Paola Flocchini

List of Publications by Year
in descending order

105 papers	3,192 citations	186265 28 h-index	168389 53 g-index
107 all docs	107 docs citations	107 times ranked	833 citing authors

#	Article	IF	Citations
1	Time-varying graphs and dynamic networks. International Journal of Parallel, Emergent and Distributed Systems, 2012, 27, 387-408.	1.0	364
2	Gathering of asynchronous robots with limited visibility. Theoretical Computer Science, 2005, 337, 147-168.	0.9	319
3	Arbitrary pattern formation by asynchronous, anonymous, oblivious robots. Theoretical Computer Science, 2008, 407, 412-447.	0.9	166
4	Distributed Computing by Mobile Robots: Gathering. SIAM Journal on Computing, 2012, 41, 829-879.	1.0	166
5	Distributed Computing by Oblivious Mobile Robots. Synthesis Lectures on Distributed Computing Theory, 2012, 3, 1-185.	0.2	116
6	Solving the Robots Gathering Problem. Lecture Notes in Computer Science, 2003, , 1181-1196.	1.3	108
7	Autonomous mobile robots with lights. Theoretical Computer Science, 2016, 609, 171-184.	0.9	101
8	Hard Tasks for Weak Robots: The Role of Common Knowledge in Pattern Formation by Autonomous Mobile Robots. Lecture Notes in Computer Science, 1999, , 93-102.	1.3	85
9	Capture of an intruder by mobile agents. , 2002, , .		82
10	Self-deployment of mobile sensors on a ring. Theoretical Computer Science, 2008, 402, 67-80.	0.9	78
11	Mobile Search for a Black Hole in an Anonymous Ring. Algorithmica, 2007, 48, 67-90.	1.3	77
12	Searching for a black hole in arbitrary networks: optimal mobile agents protocols. Distributed Computing, 2006, 19, 1-99999.	0.8	72
13	Remembering without memory: Tree exploration by asynchronous oblivious robots. Theoretical Computer Science, 2010, 411, 1583-1598.	0.9	62
14	Map construction of unknown graphs by multiple agents. Theoretical Computer Science, 2007, 385, 34-48.	0.9	59
15	Computing Without Communicating: Ring Exploration by Asynchronous Oblivious Robots. Algorithmica, 2013, 65, 562-583.	1.3	58
16	Forming sequences of geometric patterns with oblivious mobile robots. Distributed Computing, 2015, 28, 131-145.	0.8	55
17	On the exploration of time-varying networks. Theoretical Computer Science, 2013, 469, 53-68.	0.9	54
18	Sense of direction: Definitions, properties, and classes. Networks, 1998, 32, 165-180.	2.7	47

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19	Rendezvous and Election of Mobile Agents: Impact of Sense of Direction. Theory of Computing Systems, 2007, 40, 143-162.	1.1	43
20	Sense of direction in distributed computing. Theoretical Computer Science, 2003, 291, 29-53.	0.9	40
21	Distributed computing by mobile robots: uniform circle formation. Distributed Computing, 2017, 30, 413-457.	0.8	40
22	UNIFORM SCATTERING OF AUTONOMOUS MOBILE ROBOTS IN A GRID. International Journal of Foundations of Computer Science, 2011, 22, 679-697.	1.1	37
23	DECONTAMINATING CHORDAL RINGS AND TORI USING MOBILE AGENTS. International Journal of Foundations of Computer Science, 2007, 18, 547-563.	1.1	34
24	The Power of Lights: Synchronizing Asynchronous Robots Using Visible Bits. , 2012, , .		34
25	Optimal Elections in Labeled Hypercubes. Journal of Parallel and Distributed Computing, 1996, 33, 76-83.	4.1	33
26	On the impact of sense of direction on message complexity. Information Processing Letters, 1997, 63, 23-31.	0.6	33
27	Sorting and election in anonymous asynchronous rings. Journal of Parallel and Distributed Computing, 2004, 64, 254-265.	4.1	32
28	Decontamination of hypercubes by mobile agents. Networks, 2008, 52, 167-178.	2.7	32
29	Connected graph searching. Information and Computation, 2012, 219, 1-16.	0.7	32
30	Ping Pong in Dangerous Graphs: Optimal Black Hole Search with Pebbles. Algorithmica, 2012, 62, 1006-1033.	1.3	31
31	Shape formation by programmable particles. Distributed Computing, 2020, 33, 69-101.	0.8	30
32	Network Exploration by Silent and Oblivious Robots. Lecture Notes in Computer Science, 2010, , 208-219.	1.3	29
33	Enhancing peer-to-peer systems through redundancy. IEEE Journal on Selected Areas in Communications, 2007, 25, 15-24.	14.0	28
34	On the computational power of oblivious robots. , 2010, , .		28
35	How many oblivious robots can explore a line. Information Processing Letters, 2011, 111, 1027-1031.	0.6	28
36	Measuring Temporal Lags in Delay-Tolerant Networks. IEEE Transactions on Computers, 2014, 63, 397-410.	3.4	26

