Fabrizio Frati

List of Publications by Year
in descending order

122 papers	1,009 citations	586496 16 h-index	721071 23 g-index
132 all docs	132 docs citations	132 times ranked	272 citing authors

#	Article	IF	Citations
1	Planar rectilinear drawings of outerplanar graphs in linear time. Computational Geometry: Theory and Applications, 2022, 103, 101854.	0.3	5
2	Every Collinear Set in a Planar Graph is Free. Discrete and Computational Geometry, 2021, 65, 999-1027.	0.4	1
3	On the area requirements of planar straight-line orthogonal drawings of ternary trees. Theoretical Computer Science, 2021, 852, 197-211.	0.5	1
4	On Planar Greedy Drawings of 3-Connected Planar Graphs. Discrete and Computational Geometry, 2020, 63, 114-157.	0.4	4
5	LR-drawings of ordered rooted binary trees and near-linear area drawings of outerplanar graphs. Journal of Computer and System Sciences, 2020, 107, 28-53.	0.9	5
6	Beyond level planarity: Cyclic, torus, and simultaneous level planarity. Theoretical Computer Science, 2020, 804, 161-170.	0.5	5
7	Extending upward planar graph drawings. Computational Geometry: Theory and Applications, 2020, 91, 101668.	0.3	3
8	Upward Planar Morphs. Algorithmica, 2020, 82, 2985-3017.	1.0	9
9	Schematic Representation of Biconnected Graphs. Lecture Notes in Computer Science, 2020, , 160-172.	1.0	2
10	Graph Stories in Small Area. Journal of Graph Algorithms and Applications, 2020, 24, 269-292.	0.4	5
11	Drawing Graphs as Spanners. Lecture Notes in Computer Science, 2020, , 310-324.	1.0	0
12	Universal Geometric Graphs. Lecture Notes in Computer Science, 2020, , 174-186.	1.0	0
13	On the Area Requirements of Planar Greedy Drawings of Triconnected PlanarÂGraphs. Lecture Notes in Computer Science, 2020, , 435-447.	1.0	1
14	Advances on Testing C-Planarity of Embedded Flat Clustered Graphs. International Journal of Foundations of Computer Science, 2019, 30, 197-230.	0.8	5
15	Extending Upward Planar Graph Drawings. Lecture Notes in Computer Science, 2019, , 339-352.	1.0	6
16	How to Morph a Tree on a Small Grid. Lecture Notes in Computer Science, 2019, , 57-70.	1.0	5
17	Pole Dancing: 3D Morphs for Tree Drawings. Journal of Graph Algorithms and Applications, 2019, 23, 579-602.	0.4	8
18	Simultaneous Embeddings with Few Bends and Crossings. Journal of Graph Algorithms and Applications, 2019, 23, 683-713.	0.4	2

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19	Graph Stories in Small Area. Lecture Notes in Computer Science, 2019, , 545-558.	1.0	1
20	Every Collinear Set in a Planar Graph Is Free. , 2019, , 1521-1538.		2
21	On the Edge-Length Ratio of Planar Graphs. Lecture Notes in Computer Science, 2019, , 165-178.	1.0	1
22	On the Area Requirements of Straight-Line Orthogonal Drawings of Ternary Trees. Lecture Notes in Computer Science, 2018, , 128-140.	1.0	0
23	Upward Planar Morphs. Lecture Notes in Computer Science, 2018, , 92-105.	1.0	3
24	Stack and Queue Layouts via Layered Separators. Journal of Graph Algorithms and Applications, 2018, 22, 89-99.	0.4	22
25	Computing NodeTrix Representations of Clustered Graphs. Journal of Graph Algorithms and Applications, 2018, 22, 139-176.	0.4	19
26	Pole Dancing: 3D Morphs for Tree Drawings. Lecture Notes in Computer Science, 2018, , 371-384.	1.0	0
27	Strip Planarity Testing for Embedded Planar Graphs. Algorithmica, 2017, 77, 1022-1059.	1.0	18
28	How to Morph Planar Graph Drawings. SIAM Journal on Computing, 2017, 46, 824-852.	0.8	21
29	LR-Drawings of Ordered Rooted Binary Trees and Near-Linear Area Drawings of Outerplanar Graphs. , 2017, , .		2
30	Intersection-Link Representations of Graphs. Journal of Graph Algorithms and Applications, 2017, 21, 731-755.	0.4	23
31	A Lower Bound on the Diameter of the Flip Graph. Electronic Journal of Combinatorics, 2017, 24, .	0.2	0
32	SEFE without Mapping via Large Induced Outerplane Graphs in Plane Graphs. Journal of Graph Theory, 2016, 82, 45-64.	0.5	2
33	Drawing Planar Graphs with Many Collinear Vertices. Lecture Notes in Computer Science, 2016, , 152-165.	1.0	2
34	Beyond Level Planarity. Lecture Notes in Computer Science, 2016, , 482-495.	1.0	9
35	Clustered Graph Drawing. , 2016, , 326-331.		0
36	Stack and Queue Layouts via Layered Separators. Lecture Notes in Computer Science, 2016, , 511-518.	1.0	0

