Luca Manzoni

List of Publications by Year
in descending order

100	1,367	430754 18	477173 29
papers	citations	h-index	g-index

107	107	107	586
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Combining Geometric Semantic GP withÂGradient-Descent Optimization. Lecture Notes in Computer Science, 2022, , 19-33.	1.0	5
2	The Effect of Multi-Generational Selection in Geometric Semantic Genetic Programming. Applied Sciences (Switzerland), 2022, 12, 4836.	1.3	0
3	Heuristic search of (semi-)bent functions based on cellular automata. Natural Computing, 2022, 21, 377-391.	1.8	5
4	An Evolutionary Computation Approach for Twitter Bot Detection. Applied Sciences (Switzerland), 2022, 12, 5915.	1.3	2
5	Shaping and Dilating the Fitness Landscape for Parameter Estimation in Stochastic Biochemical Models. Applied Sciences (Switzerland), 2022, 12, 6671.	1.3	1
6	HyperBeta: characterizing the structural dynamics of proteins and self-assembling peptides. Scientific Reports, 2021, 11, 7783.	1.6	0
7	Alternative space definitions for PÂsystems with active membranes. Journal of Membrane Computing, 2021, 3, 87-96.	1.0	5
8	Algorithmic Music for Therapy: Effectiveness and Perspectives. Applied Sciences (Switzerland), 2021, 11, 8833.	1.3	8
9	Communication improvement reduces BPSD: a music therapy study based on artificial neural networks. Neurological Sciences, 2021, 42, 2103-2106.	0.9	3
10	Depth-two P systems can simulate Turing machines with NP oracles. Theoretical Computer Science, 2021, , .	0.5	1
11	Tip the Balance: Improving Exploration of Balanced Crossover Operators by Adaptive Bias. , 2021, , .		4
12	Subroutines in P systems and closure properties of their complexity classes. Theoretical Computer Science, 2020, 805, 193-205.	0.5	4
13	Machine learning techniques to predict the effectiveness of music therapy: A randomized controlled trial. Computer Methods and Programs in Biomedicine, 2020, 185, 105160.	2.6	14
14	Facilitation in reaction systems. Journal of Membrane Computing, 2020, 2, 149-161.	1.0	2
15	Which random is the best random? A study on sampling methods in Fourier surrogate modeling. , 2020, , .		3
16	Simulating counting oracles with cooperation. Journal of Membrane Computing, 2020, 2, 303-310.	1.0	3
17	Specializing Context-Free Grammars With a (1 + 1)-EA. IEEE Transactions on Evolutionary Computation, 2020, 24, 960-973.	7.5	5
18	Shallow laconic P systems can count. Journal of Membrane Computing, 2020, 2, 49-58.	1.0	8

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19	Surfing on Fitness Landscapes: A Boost on Optimization by Fourier Surrogate Modeling. Entropy, 2020, 22, 285.	1.1	14
20	Search space reduction of asynchrony immune cellular automata. Natural Computing, 2020, 19, 287-293.	1.8	1
21	A Turing machine simulation by PÂsystems without charges. Journal of Membrane Computing, 2020, 2, 71-79.	1.0	15
22	Balanced crossover operators in Genetic Algorithms. Swarm and Evolutionary Computation, 2020, 54, 100646.	4.5	30
23	Fourier Surrogate Models of Dilated Fitness Landscapes in Systems Biology : or how we learned to torture optimization problems until they confess. , 2020, , .		0
24	A distance between populations for n-points crossover in genetic algorithms. Swarm and Evolutionary Computation, 2019, 44, 636-645.	4.5	3
25	Characterizing PSPACE with shallow non-confluent P systems. Journal of Membrane Computing, 2019, 1, 75-84.	1.0	20
26	GSGP-C++ 2.0: A geometric semantic genetic programming framework. SoftwareX, 2019, 10, 100313.	1.2	8
27	Does constraining the search space of GA always help?. , 2019, , .		4
28	Complexity of the dynamics of reaction systems. Information and Computation, 2019, 267, 96-109.	0.5	18
29	On the dynamical behaviour of linear higher-order cellular automata and its decidability. Information Sciences, 2019, 486, 73-87.	4.0	18
30	The Many Roads to the Simulation of Reaction Systems. Fundamenta Informaticae, 2019, 171, 175-188.	0.3	1
31	Computational Intelligence for Life Sciences. Fundamenta Informaticae, 2019, 171, 57-80.	0.3	5
32	Decidability of Sensitivity and Equicontinuity for Linear Higher-Order Cellular Automata. Lecture Notes in Computer Science, 2019, , 95-107.	1.0	1
33	Extending Local Search in Geometric Semantic Genetic Programming. Lecture Notes in Computer Science, 2019, , 775-787.	1.0	1
34	Solving QSAT in Sublinear Depth. Lecture Notes in Computer Science, 2019, , 188-201.	1.0	0
35	Hidden Costs of Modelling Post-fire Plant Community Assembly Using Cellular Automata. Lecture Notes in Computer Science, 2018, , 68-79.	1.0	6
36	A survey on space complexity of P systems with active membranes. International Journal of Advances in Engineering Sciences and Applied Mathematics, 2018, 10, 221-229.	0.7	11

