Fabrizio Montecchiani

List of Publications by Year
in descending order

104 papers	956 citations	586496 16 h-index	651938 25 g-index
107 all docs	107 docs citations	107 times ranked	393 citing authors

#	Article	IF	Citations
1	Hybrid Graph Visualizations With ChordLink: Algorithms, Experiments, and Applications. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 1288-1300.	2.9	9
2	Orthogonal planarity testing of bounded treewidth graphs. Journal of Computer and System Sciences, 2022, 125, 129-148.	0.9	10
3	Placing Arrows in Directed Graph Layouts: Algorithms and Experiments. Computer Graphics Forum, 2022, 41, 364-376.	1.8	2
4	1-planarity testing and embedding: An experimental study. Computational Geometry: Theory and Applications, 2022, , 101900.	0.3	0
5	Convex Grid Drawings of Planar Graphs with Constant Edge-Vertex Resolution. Lecture Notes in Computer Science, 2022, , 157-171.	1.0	1
6	Influence Maximization With Visual Analytics. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, 3428-3440.	2.9	1
7	On Morphing 1-Planar Drawings. Lecture Notes in Computer Science, 2021, , 270-282.	1.0	0
8	Planar Drawings with Few Slopes of Halin Graphs and Nested Pseudotrees. Lecture Notes in Computer Science, 2021, , 271-285.	1.0	3
9	Ortho-polygon visibility representations of 3-connected 1-plane graphs. Theoretical Computer Science, 2021, 863, 40-52.	0.5	3
10	Grid drawings of graphs with constant edge-vertex resolution. Computational Geometry: Theory and Applications, 2021, 98, 101789.	0.3	3
11	Visual Analytics for Financial Crime Detection at the University of Perugia. Lecture Notes in Computer Science, 2021, , 195-200.	1.0	0
12	Crossing numbers of beyond-planar graphs. Theoretical Computer Science, 2021, 898, 44-44.	0.5	2
13	On the Upward Book Thickness Problem: Combinatorial andÂComplexity Results. Lecture Notes in Computer Science, 2021, , 242-256.	1.0	3
14	A User Study onÂHybrid Graph Visualizations. Lecture Notes in Computer Science, 2021, , 21-38.	1.0	3
15	A Survey on Graph Drawing Beyond Planarity. ACM Computing Surveys, 2020, 52, 1-37.	16.1	60
16	Simple k-planar graphs are simple (kâ€¯+â€¯1)-quasiplanar. Journal of Combinatorial Theory Series B, 2020, 142, 1-35.	0.6	11
17	Polyline drawings with topological constraints. Theoretical Computer Science, 2020, 809, 250-264.	0.5	2
18	Combining Network Visualization and Data Mining for Tax Risk Assessment. IEEE Access, 2020, 8, 16073-16086.	2.6	26

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19	Parameterized Algorithms for Book Embedding Problems. Journal of Graph Algorithms and Applications, 2020, 24, 603-620.	0.4	15
20	Parameterized Algorithms for Queue Layouts. Lecture Notes in Computer Science, 2020, , 40-54.	1.0	5
21	The Stub Resolution of 1-Planar Graphs. Lecture Notes in Computer Science, 2020, , 170-182.	1.0	0
22	Storyline Visualizations with Ubiquitous Actors. Lecture Notes in Computer Science, 2020, , 324-332.	1.0	2
23	VAIM: Visual Analytics for Influence Maximization. Lecture Notes in Computer Science, 2020, , 115-123.	1.0	1
24	Edge Partitions and Visibility Representations of 1-planar Graphs. , 2020, , 89-107.		0
25	An Experimental Study of a 1-Planarity Testing and Embedding Algorithm. Lecture Notes in Computer Science, 2020, , 329-335.	1.0	3
26	1-bend upward planar slope number of SP-digraphs. Computational Geometry: Theory and Applications, 2020, 90, 101628.	0.3	4
27	Guarding Orthogonal Art Galleries with Sliding k-Transmitters: Hardness and Approximation. Algorithmica, 2019, 81, 69-97.	1.0	2
28	Visual querying and analysis of temporal fiscal networks. Information Sciences, 2019, 505, 406-421.	4.0	8
29	Planar graphs of bounded degree have bounded queue number. , 2019, , .		2
30	Universal Slope Sets for 1-Bend Planar Drawings. Algorithmica, 2019, 81, 2527-2556.	1.0	6
31	On 3D visibility representations of graphs with few crossings per edge. Theoretical Computer Science, 2019, 784, 11-20.	0.5	5
32	A Distributed Multilevel Force-Directed Algorithm. IEEE Transactions on Parallel and Distributed Systems, 2019, 30, 754-765.	4.0	16
33	Planar Graphs of Bounded Degree Have Bounded Queue Number. SIAM Journal on Computing, 2019, 48, 1487-1502.	0.8	11
34	Edge partitions of optimal 2-plane and 3-plane graphs. Discrete Mathematics, 2019, 342, 1038-1047.	0.4	6
35	ChordLink: A New Hybrid Visualization Model. Lecture Notes in Computer Science, 2019, , 276-290.	1.0	8
36	Parameterized Algorithms for Book Embedding Problems. Lecture Notes in Computer Science, 2019, , 365-378.	1.0	5

