

# Thomas Bäck

## List of Publications by Year in descending order

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249  
papers

8,288  
citations

172207

29  
h-index

123241

61  
g-index

260  
all docs

260  
docs citations

260  
times ranked

5461  
citing authors

#	ARTICLE	IF	CITATIONS
1	The vision of self-evolving computing systems. Journal of Integrated Design and Process Science, 2023, 26, 351-367.	0.2	4
2	Finding efficient trade-offs in multi-fidelity response surface modelling. Engineering Optimization, 2023, 55, 946-963.	1.5	0
3	Multitask Shape Optimization Using a 3-D Point Cloud Autoencoder as Unified Representation. IEEE Transactions on Evolutionary Computation, 2022, 26, 206-217.	7.5	12
4	Optimally Weighted Ensembles for Efficient Multi-objective Optimization. Lecture Notes in Computer Science, 2022, , 144-156.	1.0	1
5	IOAnalyzer: Detailed Performance Analyses for Iterative Optimization Heuristics. ACM Transactions on Evolutionary Learning, 2022, 2, 1-29.	2.7	20
6	Automated Configuration of Genetic Algorithms by Tuning for Anytime Performance. IEEE Transactions on Evolutionary Computation, 2022, 26, 1526-1538.	7.5	10
7	Constrained Multi-Objective Optimization with a Limited Budget of Function Evaluations. Memetic Computing, 2022, 14, 151-164.	2.7	10
8	Analyzing the impact of undersampling on the benchmarking and configuration of evolutionary algorithms. , 2022, , .		3
9	Multi-point acquisition function for constraint parallel efficient multi-objective optimization. , 2022, , .		2
10	Discovering Outstanding Subgroup Lists for Numeric Targets Using MDL. Lecture Notes in Computer Science, 2021, , 19-35.	1.0	6
11	SAMO-COBRA: A Fast Surrogate Assisted Constrained Multi-objective Optimization Algorithm. Lecture Notes in Computer Science, 2021, , 270-282.	1.0	6
12	Expressivity of parameterized and data-driven representations in quality diversity search. , 2021, , .		8
13	Exploiting Local Geometric Features in Vehicle Design Optimization with 3D Point Cloud Autoencoders. , 2021, , .		4
14	Automated Machine Learning for Remaining Useful Life Estimation of Aircraft Engines. , 2021, , .		6
15	Leveraging benchmarking data for informed one-shot dynamic algorithm selection. , 2021, , .		3
16	Bayesian neural architecture search using a training-free performance metric. Applied Soft Computing Journal, 2021, 106, 107356.	4.1	11
17	Sequential experimentation by evolutionary algorithms. , 2021, , .		1
18	Tuning as a means of assessing the benefits of new ideas in interplay with existing algorithmic modules. , 2021, , .		20

#	ARTICLE	IF	CITATIONS
19	Is there anisotropy in structural bias?. , 2021, , .		6
20	Addressing the multiplicity of solutions in optical lens design as a niching evolutionary algorithms computational challenge. , 2021, , .		2
21	A new acquisition function for robust Bayesian optimization of unconstrained problems. , 2021, , .		1
22	Locating the local minima in lens design with machine learning. , 2021, , .		1
23	Automatic preference based multi-objective evolutionary algorithm on vehicle fleet maintenance scheduling optimization. Swarm and Evolutionary Computation, 2021, 65, 100933.	4.5	15
24	Learning Adaptive Differential Evolution Algorithm From Optimization Experiences by Policy Gradient. IEEE Transactions on Evolutionary Computation, 2021, 25, 666-680.	7.5	50
25	Lifecycle forecast for consumer technology products with limited sales data. International Journal of Production Economics, 2021, 239, 108206.	5.1	6
26	Temporal convolutional autoencoder for unsupervised anomaly detection in time series. Applied Soft Computing Journal, 2021, 112, 107751.	4.1	67
27	Requirements towards optimizing analytics in industrial processes. Procedia Computer Science, 2021, 184, 597-605.	1.2	3
28	Comparison of deep learning and hand crafted features for mining simulation data. , 2021, , .		0
29	Improved Automated CASH Optimization with Tree Parzen Estimators for Class Imbalance Problems. , 2021, , .		4
30	Optimizing Ships Using the Holistic Accelerated Concept Design Methodology. Lecture Notes in Civil Engineering, 2021, , 38-50.	0.3	3
31	A Combination of Fourier Transform and Machine Learning for Fault Detection and Diagnosis of Induction Motors. , 2021, , .		3
32	Exploiting Generative Models for Performance Predictions of 3D Car Designs. , 2021, , .		3
33	Efficient AutoML via Combinational Sampling. , 2021, , .		2
34	Point2FFD: Learning Shape Representations of Simulation-Ready 3D Models for Engineering Design Optimization. , 2021, , .		1
35	Cluster-based Kriging approximation algorithms for complexity reduction. Applied Intelligence, 2020, 50, 778-791.	3.3	31
36	Benchmarking discrete optimization heuristics with IOHprofiler. Applied Soft Computing Journal, 2020, 88, 106027.	4.1	41

