Fabrizio Montecchiani

List of Publications by Year in Descending Order

103 papers	686 citations	15 h-index	20 g-index
107 ext. papers	804 ext. citations	1.5 avg, IF	4.64 L-index

#	Paper	IF	Citations
103	1-planarity testing and embedding: An experimental study. *Computational Geometry: Theory and Applications*, **2022**, 101900	0.4	
102	Convex Grid Drawings of Planar Graphs with Constant Edge-Vertex Resolution. *Lecture Notes in Computer Science*, **2022**, 157-171	0.9	1
101	Orthogonal Planarity Testing of Bounded Treewidth Graphs. *Journal of Computer and System Sciences*, **2021**, 125, 129-129	1	4
100	On the Upward Book Thickness Problem: Combinatorial and Complexity Results. *Lecture Notes in Computer Science*, **2021**, 242-256	0.9	1
99	Optimal-Area Visibility Representations of Outer-1-Plane Graphs. *Lecture Notes in Computer Science*, **2021**, 287-303	0.9	
98	A User Study on Hybrid Graph Visualizations. *Lecture Notes in Computer Science*, **2021**, 21-38	0.9	2
97	Crossing numbers of beyond-planar graphs. *Theoretical Computer Science*, **2021**, 898, 44-44	1.1	1
96	Ortho-polygon visibility representations of 3-connected 1-plane graphs. *Theoretical Computer Science*, **2021**, 863, 40-52	1.1	2
95	On Morphing 1-Planar Drawings. *Lecture Notes in Computer Science*, **2021**, 270-282	0.9	
94	Planar Drawings with Few Slopes of Halin Graphs and Nested Pseudotrees. *Lecture Notes in Computer Science*, **2021**, 271-285	0.9	1
93	Grid drawings of graphs with constant edge-vertex resolution. *Computational Geometry: Theory and Applications*, **2021**, 98, 101789	0.4	2
92	Visual Analytics for Financial Crime Detection at the University of Perugia. *Lecture Notes in Computer Science*, **2021**, 195-200	0.9	
91	. *IEEE Access*, **2020**, 8, 16073-16086	3.5	10
90	An Experimental Study of a 1-Planarity Testing and Embedding Algorithm. *Lecture Notes in Computer Science*, **2020**, 329-335	0.9	3
89	1-bend upward planar slope number of SP-digraphs. *Computational Geometry: Theory and Applications*, **2020**, 90, 101628	0.4	2
88	Parameterized Algorithms for Book Embedding Problems. *Journal of Graph Algorithms and Applications*, **2020**, 24, 603-620	1.5	7
87	Parameterized Algorithms for Queue Layouts. *Lecture Notes in Computer Science*, **2020**, 40-54	0.9	5

86	The Stub Resolution of 1-Planar Graphs. *Lecture Notes in Computer Science*, **2020**, 170-182	0.9	
85	Storyline Visualizations with Ubiquitous Actors. *Lecture Notes in Computer Science*, **2020**, 324-332	0.9	1
84	VAIM: Visual Analytics for Influence Maximization. *Lecture Notes in Computer Science*, **2020**, 115-123	0.9	0
83	Edge Partitions and Visibility Representations of 1-planar Graphs **2020**, 89-107		
82	Polyline drawings with topological constraints. *Theoretical Computer Science*, **2020**, 809, 250-264	1.1	1
81	Hybrid Graph Visualizations with ChordLink: Algorithms, Experiments, and Applications. *IEEE Transactions on Visualization and Computer Graphics*, **2020**, PP,	4	3
80	Simple k-planar graphs are simple (k + 1)-quasiplanar. *Journal of Combinatorial Theory Series B*, **2020**, 142, 1-35	1.1	6
79	On 3D visibility representations of graphs with few crossings per edge. *Theoretical Computer Science*, **2019**, 784, 11-20	1.1	5
78	A Distributed Multilevel Force-Directed Algorithm. *IEEE Transactions on Parallel and Distributed Systems*, **2019**, 30, 754-765	3.7	8
77	Guarding Orthogonal Art Galleries with Sliding k-Transmitters: Hardness and Approximation. *Algorithmica*, **2019**, 81, 69-97	0.9	1
76	Visual querying and analysis of temporal fiscal networks. *Information Sciences*, **2019**, 505, 406-421	7.7	5
75	Planar graphs of bounded degree have bounded queue number **2019**,		1
74	Universal Slope Sets for 1-Bend Planar Drawings. *Algorithmica*, **2019**, 81, 2527-2556	0.9	3
73	Parameterized Algorithms for Book Embedding Problems. *Lecture Notes in Computer Science*, **2019**, 365-378	0.9	4
72	Sketched Representations and Orthogonal Planarity of Bounded Treewidth Graphs. *Lecture Notes in Computer Science*, **2019**, 379-392	0.9	5
71	Crossing Numbers of Beyond-Planar Graphs. *Lecture Notes in Computer Science*, **2019**, 78-86	0.9	1
70	ChordLink: A New Hybrid Visualization Model. *Lecture Notes in Computer Science*, **2019**, 276-290	0.9	6
69	A Survey on Graph Drawing Beyond Planarity. *ACM Computing Surveys*, **2019**, 52, 1-37	13.4	38