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37	Sketched Representations and Orthogonal Planarity of Bounded Treewidth Graphs. Lecture Notes in Computer Science, 2019, , 379-392.	1.0	5
38	Crossing Numbers of Beyond-Planar Graphs. Lecture Notes in Computer Science, 2019, , 78-86.	1.0	2
39	Drawing subcubic planar graphs with four slopes and optimal angular resolution. Theoretical Computer Science, 2018, 714, 51-73.	0.5	11
40	New results on edge partitions of 1-plane graphs. Theoretical Computer Science, 2018, 713, 78-84.	0.5	8
41	Profiling distributed graph processing systems through visual analytics. Future Generation Computer Systems, 2018, 87, 43-57.	4.9	4
42	A visual analytics system to support tax evasion discovery. Decision Support Systems, 2018, 110, 71-83.	3.5	26
43	A Visualization Framework and User Studies for Overloaded Orthogonal Drawings. Computer Graphics Forum, 2018, 37, 288-300.	1.8	7
44	Ortho-polygon Visibility Representations of Embedded Graphs. Algorithmica, 2018, 80, 2345-2383.	1.0	20
45	Visibility representations of boxes in 2.5 dimensions. Computational Geometry: Theory and Applications, 2018, 72, 19-33.	0.3	4
46	Embedding-Preserving Rectangle Visibility Representations of Nonplanar Graphs. Discrete and Computational Geometry, 2018, 60, 345-380.	0.4	8
47	Gap-planar graphs. Theoretical Computer Science, 2018, 745, 36-52.	0.5	24
48	GiViP: A Visual Profiler for Distributed Graph Processing Systems. Lecture Notes in Computer Science, 2018, , 256-271.	1.0	3
49	Guest Editors' Foreword and Overview. Journal of Graph Algorithms and Applications, 2018, 22, 1-10.	0.4	10
50	Gap-Planar Graphs. Lecture Notes in Computer Science, 2018, , 531-545.	1.0	2
51	Drawing Subcubic 1-Planar Graphs with Few Bends, Few Slopes, and Large Angles. Lecture Notes in Computer Science, 2018, , 152-166.	1.0	2
52	Bounded Stub Resolution for Some Maximal 1-Planar Graphs. Lecture Notes in Computer Science, 2018, , 214-220.	1.0	1
53	Ortho-Polygon Visibility Representations of 3-Connected 1-Plane Graphs. Lecture Notes in Computer Science, 2018, , 524-537.	1.0	5
54	Universal Slope Sets for Upward Planar Drawings. Lecture Notes in Computer Science, 2018, , 77-91.	1.0	4

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55	Edge Partitions of Optimal 2-plane and 3-plane Graphs. Lecture Notes in Computer Science, 2018, , 27-39.	1.0	2
56	On partitioning the edges of 1-plane graphs. Theoretical Computer Science, 2017, 662, 59-65.	0.5	10
57	Designing the Content Analyzer of a Travel Recommender System. Expert Systems With Applications, 2017, 87, 199-208.	4.4	26
58	Large graph visualizations using a distributed computing platform. Information Sciences, 2017, 381, 124-141.	4.0	18
59	An annotated bibliography on 1-planarity. Computer Science Review, 2017, 25, 49-67.	10.2	89
60	On RAC drawings of 1-planar graphs. Theoretical Computer Science, 2017, 689, 48-57.	0.5	25
61	Area-Thickness Trade-Offs for Straight-Line Drawings of Planar Graphs. Computer Journal, 2017, 60, 135-142.	1.5	1
62	On Guarding Orthogonal Polygons with Sliding Cameras. Lecture Notes in Computer Science, 2017, , 54-65.	1.0	6
63	On the Relationship Between k-Planar and k-Quasi-Planar Graphs. Lecture Notes in Computer Science, 2017, , 59-74.	1.0	7
64	Algorithms and Characterizations for 2-Layer Fan-planarity: From Caterpillar to Stegosaurus. Journal of Graph Algorithms and Applications, 2017, 21, 81-102.	0.4	15
65	Vertex-Coloring with Defects. Journal of Graph Algorithms and Applications, 2017, 21, 313-340.	0.4	8
66	Progress on Partial Edge Drawings. Journal of Graph Algorithms and Applications, 2017, 21, 757-786.	0.4	12
67	Partial edge drawing: Homogeneity is more important than crossings and ink. , 2016, , .		8
68	Simultaneous Visibility Representations of Plane st-graphs Using L-shapes. Lecture Notes in Computer Science, 2016, , 252-265.	1.0	1
69	Simultaneous visibility representations of plane st-graphs using L-shapes. Theoretical Computer Science, 2016, 645, 100-111.	0.5	11
70	Recognizing and drawing IC-planar graphs. Theoretical Computer Science, 2016, 636, 1-16.	0.5	40
71	L-visibility drawings of IC-planar graphs. Information Processing Letters, 2016, 116, 217-222.	0.4	18
72	1-Bend Upward Planar Drawings of SP-Digraphs. Lecture Notes in Computer Science, 2016, , 123-130.	1.0	2