#	ARTICLE	IF	CITATIONS
37	Time Series Encodings with Temporal Convolutional Networks. Lecture Notes in Computer Science, 2020, , 161-173.	1.0	14
38	The significance of bug report elements. Empirical Software Engineering, 2020, 25, 5255-5294.	3.0	14
39	Feature Visualization for 3D Point Cloud Autoencoders. , 2020, , .		14
40	Exploring Clinical Time Series Forecasting with Meta-Features in Variational Recurrent Models. , 2020, , .		1
41	Can Single Solution Optimisation Methods Be Structurally Biased?. , 2020, , .		6
42	On the Performance of Oversampling Techniques for Class Imbalance Problems. Lecture Notes in Computer Science, 2020, , 84-96.	1.0	8
43	Can Compact Optimisation Algorithms Be Structurally Biased?. Lecture Notes in Computer Science, 2020, , 229-242.	1.0	9
44	Improving Imbalanced Classification by Anomaly Detection. Lecture Notes in Computer Science, 2020, , 512-523.	1.0	17
45	Benchmarking a $(\mu + \lambda)$ Genetic Algorithm with Configurable Crossover Probability. Lecture Notes in Computer Science, 2020, , 699-713.	1.0	9
46	An Analysis of Phenotypic Diversity in Multi-solution Optimization. Lecture Notes in Computer Science, 2020, , 43-55.	1.0	5
47	Exploring Dimensionality Reduction Techniques for Efficient Surrogate-Assisted optimization. , 2020, , .		7
48	Sequential experimentation by evolutionary algorithms. , 2020, , .		1
49	A modular hybridization of particle swarm optimization and differential evolution. , 2020, , .		8
50	Integrated vs. sequential approaches for selecting and tuning CMA-ES variants. , 2020, , .		10
51	Towards dynamic algorithm selection for numerical black-box optimization. , 2020, , .		8
52	Improving NSGA-III for flexible job shop scheduling using automatic configuration, smart initialization and local search. , 2020, , .		1
53	Designing Air Flow with Surrogate-Assisted Phenotypic Niching. Lecture Notes in Computer Science, 2020, , 140-153.	1.0	6
54	Back To Meshes: Optimal Simulation-ready Mesh Prototypes For Autoencoder-based 3D Car Point Clouds. , 2020, , .		2

#	ARTICLE	IF	CITATIONS
55	Improving Many-Objective Evolutionary Algorithms by Means of Edge-Rotated Cones. Lecture Notes in Computer Science, 2020, , 313-326.	1.0	4
56	Benchmarking and analyzing iterative optimization heuristics with IOHprofiler. , 2020, , .		0
57	Hyper-Parameter Optimization for Improving the Performance of Grammatical Evolution. , 2019, , .		2
58	Interpolating Local and Global Search by Controlling the Variance of Standard Bit Mutation. , 2019, , .		16
59	Bayesian performance analysis for black-box optimization benchmarking. , 2019, , .		15
60	A multi-point mechanism of expected hypervolume improvement for parallel multi-objective bayesian global optimization. , 2019, , .		14
61	A tabu search-based memetic algorithm for the multi-objective flexible job shop scheduling problem. , 2019, , .		2
62	Predict or screen your expensive assay. , 2019, , .		3
63	Efficient computation of expected hypervolume improvement using box decomposition algorithms. Journal of Global Optimization, 2019, 75, 3-34.	1.1	51
64	Multi-objective genetic algorithms for reducing mark read-out effort in lithographic tests. , 2019, , .		0
65	Automatic Configuration of Deep Neural Networks with Parallel Efficient Global Optimization. , 2019, , .		13
66	Sequential experimentation by evolutionary algorithms. , 2019, , .		0
67	Modeling user selection in quality diversity. , 2019, , .		4
68	Vehicle Fleet Maintenance Scheduling Optimization by Multi-objective Evolutionary Algorithms. , 2019, , .		8
69	Online selection of CMA-ES variants. , 2019, , .		16
70	Benchmarking discrete optimization heuristics with IOHprofiler. , 2019, , .		6
71	Solving optimization problems with high conditioning by means of online whitening. , 2019, , .		0
72	On the potential of evolution strategies for neural network weight optimization. , 2019, , .		0

