Fabio Caraffini

List of Publications by Year
in descending order

65 papers	1,208 citations	471061 17 h-index	433756 31 g-index
73 all docs	73 docs citations	73 times ranked	860 citing authors

#	ARTICLE	IF	CITATIONS
1	Parallel memetic structures. Information Sciences, 2013, 227, 60-82.	4.0	95
2	Cluster-Based Population Initialization for differential evolution frameworks. Information Sciences, 2015, 297, 216-235.	4.0	86
3	An analysis on separability for Memetic Computing automatic design. Information Sciences, 2014, 265, 1-22.	4.0	84
4	Infeasibility and structural bias in differential evolution. Information Sciences, 2019, 496, 161-179.	4.0	78
5	MULTI-STRATEGY COEVOLVING AGING PARTICLE OPTIMIZATION. International Journal of Neural Systems, 2014, 24, 1450008.	3.2	65
6	Structural bias in population-based algorithms. Information Sciences, 2015, 298, 468-490.	4.0	64
7	Multicriteria adaptive differential evolution for global numerical optimization. Integrated Computer-Aided Engineering, 2015, 22, 103-107.	2.5	48
8	HyperSPAM: A study on hyper-heuristic coordination strategies in the continuous domain. Information Sciences, 2019, 477, 186-202.	4.0	44
9	Evolving Deep Learning Convolutional Neural Networks for Early COVID-19 Detection in Chest X-ray Images. Mathematics, 2021, 9, 1002.	1.1	37
10	Compact Differential Evolution Light: High Performance Despite Limited Memory Requirement and Modest Computational Overhead. Journal of Computer Science and Technology, 2012, 27, 1056-1076.	0.9	35
11	Memory-saving memetic computing for path-following mobile robots. Applied Soft Computing Journal, 2013, 13, 2003-2016.	4.1	32
12	Super-fit Multicriteria Adaptive Differential Evolution. , 2013, , .		31
13	Re-sampled inheritance search: high performance despite the simplicity. Soft Computing, 2013, 17, 2235-2256.	2.1	28
14	A CMA-ES super-fit scheme for the re-sampled inheritance search. , 2013, , .		26
15	A product-centric data mining algorithm for targeted promotions. Journal of Retailing and Consumer Services, 2020, 54, 101940.	5.3	25
16	A study on rotation invariance in differential evolution. Swarm and Evolutionary Computation, 2019, 50, 100436.	4.5	24
17	Differential evolution outside the box. Information Sciences, 2021, 581, 587-604.	4.0	23
18	A Clustering System for Dynamic Data Streams Based on Metaheuristic Optimisation. Mathematics, 2019, 7, 1229.	1.1	22

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19	Application of uninorms to market basket analysis. International Journal of Intelligent Systems, 2019, 34, 39-49.	3.3	21
20	An Optimisation-Driven Prediction Method for Automated Diagnosis and Prognosis. Mathematics, 2019, 7, 1051.	1.1	17
21	The SOS Platform: Designing, Tuning and Statistically Benchmarking Optimisation Algorithms. Mathematics, 2020, 8, 785.	1.1	17
22	Large Scale Problems in Practice: The Effect of Dimensionality on the Interaction Among Variables. Lecture Notes in Computer Science, 2017, , 636-652.	1.0	15
23	Structural bias in differential evolution: A preliminary study. AIP Conference Proceedings, 2019, , .	0.3	15
24	Oil Palm Detection via Deep Transfer Learning. , 2020, , .		15
25	Cooperative and distributed decision-making in a multi-agent perception system for improvised land mines detection. Information Fusion, 2020, 64, 32-49.	11.7	15
26	A Differential Evolution Framework with Ensemble of Parameters and Strategies and Pool of Local Search Algorithms. Lecture Notes in Computer Science, 2014, , 615-626.	1.0	13
27	Micro-differential evolution with extra moves along the axes. , 2013, , .		12
28	Shallow buried improvised explosive device detection via convolutional neural networks. Integrated Computer-Aided Engineering, 2020, 27, 403-416.	2.5	11
29	Using Data Mining in Educational Administration: A Case Study on Improving School Attendance. Applied Sciences (Switzerland), 2020, 10, 3116.	1.3	11
30	Validation of convolutional layers in deep learning models to identify patterns in multispectral images. , 2019, , .		10
31	A comparison of three differential evolution strategies in terms of early convergence with different population sizes. AIP Conference Proceedings, 2019, , .	0.3	10
32	Fuzzy convolutional deep-learning model to estimate the operational risk capital using multi-source risk events. Applied Soft Computing Journal, 2021, 107, 107381.	4.1	10
33	Can Compact Optimisation Algorithms Be Structurally Biased?. Lecture Notes in Computer Science, 2020, , 229-242.	1.0	9
34	Regression Analysis of Macroeconomic Conditions and Capital Structures of Publicly Listed British Firms. Mathematics, 2022, 10, 1119.	1.1	9
35	A Separability Prototype for Automatic Memes with Adaptive Operator Selection. , 2014, , .		8
36	Improving (1+1) covariance matrix adaptation evolution strategy: A simple yet efficient approach. AIP Conference Proceedings, 2019, , .	0.3	8

