficient Set of MNK-Landscapes. *Lecture Notes in Computer Science*, **2011**, 116-130	0.9	11
11	On the Effect of Connectedness for Biobjective Multiple and Long Path Problems. *Lecture Notes in Computer Science*, **2011**, 31-45	0.9	
10	ParadisEO-MOEO: A Software Framework for Evolutionary Multi-Objective Optimization. *Studies in Computational Intelligence*, **2010**, 87-117	0.8	8
9	On optimizing a demand responsive transport with an evolutionary multi-objective approach **2010**,		3
8	A parallel multiple reference point approach for multi-objective optimization. *European Journal of Operational Research*, **2010**, 205, 390-400	5.6	54
7	Metaheuristics and cooperative approaches for the Bi-objective Ring Star Problem. *Computers and Operations Research*, **2010**, 37, 1033-1044	4.6	17
6	A Study on Dominance-Based Local Search Approaches for Multiobjective Combinatorial Optimization. *Lecture Notes in Computer Science*, **2009**, 120-124	0.9	7
5	A unified model for evolutionary multi-objective optimization and its implementation in a general purpose software framework **2009**,		7
4	Metaheuristics for the Bi-objective Ring Star Problem. *Lecture Notes in Computer Science*, **2008**, 206-217	0.9	5
3	On the Integration of a TSP Heuristic into an EA for the Bi-objective Ring Star Problem. *Lecture Notes in Computer Science*, **2008**, 117-130	0.9	2
2	ParadisEO-MOEO: A Framework for Evolutionary Multi-objective Optimization **2007**, 386-400		41
1	Combinatorial Optimization of Stochastic Multi-objective Problems: An Application to the Flow-Shop Scheduling Problem **2007**, 457-471		17