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73	Towards self-adaptive efficient global optimization. AIP Conference Proceedings, 2019, , .	0.3	2
74	Weighted ensembles in model-based global optimization. AIP Conference Proceedings, 2019, , .	0.3	4
75	Mirrored Orthogonal Sampling for Covariance Matrix Adaptation Evolution Strategies. Evolutionary Computation, 2019, 27, 699-725.	2.3	9
76	Towards single- and multiobjective Bayesian global optimization for mixed integer problems. AIP Conference Proceedings, 2019, , .	0.3	5
77	Diversity-Indicator Based Multi-Objective Evolutionary Algorithm: DI-MOEA. Lecture Notes in Computer Science, 2019, , 346-358.	1.0	10
78	Towards multi-objective mixed integer evolution strategies. AIP Conference Proceedings, 2019, , .	0.3	0
79	Scalability of Learning Tasks on 3D CAE Models Using Point Cloud Autoencoders. , 2019, , .		9
80	Learning Time-Series Data of Industrial Design Optimization using Recurrent Neural Networks. , 2019, , .		3
81	An Empirical Comparison of Meta-Modeling Techniques for Robust Design Optimization. , 2019, , .		5
82	Switching Between Swarm Optimization Algorithms During a Run: An Empirical Study. , 2019, , .		0
83	Hyperparameter Optimisation for Improving Classification under Class Imbalance. , 2019, , .		19
84	On the Efficiency of a Point Cloud Autoencoder as a Geometric Representation for Shape Optimization. , 2019, , .		14
85	Automated Machine Learning for Short-term Electric Load Forecasting. , 2019, , .		11
86	Automated Machine Learning for EEG-Based Classification of Parkinson's Disease Patients. , 2019, , .		18
87	A New Approach Towards the Combined Algorithm Selection and Hyper-parameter Optimization Problem. , 2019, , .		6
88	Multi-Objective Bayesian Global Optimization using expected hypervolume improvement gradient. Swarm and Evolutionary Computation, 2019, 44, 945-956.	4.5	75
89	Boosting Quantum Annealing Performance Using Evolution Strategies for Annealing Offsets Tuning. Lecture Notes in Computer Science, 2019, , 157-168.	1.0	7
90	Modeling and Prediction of Remaining Useful Lifetime for Maintenance Scheduling Optimization of a Car Fleet. International Journal of Performability Engineering, 2019, 15, 2318.	0.6	4

#	ARTICLE	IF	CITATIONS
91	Cooling Strategies for the Moment-Generating Function in Bayesian Global Optimization. , 2018, , .		13
92	Identifying flight delay patterns using diverse subgroup discovery. , 2018, , .		6
93	Learning Fluid Flows. , 2018, , .		5
94	Machine Learning for Predicting the Impact Point of a Low Speed Vehicle Crash. , 2018, , .		3
95	Machine Learning for Predicting the Damaged Parts of a Low Speed Vehicle Crash. , 2018, , .		9
96	First Results Solving Arbitrarily Structured Maximum Independent Set Problems Using Quantum Annealing. , 2018, , .		18
97	Towards a theory-guided benchmarking suite for discrete black-box optimization heuristics. , 2018, , .		15
98	Prototype Discovery Using Quality-Diversity. Lecture Notes in Computer Science, 2018, , 500-511.	1.0	15
99	Multi-objective aerodynamic design with user preference using truncated expected hypervolume improvement. , 2018, , .		8
100	A Novel Uncertainty Quantification Method for Efficient Global Optimization. Communications in Computer and Information Science, 2018, , 480-491.	0.4	4
101	Ranking empirical cumulative distribution functions using stochastic and pareto dominance. , 2018, , .		0
102	A new foraging-based algorithm for online scheduling. , 2018, , .		0
103	Multi-fidelity surrogate model approach to optimization. , 2018, , .		5
104	Compiling a benchmarking test-suite for combinatorial black-box optimization. , 2018, , .		3
105	Sequential experimentation by evolutionary algorithms. , 2018, , .		1
106	Towards an Adaptive CMA-ES Configurator. Lecture Notes in Computer Science, 2018, , 54-65.	1.0	13
107	Dynamic vehicle routing with time windows in theory and practice. Natural Computing, 2017, 16, 119-134.	1.8	30
108	Corrosion test improvement by data driven climatic modeling. Materials and Corrosion - Werkstoffe Und Korrosion, 2017, 68, 1338-1342.	0.8	0