68	Planar Graphs of Bounded Degree Have Bounded Queue Number. *SIAM Journal on Computing*, **2019**, 48, 1487-1502	1.1	7
67	Edge partitions of optimal 2-plane and 3-plane graphs. *Discrete Mathematics*, **2019**, 342, 1038-1047	0.7	6
66	Drawing subcubic planar graphs with four slopes and optimal angular resolution. *Theoretical Computer Science*, **2018**, 714, 51-73	1.1	7
65	New results on edge partitions of 1-plane graphs. *Theoretical Computer Science*, **2018**, 713, 78-84	1.1	7
64	Profiling distributed graph processing systems through visual analytics. *Future Generation Computer Systems*, **2018**, 87, 43-57	7.5	3
63	A visual analytics system to support tax evasion discovery. *Decision Support Systems*, **2018**, 110, 71-83	5.6	16
62	A Visualization Framework and User Studies for Overloaded Orthogonal Drawings. *Computer Graphics Forum*, **2018**, 37, 288-300	2.4	4
61	Guest EditorsЦForeword and Overview. *Journal of Graph Algorithms and Applications*, **2018**, 22, 1-10	1.5	10
60	Gap-Planar Graphs. *Lecture Notes in Computer Science*, **2018**, 531-545	0.9	1
59	Drawing Subcubic 1-Planar Graphs with Few Bends, Few Slopes, and Large Angles. *Lecture Notes in Computer Science*, **2018**, 152-166	0.9	1
58	Bounded Stub Resolution for Some Maximal 1-Planar Graphs. *Lecture Notes in Computer Science*, **2018**, 214-220	0.9	1
57	Ortho-Polygon Visibility Representations of 3-Connected 1-Plane Graphs. *Lecture Notes in Computer Science*, **2018**, 524-537	0.9	2
56	Universal Slope Sets for Upward Planar Drawings. *Lecture Notes in Computer Science*, **2018**, 77-91	0.9	2
55	Edge Partitions of Optimal 2-plane and 3-plane Graphs. *Lecture Notes in Computer Science*, **2018**, 27-39	0.9	1
54	3D Visibility Representations of 1-planar Graphs. *Lecture Notes in Computer Science*, **2018**, 102-109	0.9	1
53	GiViP: A Visual Profiler for Distributed Graph Processing Systems. *Lecture Notes in Computer Science*, **2018**, 256-271	0.9	3
52	Ortho-polygon Visibility Representations of Embedded Graphs. *Algorithmica*, **2018**, 80, 2345-2383	0.9	16
51	Visibility representations of boxes in 2.5 dimensions. *Computational Geometry: Theory and Applications*, **2018**, 72, 19-33	0.4	4

50	Embedding-Preserving Rectangle Visibility Representations of Nonplanar Graphs. *Discrete and Computational Geometry*, **2018**, 60, 345-380	0.6	8
49	Gap-planar graphs. *Theoretical Computer Science*, **2018**, 745, 36-52	1.1	16
48	On partitioning the edges of 1-plane graphs. *Theoretical Computer Science*, **2017**, 662, 59-65	1.1	8
47	Designing the Content Analyzer of a Travel Recommender System. *Expert Systems With Applications* , **2017**, 87, 199-208	7.8	17
46	Large graph visualizations using a distributed computing platform. *Information Sciences*, **2017**, 381, 124-141	7.7	16
45	An annotated bibliography on 1-planarity. *Computer Science Review*, **2017**, 25, 49-67	8.3	66
44	On RAC drawings of 1-planar graphs. *Theoretical Computer Science*, **2017**, 689, 48-57	1.1	20
43	Area-Thickness Trade-Offs for Straight-Line Drawings of Planar Graphs. *Computer Journal*, **2017**, 60, 135-142	1.1	1
42	Algorithms and Characterizations for 2-Layer Fan-planarity: From Caterpillar to Stegosaurus. *Journal of Graph Algorithms and Applications*, **2017**, 21, 81-102	1.5	10
41	Vertex-Coloring with Defects. *Journal of Graph Algorithms and Applications*, **2017**, 21, 313-340	1.5	7
40	Progress on Partial Edge Drawings. *Journal of Graph Algorithms and Applications*, **2017**, 21, 757-786	1.5	10
39	On Guarding Orthogonal Polygons with Sliding Cameras. *Lecture Notes in Computer Science*, **2017**, 54-65	0.9	6
38	On the Relationship Between k-Planar and k-Quasi-Planar Graphs. *Lecture Notes in Computer Science*, **2017**, 59-74	0.9	7
37	Recognizing and drawing IC-planar graphs. *Theoretical Computer Science*, **2016**, 636, 1-16	1.1	33
36	L-visibility drawings of IC-planar graphs. *Information Processing Letters*, **2016**, 116, 217-222	0.8	18
35	1-Bend Upward Planar Drawings of SP-Digraphs. *Lecture Notes in Computer Science*, **2016**, 123-130	0.9	2
34	1-Bend RAC Drawings of 1-Planar Graphs. *Lecture Notes in Computer Science*, **2016**, 335-343	0.9	1
33	Ortho-Polygon Visibility Representations of Embedded Graphs. *Lecture Notes in Computer Science*, **2016**, 280-294	0.9	1