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37	Polynomial Equations over Finite, Discrete-Time Dynamical Systems. Lecture Notes in Computer Science, 2018, , 298-306.	1.0	4
38	Cellular Automata Pseudo-Random Number Generators and Their Resistance to Asynchrony. Lecture Notes in Computer Science, 2018, , 428-437.	1.0	4
39	Solving a Special Case of the P Conjecture Using Dependency Graphs with Dissolution. Lecture Notes in Computer Science, 2018, , 196-213.	1.0	3
40	Pruning Techniques for Mixed Ensembles of Genetic Programming Models. Lecture Notes in Computer Science, 2018, , 52-67.	1.0	5
41	Computational complexity of finite asynchronous cellular automata. Theoretical Computer Science, 2017, 664, 131-143.	0.5	19
42	A toolbox for simpler active membrane algorithms. Theoretical Computer Science, 2017, 673, 42-57.	0.5	8
43	An expert system for extracting knowledge from customersâ€™ reviews: The case of Amazon.com, Inc.. Expert Systems With Applications, 2017, 84, 117-126.	4.4	22
44	PSXO. , 2017, , .		2
45	Characterising the complexity of tissue P systems with fission rules. Journal of Computer and System Sciences, 2017, 90, 115-128.	0.9	20
46	The counting power of P systems with antimatter. Theoretical Computer Science, 2017, 701, 161-173.	0.5	14
47	Tissue P Systems with Small Cell Volume. Fundamenta Informaticae, 2017, 154, 261-275.	0.3	5
48	Efficient Simulation of Reaction Systems on Graphics Processing Units. Fundamenta Informaticae, 2017, 154, 307-321.	0.3	13
49	Geometric semantic genetic programming for biomedical applications: A state of the art upgrade. , 2017, , .		2
50	The influence of population size in geometric semantic GP. Swarm and Evolutionary Computation, 2017, 32, 110-120.	4.5	9
51	Shallow Non-confluent P Systems. Lecture Notes in Computer Science, 2017, , 307-316.	1.0	4
52	An Artificial Intelligence System to Predict Quality of Service in Banking Organizations. Computational Intelligence and Neuroscience, 2016, 2016, 1-7.	1.1	11
53	The Firing Squad Synchronization Problem on Higher-Dimensional CA with Multiple Updating Cycles. , 2016, , .		3
54	Complexity of model checking for reaction systems. Theoretical Computer Science, 2016, 623, 103-113.	0.5	27

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55	Monodirectional P systems. Natural Computing, 2016, 15, 551-564.	1.8	25
56	Self-tuning geometric semantic Genetic Programming. Genetic Programming and Evolvable Machines, 2016, 17, 55-74.	1.5	17
57	Semantic genetic programming for fast and accurate data knowledge discovery. Swarm and Evolutionary Computation, 2016, 26, 1-7.	4.5	15
58	Reachability in Resource-Bounded ReactionÂSystems. Lecture Notes in Computer Science, 2016, , 592-602.	1.0	3
59	On the complexity of occurrence and convergence problems in reaction systems. Natural Computing, 2015, 14, 185-191.	1.8	20
60	Ancestors, descendants, and gardens of Eden in reaction systems. Theoretical Computer Science, 2015, 608, 16-26.	0.5	20
61	Membrane Division, Oracles, and the Counting Hierarchy. Fundamenta Informaticae, 2015, 138, 97-111.	0.3	24
62	Reaction systems and extremal combinatorics properties. Theoretical Computer Science, 2015, 598, 138-149.	0.5	12
63	Tissue P Systems Can be Simulated Efficiently with Counting Oracles. Lecture Notes in Computer Science, 2015, , 251-261.	1.0	4
64	Complexity Classes for Membrane Systems: A Survey. Lecture Notes in Computer Science, 2015, , 56-69.	1.0	0
65	Electricity Demand Modelling with Genetic Programming. Lecture Notes in Computer Science, 2015, , 213-225.	1.0	0
66	SIMPLE REACTION SYSTEMS AND THEIR CLASSIFICATION. International Journal of Foundations of Computer Science, 2014, 25, 441-457.	0.8	17
67	Constant-Space P Systems with Active Membranes. Fundamenta Informaticae, 2014, 134, 111-128.	0.3	11
68	A comparison between geometric semantic GP and cartesian GP for boolean functions learning. , 2014, , .		3
69	The firing squad synchronization problem on CA with multiple updating cycles. Theoretical Computer Science, 2014, 559, 108-117.	0.5	6
70	Geometric Selective Harmony Search. Information Sciences, 2014, 279, 468-482.	4.0	37
71	Geometric Semantic Genetic Programming for Real Life Applications. Genetic and Evolutionary Computation, 2014, , 191-209.	1.0	40
72	Fixed Points and Attractors of Reaction Systems. Lecture Notes in Computer Science, 2014, , 194-203.	1.0	18