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109	Algorithm configuration data mining for CMA evolution strategies. , 2017, , .		15
110	Optimizationâ€Based Process Synthesis Based on a Commercial Flowsheet Simulator. Chemie-Ingenieur-Technik, 2017, 89, 655-664.	0.4	6
111	Self-adjusting parameter control for surrogate-assisted constrained optimization under limited budgets. Applied Soft Computing Journal, 2017, 61, 377-393.	4.1	52
112	Online anomaly detection on the webscope S5 dataset: A comparative study. , 2017, , .		25
113	Configuring advanced evolutionary algorithms for multicriteria building spatial design optimisation. , 2017, , .		6
114	Time complexity reduction in efficient global optimization using cluster kriging. , 2017, , .		16
115	Sequential experimentation by evolutionary algorithms. , 2017, , .		0
116	Reconstructing fixed time traffic light cycles by camera data analytics. , 2017, , .		0
117	A multi-method simulation of a high-frequency bus line. , 2017, , .		4
118	A new acquisition function for Bayesian optimization based on the moment-generating function. , 2017, , .		40
119	Hypervolume Indicator Gradient Ascent Multi-objective Optimization. Lecture Notes in Computer Science, 2017, , 654-669.	1.0	16
120	Derivative-Free Chemical Process Synthesis by Memetic Algorithms Coupled to Aspen Plus Process Models. Computer Aided Chemical Engineering, 2016, 38, 187-192.	0.3	6
121	Truncated expected hypervolume improvement: Exact computation and application. , 2016, , .		11
122	Local subspace-based outlier detection using global neighbourhoods. , 2016, , .		21
123	Towards Data Driven Process Control in Manufacturing Car Body Parts. , 2016, , .		5
124	Online selection of surrogate models for constrained black-box optimization. , 2016, , .		10
125	A framework for evaluating meta-models for simulation-based optimisation. , 2016, , .		1
126	Evolving the structure of Evolution Strategies. , 2016, , .		35



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127	Equality constraint handling for surrogate-assisted constrained optimization. , 2016, , .		4
128	Preference-based multiobjective optimization using truncated expected hypervolume improvement. , 2016, , .		13
129	Selection of a DFO Method for the Efficient Solution of Continuous Constrained Sub-Problems within a Memetic Algorithm for Chemical Process Synthesis. , 2016, , .		4
130	Balancing risk and expected gain in kriging-based global optimization. , 2016, , .		3
131	Multi-objective inventory routing with uncertain demand using population-based metaheuristics. Integrated Computer-Aided Engineering, 2016, 23, 205-220.	2.5	13
132	SMS-EMOA with multiple dynamic reference points. , 2016, , .		2
133	Fuzzy clustering for Optimally Weighted Cluster Kriging. , 2016, , .		4
134	Ein memetischer Algorithmus zur globalen Suche optimaler Designalternativen und Betriebsparameter chemischer Prozesse. Chemie-Ingenieur-Technik, 2016, 88, 1372-1372.	0.4	0
135	Multiobjective optimization of classifiers by means of 3D convex-hull-based evolutionary algorithms. Information Sciences, 2016, 367-368, 80-104.	4.0	21
136	RELIABILITY TEST DEMONSTRATION METHOD FOR EXPONENTIAL LIFE SYSTEM WITH RELIABILITY GROWTH UNDER THE CONDITION OF IN-TIME CORRECTIVE STRATEGY. , 2016, , .		1
137	Comparing a Weiszfeld's-Based Procedure and (1+1)-es for Solving the Planar Single-Facility Location-Routing Problem. , 2015, , .		0
138	Towards robustness optimization of complex networks based on redundancy backup. , 2015, , .		3
139	Optimizing highly constrained truck loadings using a self-adaptive genetic algorithm. , 2015, , .		8
140	Ant based solver for dynamic vehicle routing problem with time windows and multiple priorities. , 2015, , .		7
141	Expected hypervolume improvement algorithm for PID controller tuning and the multiobjective dynamical control of a biogas plant. , 2015, , .		13
142	User-derived mutation in highly constrained truck loading optimization. , 2015, , .		0
143	Reducing complexity in many objective optimization using community detection. , 2015, , .		5
144	Efficient multi-criteria optimization on noisy machine learning problems. Applied Soft Computing Journal, 2015, 29, 357-370.	4.1	28