32	Visibility Representations of Boxes in 2.5 Dimensions. *Lecture Notes in Computer Science*, **2016**, 251-265	0.9	2
31	A Distributed Multilevel Force-Directed Algorithm. *Lecture Notes in Computer Science*, **2016**, 3-17	0.9	3
30	Placing Arrows in Directed Graph Drawings. *Lecture Notes in Computer Science*, **2016**, 44-51	0.9	1
29	Partial edge drawing: Homogeneity is more important than crossings and ink **2016**,		6
28	Simultaneous Visibility Representations of Plane st-graphs Using L-shapes. *Lecture Notes in Computer Science*, **2016**, 252-265	0.9	1
27	Simultaneous visibility representations of plane st-graphs using L-shapes. *Theoretical Computer Science*, **2016**, 645, 100-111	1.1	10
26	Fan-planarity: Properties and complexity. *Theoretical Computer Science*, **2015**, 589, 76-86	1.1	25
25	Algorithms and bounds for drawing non-planar graphs with crossing-free subgraphs. *Computational Geometry: Theory and Applications*, **2015**, 50, 34-48	0.4	3
24	A Million Edge Drawing for a Fistful of Dollars. *Lecture Notes in Computer Science*, **2015**, 44-51	0.9	4
23	**2015**,		1
22	Drawing Outer 1-planar Graphs with Few Slopes. *Journal of Graph Algorithms and Applications*, **2015**, 19, 707-741	1.5	11
21	Kojaph: Visual Definition and Exploration of Patterns in Graph Databases. *Lecture Notes in Computer Science*, **2015**, 272-278	0.9	2
20	2-Layer Fan-Planarity: From Caterpillar to Stegosaurus. *Lecture Notes in Computer Science*, **2015**, 281-294	0.9	
19	Recognizing and Drawing IC-Planar Graphs. *Lecture Notes in Computer Science*, **2015**, 295-308	0.9	1
18	L-Visibility Drawings of IC-Planar Graphs. *Lecture Notes in Computer Science*, **2015**, 545-547	0.9	
17	**2014**,		4
16	How to visualize directed graphs: A user study **2014**,		3
15	Fast layout computation of clustered networks: Algorithmic advances and experimental analysis. *Information Sciences*, **2014**, 260, 185-199	7.7	25

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14	Network visualization for financial crime detection. *Journal of Visual Languages and Computing*, **2014**, 25, 433-451		25
13	Techniques for Edge Stratification of Complex Graph Drawings. *Journal of Visual Languages and Computing*, **2014**, 25, 533-543		5
12	1-Bend Orthogonal Partial Edge Drawing. *Journal of Graph Algorithms and Applications*, **2014**, 18, 111-131	1.5	8
11	Drawing Outer 1-planar Graphs with Few Slopes. *Lecture Notes in Computer Science*, **2014**, 174-185	0.9	2
10	Fan-Planar Graphs: Combinatorial Properties and Complexity Results. *Lecture Notes in Computer Science*, **2014**, 186-197	0.9	2
9	The Planar Slope Number of Subcubic Graphs. *Lecture Notes in Computer Science*, **2014**, 132-143	0.9	6
8	Area requirement of graph drawings with few crossings per edge. *Computational Geometry: Theory and Applications*, **2013**, 46, 909-916	0.4	18
7	**2013**,		1
6	Drawing Non-Planar Graphs with Crossing-Free Subgraphs. *Lecture Notes in Computer Science*, **2013**, 292-303		4
5	Exploring Complex Drawings via Edge Stratification. *Lecture Notes in Computer Science*, **2013**, 304-315	0.9	1
4	Progress on Partial Edge Drawings. *Lecture Notes in Computer Science*, **2013**, 67-78	0.9	6
3	**2012**,		9
2	h-Quasi Planar Drawings of Bounded Treewidth Graphs in Linear Area. *Lecture Notes in Computer Science*, **2012**, 91-102	0.9	10
1	**2011**,		19