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37	Shortest, Fastest, and Foremost Broadcast in Dynamic Networks. International Journal of Foundations of Computer Science, 2015, 26, 499-522.	1.1	24
38	Map construction and exploration by mobile agents scattered in a dangerous network. , 2009, , .		22
39	Searching for Black Holes in Subways. Theory of Computing Systems, 2012, 50, 158-184.	1.1	22
40	Solving the parity problem in one-dimensional cellular automata. Natural Computing, 2013, 12, 323-337.	3.0	22
41	Exploring an unknown dangerous graph using tokens. Theoretical Computer Science, 2013, 472, 28-45.	0.9	20
42	Rendezvous of Two Robots with Constant Memory. Lecture Notes in Computer Science, 2013, , 189-200.	1.3	20
43	Robots with Lights: Overcoming Obstructed Visibility Without Colliding. Lecture Notes in Computer Science, 2014, , 150-164.	1.3	20
44	Gathering in dynamic rings. Theoretical Computer Science, 2020, 811, 79-98.	0.9	18
45	On the Relationship Between Boolean and Fuzzy Cellular Automata. Electronic Notes in Theoretical Computer Science, 2009, 252, 5-21.	0.9	14
46	On the relationship between fuzzy and Boolean cellular automata. Theoretical Computer Science, 2011, 412, 703-713.	0.9	14
47	Distributed Computing by Mobile Robots: Solving the Uniform Circle Formation Problem. Lecture Notes in Computer Science, 2014, , 217-232.	1.3	13
48	Line Recovery by Programmable Particles. , 2018, , .		13
49	Ping Pong in Dangerous Graphs: Optimal Black Hole Search with Pure Tokens. Lecture Notes in Computer Science, 2008, , 227-241.	1.3	13
50	Minimal sense of direction in regular networks. Information Processing Letters, 1997, 61, 331-338.	0.6	12
51	Computing on anonymous networks with sense of direction. Theoretical Computer Science, 2003, 301, 355-379.	0.9	12
52	On the Asymptotic Behavior of Fuzzy Cellular Automata. Electronic Notes in Theoretical Computer Science, 2009, 252, 23-40.	0.9	12
53	Tree Decontamination with Temporary Immunity. Lecture Notes in Computer Science, 2008, , 330-341.	1.3	11
54	Decontaminating a Network from a Black Virus. International Journal of Networking and Computing, 2014, 4, 151-173.	0.4	11

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55	Asynchronous Exploration of an Unknown Anonymous Dangerous Graph with O(1) Pebbles. Lecture Notes in Computer Science, 2012, , 279-290.	1.3	10
56	Population protocols with faulty interactions: The impact of a leader. Theoretical Computer Science, 2019, 754, 35-49.	0.9	10
57	RTEAM: Risk-Based Trust Evaluation Advanced Model for VANETs. IEEE Access, 2021, 9, 117772-117783.	4.2	10
58	Mapping an Unfriendly Subway System. Lecture Notes in Computer Science, 2010, , 190-201.	1.3	10
59	Symmetries and sense of direction in labeled graphs. Discrete Applied Mathematics, 1998, 87, 99-115.	0.9	9
60	Network Decontamination from a Black Virus. , 2013, , .		8
61	Gathering. Lecture Notes in Computer Science, 2019, , 63-82.	1.3	8
62	Computing by Mobile Robotic Sensors. Monographs in Theoretical Computer Science, 2011, , 655-693.	0.6	8
63	Improving the Optimal Bounds for Black Hole Search in Rings. Lecture Notes in Computer Science, 2011, , 198-209.	1.3	8
64	Finding the Extrema of a Distributed Multiset. Journal of Parallel and Distributed Computing, 1996, 37, 123-133.	4.1	7
65	TOPOLOGICAL CONSTRAINTS FOR SENSE OF DIRECTION. International Journal of Foundations of Computer Science, 1998, 09, 179-197.	1.1	7
66	On the expressivity of time-varying graphs. Theoretical Computer Science, 2015, 590, 27-37.	0.9	7
67	Network decontamination under <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si60.gif" display="inline" overflow="scroll"><mml:mi>m</mml:mi></mml:math>-immunity. Discrete Applied Mathematics, 2016, 201, 114-129.	0.9	7
68	Synchronized Dancing of Oblivious Chameleons. Lecture Notes in Computer Science, 2014, , 113-124.	1.3	7
69	Gathering in Dynamic Rings. Lecture Notes in Computer Science, 2017, , 339-355.	1.3	7
70	Computation and analysis of temporal betweenness in a knowledge mobilization network. Computational Social Networks, 2017, 4, 5.	2.1	6
71	Mobile RAM and Shape Formation by Programmable Particles. Lecture Notes in Computer Science, 2020, , 343-358.	1.3	6
72	Distributed Barrier Coverage with Relocatable Sensors. Lecture Notes in Computer Science, 2014, , 235-249.	1.3	6