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145	Multicriteria Inventory Routing by Cooperative Swarms and Evolutionary Algorithms. Lecture Notes in Computer Science, 2015, , 127-137.	1.0	5
146	Automatic Metamodelling of CAE Simulation Models. ATZ Worldwide, 2015, 117, 36-41.	0.1	2
147	Convex Hull-Based Multiobjective Genetic Programming for Maximizing Receiver Operating Characteristic Performance. IEEE Transactions on Evolutionary Computation, 2015, 19, 188-200.	7.5	86
148	A New Repair Method For Constrained Optimization. , 2015, , .		15
149	Optimally Weighted Cluster Kriging for Big Data Regression. Lecture Notes in Computer Science, 2015, , 310-321.	1.0	20
150	Mirrored orthogonal sampling with pairwise selection in evolution strategies. , 2014, , .		13
151	Introduction to evolution strategies. , 2014, , .		2
152	Major aging-associated RNA expressions change at two distinct age-positions. BMC Genomics, 2014, 15, 132.	1.2	20
153	Power Distribution Network Reconfiguration by Evolutionary Integer Programming. Lecture Notes in Computer Science, 2014, , 11-23.	1.0	2
154	Contemporary Evolution Strategies. Natural Computing Series, 2013, , .	2.2	64
155	Academic education of software engineering practices: towards planning and improving capstone courses based upon intensive coaching and team routines. , 2013, , .		15
156	Evolution strategies. , 2013, , .		0
157	Novelty and interestingness measures for design-space exploration. , 2013, , .		10
158	Mixed Integer Evolution Strategies for Parameter Optimization. Evolutionary Computation, 2013, 21, 29-64.	2.3	74
159	Ant Colony Algorithms for the Dynamic Vehicle Routing Problem with Time Windows. Lecture Notes in Computer Science, 2013, , 1-10.	1.0	12
160	Empirical Analysis. Natural Computing Series, 2013, , 55-83.	2.2	1
161	State estimation for anaerobic digesters using the ADM1. Water Science and Technology, 2012, 66, 1088-1095.	1.2	31
162	What is the value of your software?. , 2012, , .		12

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163	A meta-genetic algorithm for solving the Capacitated Vehicle Routing Problem. , 2012, , .		5
164	Nonlinear model predictive substrate feed control of biogas plants. , 2012, , .		8
165	Novel head and neck cancer survival analysis approach: Random survival forests versus cox proportional hazards regression. Head and Neck, 2012, 34, 50-58.	0.9	46
166	Using the uncertainty handling CMA-ES for finding robust optima. , 2011, , .		5
167	On the log-normal self-adaptation of the mutation rate in binary search spaces. , 2011, , .		10
168	Evolutionary strategies for identification and validation of material model parameters for forming simulations. , 2011, , .		3
169	Evolution strategies. , 2011, , .		1
170	Evolutionary optimization of rotational population transfer. Physical Review A, 2011, 84, .	1.0	5
171	Experimental optimization by evolutionary algorithms. , 2010, , .		1
172	Mixed-integer evolution strategy using multiobjective selection applied to warehouse design optimization. , 2010, , .		14
173	Adaptive Niche Radii and Niche Shapes Approaches for Niching with the CMA-ES. Evolutionary Computation, 2010, 18, 97-126.	2.3	81
174	A robust optimization approach using Kriging metamodels for robustness approximation in the CMA-ES. , 2010, , .		13
175	A Reduced-Cost SMS-EMOA Using Kriging, Self-Adaptation, and Parallelization. Lecture Notes in Economics and Mathematical Systems, 2010, , 301-311.	0.3	10
176	An Archive Maintenance Scheme for Finding Robust Solutions. , 2010, , 214-223.		12
177	Exploiting Overlap When Searching for Robust Optima. , 2010, , 63-72.		1
178	Accelerated optimization and automated discovery with covariance matrix adaptation for experimental quantum control. Physical Review A, 2009, 80, .	1.0	35
179	Combining Aggregation with Pareto Optimization: A Case Study in Evolutionary Molecular Design. Lecture Notes in Computer Science, 2009, , 453-467.	1.0	27
180	Optimization of laser field-free orientation of a state-selected NO molecular sample. New Journal of Physics, 2009, 11, 105040.	1.2	20

