Mohammed H El-Abd

List of Publications by Citations

57 papers	697 citations	14 h-index	24 g-index
70 ext. papers	875 ext. citations	3.4 avg, IF	5.16 L-index

#	Paper	IF	Citations
57	Performance assessment of foraging algorithms vs. evolutionary algorithms. *Information Sciences*, **2012**, 182, 243-263	7.7	95
56	An improved global-best harmony search algorithm. *Applied Mathematics and Computation*, **2013**, 222, 94-106	2.7	66
55	Global-best brain storm optimization algorithm. *Swarm and Evolutionary Computation*, **2017**, 37, 27-44	9.8	64
54	A Taxonomy of Cooperative Search Algorithms. *Lecture Notes in Computer Science*, **2005**, 32-41	0.9	43
53	A Taxonomy of Cooperative Particle Swarm Optimizers. *International Journal of Computational Intelligence Research*, **2008**, 4,	0	27
52	Generalized opposition-based artificial bee colony algorithm **2012**,		26
51	Discrete cooperative particle swarm optimization for FPGA placement. *Applied Soft Computing Journal*, **2010**, 10, 284-295	7.5	25
50	Opposition-based artificial bee colony algorithm **2011**,		24
49	Brain storm optimization algorithm with re-initialized ideas and adaptive step size **2016**,		21
48	A Review of Embedded Systems Education in the Arduino Age: Lessons Learned and Future Directions. *International Journal of Engineering Pedagogy*, **2017**, 7, 79	1.3	19
47	A cooperative approach to The Artificial Bee Colony algorithm **2010**,		18
46	Testing a Particle Swarm Optimization and Artificial Bee Colony Hybrid algorithm on the CEC13 benchmarks **2013**,		17
45	Black-box optimization benchmarking for noiseless function testbed using particle swarm optimization **2009**,		17
44	A Review on Swarm Intelligence and Evolutionary Algorithms for Solving the Traffic Signal Control Problem. *IEEE Transactions on Intelligent Transportation Systems*, **2020**, 1-16	6.1	17
43	**2011**,		12
42	Information exchange in multiple cooperating swarms		12
41	A cooperative particle swarm optimizer with migration of heterogeneous probabilistic models. *Swarm Intelligence*, **2010**, 4, 57-89	3	11

40	Semi-autonomous indoor firefighting UAV **2017**,		10
39	Black-box optimization benchmarking for noiseless function testbed using artificial bee colony algorithm **2010**,		10
38	iPlant: The greenhouse robot **2015**,		9
37	Particle swarm optimization with varying bounds **2007**,		8
36	An analytical framework for high-speed hardware particle swarm optimization. *Microprocessors and Microsystems*, **2020**, 72, 102949	2.4	8
35	Parallel hardware implementation of the brain storm optimization algorithm using FPGAs. *Microprocessors and Microsystems*, **2020**, 74, 103005	2.4	8
34	An autonomous firefighting robot **2015**,		7
33	Improving SHADE with Center-based Mutation for Large-scale Optimization **2019**,		7
32	**2017**,		7
31	Medical Drones System for Amusement Parks **2017**,		7
30	Preventing premature convergence in a PSO and EDA hybrid **2009**,		7
29	Factors governing the behavior of multiple cooperating swarms **2005**,		7
28	Hybrid cooperative co-evolution for the CEC15 benchmarks **2015**,		6
27	A unified approach for assessing capstone design projects and student outcomes in computer engineering programs **2015**,		6
26	Guidelines for Teaching an Introductory Course on the Internet of Things **2019**,		5
25	The Hybrid Framework for Multi-objective Evolutionary Optimization Based on Harmony Search Algorithm. *Advances in Intelligent Systems and Computing*, **2019**, 134-142	0.4	5
24	Black-box optimization benchmarking for noiseless function testbed using an EDA and PSO hybrid **2009**,		5
23	Discrete and continuous particle swarm optimization for FPGA placement **2009**,		5

22	**2016**,		5
21	New feature selection paradigm based on hyper-heuristic technique. *Applied Mathematical Modelling*, **2021**, 98, 14-37	4.5	5
20	Implementation of an emergency vehicle to traffic lights communication system **2015**,		4
19	V-LAB The Virtual Electric Machines Laboratory **2020**,		4
18	Cooperative coevolution using the Brain Storm Optimization Algorithm **2016**,		4
17	Multiple Cooperating Swarms for Non-Linear Function Optimization **2005**, 999-1008		4
16	Local best Artificial Bee Colony algorithm with dynamic sub-populations **2013**,		3
15	PSO_Bounds: A New Hybridization Technique of PSO and EDAs. *Studies in Computational Intelligence*, **2009**, 509-526	0.8	3
14	How course projects can successfully prepare engineering students for capstone design projects **2016**,		3
13	Cooperative Co-evolutionary Metaheuristics for Solving Large-Scale TSP Art Project **2019**,		3
12	On Different Stopping Criteria for Multi-objective Harmony Search Algorithms **2019**,		2
11	Implementing a population-based harmony search algorithm on graphic processing units **2014**,		2
10	Hybrid cooperative co-evolution for large scale optimization **2014**,		2
9	Particle Swarm Optimization with Adaptive Bounds **2012**,		2
8	Black-box optimization benchmarking for noiseless function testbed using PSO_bounds **2009**,		2
7	Total Optimization of Energy Networks in Smart City by Cooperative Coevolution using Global-best Brain Storm Optimization **2019**,		1
6	Gaussian Bare-Bones Brain Storm Optimization Algorithm **2019**,		1
5	Guest Editorial Special Issue on Project-Based, Senior Design, and Capstone Courses in Engineering Education. *IEEE Transactions on Education*, **2020**, 63, 79-81	2.1	1

List of Publications

4	Enhancing the Local Search Ability of the Brain Storm Optimization Algorithm by Covariance Matrix Adaptation. *Adaptation, Learning, and Optimization*, **2019**, 105-122	0.7	1
3	Stimulating Research Projects Through Teaching a Course on the Internet of Things **2020**,		1
2	A Comparative State-of-the-Art Constrained Metaheuristics Framework for TRUSS Optimisation on Shape and Sizing. *Mathematical Problems in Engineering*, **2022**, 2022, 1-13	1.1	1
1	The effect of different stopping criteria on multi-objective optimization algorithms. *Neural Computing and Applications*,1	4.8	0