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37	A Robust Decision-Making Framework Based on Collaborative Agents. IEEE Access, 2020, 8, 150974-150988.	2.6	8
38	Emergence of structural bias in differential evolution. , 2021, , .		8
39	Compact Optimization Algorithms with Re-Sampled Inheritance. Lecture Notes in Computer Science, 2019, , 523-534.	1.0	8
40	SCIPS: A serious game using a guidance mechanic to scaffold effective training for cyber security. Information Sciences, 2021, 580, 524-540.	4.0	7
41	Re-sampled inheritance compact optimization. Knowledge-Based Systems, 2020, 208, 106416.	4.0	7
42	Using Optimisation Meta-Heuristics for the Roughness Estimation Problem in River Flow Analysis. Applied Sciences (Switzerland), 2021, 11, 10575.	1.3	7
43	A Proposed VR Platform for Supporting Blended Learning Post COVID-19. Education Sciences, 2022, 12, 435.	1.4	7
44	Continuous Parameter Pools in Ensemble Differential Evolution. , 2015, , .		6
45	Can Single Solution Optimisation Methods Be Structurally Biased?. , 2020, , .		6
46	Is there anisotropy in structural bias?. , 2021, , .		6
47	BIAS: A Toolbox for Benchmarking Structural Bias in the Continuous Domain. IEEE Transactions on Evolutionary Computation, 2022, 26, 1380-1393.	7.5	6
48	Identifying Parkinson's Disease Through the Classification of Audio Recording Data. , 2020, , .		5
49	Rotation Invariance and Rotated Problems: An Experimental Study on Differential Evolution. Lecture Notes in Computer Science, 2018, , 597-614.	1.0	5
50	Robot Base Disturbance Optimization with Compact Differential Evolution Light. Lecture Notes in Computer Science, 2012, , 285-294.	1.0	5
51	Meta-Lamarckian learning in three stage optimal memetic exploration. , 2012, , .		4
52	Efficient Computation of the Nonlinear Schrödinger Equation with Time-Dependent Coefficients. Mathematics, 2020, 8, 374.	1.1	4
53	The importance of being structured: A comparative study on multi stage memetic approaches. , 2012, , .		3
54	Single particle algorithms for continuous optimization. , 2013, , .		3

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55	Focusing the search: a progressively shrinking memetic computing framework. International Journal of Innovative Computing and Applications, 2013, 5, 127.	0.2	3
56	Analysis of Structural Bias in Differential Evolution Configurations. Studies in Computational Intelligence, 2022, , 1-22.	0.7	3
57	A new moving peaks benchmark with attractors for dynamic evolutionary algorithms. Swarm and Evolutionary Computation, 2022, 74, 101125.	4.5	3
58	Three variants of three Stage Optimal Memetic Exploration for handling non-separable fitness landscapes. , 2012, , .		2
59	Re-sampling search: A seriously simple memetic approach with a high performance. , 2013, , .		2
60	Training Data Set Assessment for Decision-Making in a Multiagent Landmine Detection Platform. , 2020, , .		2
61	An Experimental Study of Prediction Methods in Robust optimization Over Time. , 2020, , .		2
62	A Multi-Agent System for Modelling the Spread of Lethal Wilt in Oil-Palm Plantations. , 2020, , .		2
63	Applications of computational intelligence€based systems for societal enhancement. International Journal of Intelligent Systems, 2022, 37, 2679-2682.	3.3	2
64	Using self€organising maps to predict and contain natural disasters and pandemics. International Journal of Intelligent Systems, 0, , .	3.3	1
65	A Neural Network for Interpolating Light-Sources. , 2020, , .		0