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181	Niching with derandomized evolution strategies in artificial and real-world landscapes. <i>Natural Computing</i> , 2009, 8, 171-196.	1.8	25
182	How to Do Recombination in Evolution Strategies: An Empirical Study. <i>Lecture Notes in Computer Science</i> , 2009, , 223-232.	1.0	0
183	Optimizing a Medical Image Analysis System Using Mixed-Integer Evolution Strategies. <i>Studies in Computational Intelligence</i> , 2009, , 91-112.	0.7	4
184	Niching Methods: Speciation Theory Applied for Multi-modal Function Optimization. <i>Natural Computing Series</i> , 2009, , 705-729.	2.2	1
185	GPCR NaVa database: natural variants in human G protein-coupled receptors. <i>Human Mutation</i> , 2008, 29, 39-44.	1.1	44
186	Evolutionary algorithms for real world applications [Application Notes]. <i>IEEE Computational Intelligence Magazine</i> , 2008, 3, 64-67.	3.4	16
187	Evolution Strategies for Laser Pulse Compression. <i>Lecture Notes in Computer Science</i> , 2008, , 219-230.	1.0	8
188	Evolutionary algorithms for automated drug design towards target molecule properties. , 2008, , .		4
189	On the evolution of laser pulses under a dynamic Quantum Control environment. , 2008, , .		0
190	Metamodel-assisted mixed integer evolution strategies and their application to intravascular ultrasound image analysis. , 2008, , .		8
191	Niche Radius Adaptation with Asymmetric Sharing. <i>Lecture Notes in Computer Science</i> , 2008, , 195-204.	1.0	5
192	Mixed-Integer Evolution Strategies with Dynamic Niching. <i>Lecture Notes in Computer Science</i> , 2008, , 246-255.	1.0	3
193	Optimizing Computed Tomographic Angiography Image Segmentation Using Fitness Based Partitioning. <i>Lecture Notes in Computer Science</i> , 2008, , 275-284.	1.0	2
194	Performance analysis of niching algorithms based on derandomized-ES variants. , 2007, , .		4
195	The application of evolutionary multi-criteria optimization to dynamic molecular alignment. , 2007, , .		8
196	Self-Adaptive Niching CMA-ES with Mahalanobis Metric. , 2007, , .		8
197	The second harmonic generation case-study as a gateway for es to quantum control problems. , 2007, , .		3
198	On the scalability of evolution strategies in the optimization of dynamic molecular alignment. , 2007, , .		0