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73	1-Bend RAC Drawings of 1-Planar Graphs. Lecture Notes in Computer Science, 2016, , 335-343.	1.0	1
74	Ortho-Polygon Visibility Representations of Embedded Graphs. Lecture Notes in Computer Science, 2016, , 280-294.	1.0	3
75	Visibility Representations of Boxes in 2.5 Dimensions. Lecture Notes in Computer Science, 2016, , 251-265.	1.0	3
76	A Distributed Multilevel Force-Directed Algorithm. Lecture Notes in Computer Science, 2016, , 3-17.	1.0	7
77	Placing Arrows in Directed Graph Drawings. Lecture Notes in Computer Science, 2016, , 44-51.	1.0	2
78	VisFLOWer: Visual analysis of touristic flows. , 2015, , .		0
79	A Million Edge Drawing for a Fistful of Dollars. Lecture Notes in Computer Science, 2015, , 44-51.	1.0	4
80	Network visualization retargeting. , 2015, , .		3
81	Fan-planarity: Properties and complexity. Theoretical Computer Science, 2015, 589, 76-86.	0.5	31
82	Algorithms and bounds for drawing non-planar graphs with crossing-free subgraphs. Computational Geometry: Theory and Applications, 2015, 50, 34-48.	0.3	3
83	Kojaph: Visual Definition and Exploration of Patterns in Graph Databases. Lecture Notes in Computer Science, 2015, , 272-278.	1.0	2
84	Drawing Outer 1-planar Graphs with Few Slopes. Journal of Graph Algorithms and Applications, 2015, 19, 707-741.	0.4	16
85	2-Layer Fan-Planarity: From Caterpillar to Stegosaurus. Lecture Notes in Computer Science, 2015, , 281-294.	1.0	0
86	Recognizing and Drawing IC-Planar Graphs. Lecture Notes in Computer Science, 2015, , 295-308.	1.0	1
87	L-Visibility Drawings of IC-Planar Graphs. Lecture Notes in Computer Science, 2015, , 545-547.	1.0	3
88	Upward-rightward planar drawings. , 2014, , .		4
89	How to visualize directed graphs: A user study. , 2014, , .		3
90	Fast layout computation of clustered networks: Algorithmic advances and experimental analysis. Information Sciences, 2014, 260, 185-199.	4.0	29

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91	Network visualization for financial crime detection. Journal of Visual Languages and Computing, 2014, 25, 433-451.	1.8	32
92	Techniques for Edge Stratification of Complex Graph Drawings. Journal of Visual Languages and Computing, 2014, 25, 533-543.	1.8	8
93	Drawing Outer 1-planar Graphs with Few Slopes. Lecture Notes in Computer Science, 2014, , 174-185.	1.0	2
94	Fan-Planar Graphs: Combinatorial Properties and Complexity Results. Lecture Notes in Computer Science, 2014, , 186-197.	1.0	3
95	1-Bend Orthogonal Partial Edge Drawing. Journal of Graph Algorithms and Applications, 2014, 18, 111-131.	0.4	10
96	The Planar Slope Number of Subcubic Graphs. Lecture Notes in Computer Science, 2014, , 132-143.	1.0	9
97	Area requirement of graph drawings with few crossings per edge. Computational Geometry: Theory and Applications, 2013, 46, 909-916.	0.3	21
98	On the robustness of the Drosophila neural network. , 2013, , .		1
99	Drawing Non-Planar Graphs with Crossing-Free Subgraphs. Lecture Notes in Computer Science, 2013, , 292-303.	1.0	4
100	Exploring Complex Drawings via Edge Stratification. Lecture Notes in Computer Science, 2013, , 304-315.	1.0	2
101	Progress on Partial Edge Drawings. Lecture Notes in Computer Science, 2013, , 67-78.	1.0	8
102	Fast Layout Computation of Hierarchically Clustered Networks: Algorithmic Advances and Experimental Analysis. , 2012, , .		13
103	An advanced network visualization system for financial crime detection. , 2011, , .		31
104	Universal Slope Sets for Upward Planar Drawings. Algorithmica, 0, , .	1.0	0