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73	Cycles and Global Attractors of Reaction Systems. Lecture Notes in Computer Science, 2014, , 114-125.	1.0	9
74	Non Uniform Cellular Automata Description of Signed Partition Versions of Ice and Sand Pile Models. Lecture Notes in Computer Science, 2014, , 115-124.	1.0	5
75	Simulating Elementary Active Membranes. Lecture Notes in Computer Science, 2014, , 284-299.	1.0	19
76	P Systems with Active Membranes Working in Sublinear Space. Lecture Notes in Computer Science, 2014, , 35-47.	1.0	0
77	Extremal Combinatorics of Reaction Systems. Lecture Notes in Computer Science, 2014, , 297-307.	1.0	2
78	Flattening and Simulation of Asynchronous Divisionless PÂSystems with Active Membranes. Lecture Notes in Computer Science, 2014, , 238-248.	1.0	2
79	m-Asynchronous cellular automata: from fairness to quasi-fairness. Natural Computing, 2013, 12, 561-572.	1.8	33
80	A new genetic programming framework based on reaction systems. Genetic Programming and Evolvable Machines, 2013, 14, 457-471.	1.5	1
81	Theory-laden design of mutation-based Geometric Semantic Genetic Programming for learning classification trees. , 2013, , .		6
82	Better GP benchmarks: community survey results and proposals. Genetic Programming and Evolvable Machines, 2013, 14, 3-29.	1.5	178
83	Runtime analysis of mutation-based geometric semantic genetic programming on boolean functions. , 2013, , .		19
84	A New Implementation of Geometric Semantic GP and Its Application to Problems in Pharmacokinetics. Lecture Notes in Computer Science, 2013, , 205-216.	1.0	80
85	Reaction Systems Made Simple. Lecture Notes in Computer Science, 2013, , 150-161.	1.0	1
86	Genetic programming needs better benchmarks. , 2012, , .		197
87	Parameter tuning of evolutionary reactions systems. , 2012, , .		4
88	Computing Issues of Asynchronous CA. Fundamenta Informaticae, 2012, 120, 165-180.	0.3	30
89	Asynchronous cellular automata and dynamical properties. Natural Computing, 2012, 11, 269-276.	1.8	21
90	A distance between populations for one-point crossover in genetic algorithms. Theoretical Computer Science, 2012, 429, 213-221.	0.5	4

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91	Evolutionary Reaction Systems. Lecture Notes in Computer Science, 2012, , 13-25.	1.0	3
92	m-Asynchronous Cellular Automata. Lecture Notes in Computer Science, 2012, , 653-662.	1.0	8
93	The K landscapes. , 2011, , .		17
94	The effect of selection from old populations in genetic algorithms. , 2011, , .		2
95	A Quantitative Study of Learning and Generalization in Genetic Programming. Lecture Notes in Computer Science, 2011, , 25-36.	1.0	15
96	Computational Aspects of Asynchronous Cellular Automata. Lecture Notes in Computer Science, 2011, , 466-468.	1.0	4
97	Multi Objective Genetic Programming for Feature Construction in Classification Problems. Lecture Notes in Computer Science, 2011, , 503-506.	1.0	2
98	Definition of a crossover based distance for genetic algorithms. , 2010, , .		0
99	Some Formal Properties of Asynchronous Cellular Automata. Lecture Notes in Computer Science, 2010, , 419-428.	1.0	2
100	A comparison of the generalization ability of different genetic programming frameworks. , 2010, , .		12