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199	DNA computing of solutions to knapsack problems. <i>BioSystems</i> , 2007, 88, 156-162.	0.9	31
200	Characteristic amino acid combinations in olfactory G protein-coupled receptors. <i>Proteins: Structure, Function and Bioinformatics</i> , 2007, 67, 154-166.	1.5	2
201	Computing and the natural sciences at CiE 2005. <i>Theoretical Computer Science</i> , 2007, 371, 1-3.	0.5	0
202	Classification of Cell Fates with Support Vector Machine Learning. , 2007, , 258-269.		2
203	Gaining Insights into Laser Pulse Shaping by Evolution Strategies. <i>Lecture Notes in Computer Science</i> , 2007, , 467-477.	1.0	3
204	Niche Radius Adaptation in the CMA-ES Niching Algorithm. <i>Lecture Notes in Computer Science</i> , 2006, , 142-151.	1.0	38
205	The Molecule Evaluator. An Interactive Evolutionary Algorithm for the Design of Drug-Like Molecules. <i>Journal of Chemical Information and Modeling</i> , 2006, 46, 545-552.	2.5	85
206	Mining a Chemical Database for Fragment Co-occurrence: A Discovery of "Chemical Cliché". <i>Journal of Chemical Information and Modeling</i> , 2006, 46, 553-562.	2.5	49
207	Substructure Mining Using Elaborate Chemical Representation. <i>Journal of Chemical Information and Modeling</i> , 2006, 46, 597-605.	2.5	76
208	Evolutionary algorithms in the optimization of dynamic molecular alignment. <i>Optics Communications</i> , 2006, 264, 511-518.	1.0	24
209	The complete-basis-functions parameterization in ES and its application to laser pulse shaping. , 2006, , .		5
210	Mixed-Integer Evolution Strategies and Their Application to Intravascular Ultrasound Image Analysis. <i>Lecture Notes in Computer Science</i> , 2006, , 415-426.	1.0	7
211	Niching in Evolution Strategies and Its Application to Laser Pulse Shaping. <i>Lecture Notes in Computer Science</i> , 2006, , 85-96.	1.0	14
212	Mixed-Integer NK Landscapes. <i>Lecture Notes in Computer Science</i> , 2006, , 42-51.	1.0	27
213	Learning the Complete-Basis-Functions Parameterization for the Optimization of Dynamic Molecular Alignment by ES. <i>Lecture Notes in Computer Science</i> , 2006, , 410-418.	1.0	1
214	Evolutionary Algorithms in Drug Design. <i>Natural Computing</i> , 2005, 4, 177-243.	1.8	40
215	Niching in evolution strategies. , 2005, , .		40
216	Using Genetic Algorithms to Evolve Behavior in Cellular Automata. <i>Lecture Notes in Computer Science</i> , 2005, , 1-10.	1.0	16

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217	Inverse Design of Cellular Automata by Genetic Algorithms: An Unconventional Programming Paradigm. Lecture Notes in Computer Science, 2005, , 161-172.	1.0	3
218	Reliable Hierarchical Clustering with the Self-organizing Map. Lecture Notes in Computer Science, 2005, , 385-396.	1.0	2
219	Evolving Transition Rules for Multi Dimensional Cellular Automata. Lecture Notes in Computer Science, 2004, , 182-191.	1.0	11
220	Robust Parameter Settings for Variation Operators by Measuring the Resampling Ratio: A Study on Binary Constraint Satisfaction Problems. Journal of Heuristics, 2004, 10, 629-640.	1.1	2
221	An analysis of the behavior of simplified evolutionary algorithms on trap functions. IEEE Transactions on Evolutionary Computation, 2003, 7, 11-22.	7.5	34
222	Multi-criteria Airfoil Design with Evolution Strategies. Lecture Notes in Computer Science, 2003, , 782-795.	1.0	0
223	Evolution strategies for engineering design optimisation. , 2003, , 2394-2397.		1
224	Combining and Comparing Cluster Methods in a Receptor Database. Lecture Notes in Computer Science, 2003, , 341-351.	1.0	1
225	Metamodel-Assisted Evolution Strategies. Lecture Notes in Computer Science, 2002, , 361-370.	1.0	118
226	Adaptive business intelligence based on evolution strategies: some application examples of self-adaptive software. Information Sciences, 2002, 148, 113-121.	4.0	32
227	Measuring the Searched Space to Guide Efficiency: The Principle and Evidence on Constraint Satisfaction. Lecture Notes in Computer Science, 2002, , 23-32.	1.0	6
228	Evaluating Multi-criteria Evolutionary Algorithms for Airfoil Optimisation. Lecture Notes in Computer Science, 2002, , 841-850.	1.0	7
229	Robust design of multilayer optical coatings by means of evolutionary algorithms. IEEE Transactions on Evolutionary Computation, 1998, 2, 162-167.	7.5	88
230	An Overview of Parameter Control Methods by Self-Adaptation in Evolutionary Algorithms. Fundamenta Informaticae, 1998, 35, 51-66.	0.3	57
231	A superior evolutionary algorithm for 3-SAT. Lecture Notes in Computer Science, 1998, , 123-136.	1.0	21
232	Empirical Investigation of Multiparent Recombination Operators in Evolution Strategies. Evolutionary Computation, 1997, 5, 347-365.	2.3	100
233	Evolutionary Computation Models. , 1997, , .		2
234	Evolutionary Computation Implementations. , 1997, , .		0

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