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73	Network Decontamination with Temporal Immunity by Cellular Automata. Lecture Notes in Computer Science, 2010, , 287-299.	1.3	6
74	Sense of direction in distributed computing. Lecture Notes in Computer Science, 1998, , 1-15.	1.3	5
75	Fault-Tolerant Simulation of Message-Passing Algorithms by Mobile Agents. , 2007, , 289-303.		5
76	Time Optimal Algorithms for Black Hole Search in Rings. Lecture Notes in Computer Science, 2010, , 58-71.	1.3	5
77	Weak robots performing conflicting tasks without knowing who is in their team. , 2020, , .		5
78	OPTIMAL CONSTRUCTION OF SENSE OF DIRECTION IN A TORUS BY A MOBILE AGENT. International Journal of Foundations of Computer Science, 2007, 18, 529-546.	1.1	4
79	Forming Sequences of Patterns With Luminous Robots. IEEE Access, 2020, 8, 90577-90597.	4.2	4
80	Exploration of dynamic networks: Tight bounds on the number of agents. Journal of Computer and System Sciences, 2021, 122, 1-18.	1.2	4
81	Optimal Network Decontamination with Threshold Immunity. Lecture Notes in Computer Science, 2013, , 234-245.	1.3	4
82	Fault-Tolerant Exploration of an Unknown Dangerous Graph by Scattered Agents. Lecture Notes in Computer Science, 2012, , 299-313.	1.3	4
83	Towards Smart Trust Management of VANETs. , 2020, , .		4
84	On theÂComputational Power ofÂEnergy-Constrained Mobile Robots: Algorithms andÂCross-Model Analysis. Lecture Notes in Computer Science, 2022, , 42-61.	1.3	4
85	Energy Restoration in a Linear Sensor Network. , 2018, , .		3
86	Black Hole Search in Dynamic Rings. , 2021, , .		3
87	Finding Good Coffee in Paris. Lecture Notes in Computer Science, 2012, , 154-165.	1.3	3
88	Computations by Luminous Robots. Lecture Notes in Computer Science, 2015, , 238-252.	1.3	3
89	A Fog-based Reputation Evaluation Model for VANETs. , 2021, , .		3
90	Backward consistency and sense of direction in advanced distributed systems. , 1999, , .		2

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91	Distributed Black Virus Decontamination and Rooted Acyclic Orientations. , 2015, , .		2
92	On the Power of Weaker Pairwise Interaction: Fault-Tolerant Simulation of Population Protocols. , 2017, , .		2
93	Autonomous Mobile Robots: Refining the Computational Landscape. , 2021, , .		2
94	Fault-Induced Dynamics of Oblivious Robots on a Line. Lecture Notes in Computer Science, 2017, , 126-141.	1.3	2
95	Risk-based Trust Evaluation Model for VANETs. , 2020, , .		2
96	Fault-Tolerant Sequential Scan. Theory of Computing Systems, 2009, 45, 1-26.	1.1	1
97	Meeting in a polygon by anonymous oblivious robots. Distributed Computing, 2020, 33, 445-469.	0.8	1
98	Fault-tolerant simulation of population protocols. Distributed Computing, 2020, 33, 561-578.	0.8	1
99	Universal Systems of Oblivious Mobile Robots. Lecture Notes in Computer Science, 2016, , 242-257.	1.3	1
100	Fully Dynamic Line Maintenance by a Simple Robot. , 2022, , .		1
101	Distributed Algorithms by Forgetful Mobile Robots. Lecture Notes in Computer Science, 2012, , 1-1.	1.3	0
102	Tempus Fugit. , 2015, , .		0
103	Fault-induced dynamics of oblivious robots on a line. Information and Computation, 2020, 271, 104478.	0.7	0
104	TuringMobile: a turing machine of oblivious mobile robots with limited visibility and its applications. Distributed Computing, 2022, 35, 105.	0.8	0
105	On Sense of Direction and Mobile Agents. Lecture Notes in Computer Science, 2019, , 19-33.	1.3	0