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37	Computing NodeTrix Representations of Clustered Graphs. Lecture Notes in Computer Science, 2016, , 107-120.	1.0	3
38	Compatible Connectivity Augmentation of Planar Disconnected Graphs. Discrete and Computational Geometry, 2015, 54, 459-480.	0.4	1
39	The importance of being proper. Theoretical Computer Science, 2015, 571, 1-9.	0.5	17
40	Testing Planarity of Partially Embedded Graphs. ACM Transactions on Algorithms, 2015, 11, 1-42.	0.9	28
41	Increasing-Chord Graphs On Point Sets. Journal of Graph Algorithms and Applications, 2015, 19, 761-778.	0.4	16
42	Relaxing the constraints of clustered planarity. Computational Geometry: Theory and Applications, 2015, 48, 42-75.	0.3	13
43	Augmenting Graphs to Minimize the Diameter. Algorithmica, 2015, 72, 995-1010.	1.0	26
44	Compatible Connectivity-Augmentation of Planar Disconnected Graphs. , 2015, , .		1
45	Drawing Partially Embedded and Simultaneously Planar Graphs. Journal of Graph Algorithms and Applications, 2015, 19, 681-706.	0.4	13
46	Simultaneous Embeddings with Few Bends and Crossings. Lecture Notes in Computer Science, 2015, , 166-179.	1.0	1
47	Clustered Graph Drawing. , 2015, , 1-6.		1
48	On the number of upward planar orientations of maximal planar graphs. Theoretical Computer Science, 2014, 544, 32-59.	0.5	3
49	On the area requirements of Euclidean minimum spanning trees. Computational Geometry: Theory and Applications, 2014, 47, 200-213.	0.3	3
50	Morphing Planar Graph Drawings Optimally. Lecture Notes in Computer Science, 2014, , 126-137.	1.0	13
51	Drawing Partially Embedded and Simultaneously Planar Graphs. Lecture Notes in Computer Science, 2014, , 25-39.	1.0	2
52	Advances on Testing C-Planarity of Embedded Flat Clustered Graphs. Lecture Notes in Computer Science, 2014, , 416-427.	1.0	11
53	On the Upward Planarity of Mixed Plane Graphs. Journal of Graph Algorithms and Applications, 2014, 18, 253-279.	0.4	5
54	Universal Point Sets for Drawing Planar Graphs with Circular Arcs. Journal of Graph Algorithms and Applications, 2014, 18, 313-324.	0.4	9

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55	The Importance of Being Proper. Lecture Notes in Computer Science, 2014, , 246-258.	1.0	0
56	Multilayer Drawings of Clustered Graphs. Journal of Graph Algorithms and Applications, 2014, 18, 633-675.	0.4	1
57	Increasing-Chord Graphs On Point Sets. Lecture Notes in Computer Science, 2014, , 464-475.	1.0	2
58	Orthogeodesic point-set embedding of trees. Computational Geometry: Theory and Applications, 2013, 46, 929-944.	0.3	7
59	Theory and Practice of Graph Drawing. Lecture Notes in Computer Science, 2013, , 571-574.	1.0	1
60	On the Queue Number of Planar Graphs. SIAM Journal on Computing, 2013, 42, 2243-2285.	0.8	30
61	SIMULTANEOUS EMBEDDING OF EMBEDDED PLANAR GRAPHS. International Journal of Computational Geometry and Applications, 2013, 23, 93-126.	0.3	4
62	Drawing Trees, Outerplanar Graphs, Series-Parallel Graphs, and Planar Graphs in a Small Area. , 2013, , 121-165.		9
63	Morphing Planar Graph Drawings Efficiently. Lecture Notes in Computer Science, 2013, , 49-60.	1.0	9
64	Point-Set Embeddability of 2-Colored Trees. Lecture Notes in Computer Science, 2013, , 291-302.	1.0	6
65	Morphing Planar Graph Drawings with a Polynomial Number of Steps. , 2013, , .		15
66	Nonrepetitive Colourings of Planar Graphs with $O(log n)$ Colours. Electronic Journal of Combinatorics, 2013, 20, .	0.2	10
67	On the Page Number of Upward Planar Directed Acyclic Graphs. Journal of Graph Algorithms and Applications, 2013, 17, 221-244.	0.4	10
68	SEFE with No Mapping via Large Induced Outerplane Graphs in Plane Graphs. Lecture Notes in Computer Science, 2013, , 185-195.	1.0	2
69	On Representing Graphs by Touching Cuboids. Lecture Notes in Computer Science, 2013, , 187-198.	1.0	10
70	Strip Planarity Testing. Lecture Notes in Computer Science, 2013, , 37-48.	1.0	9
71	Multilevel Drawings of Clustered Graphs. Lecture Notes in Computer Science, 2012, , 311-322.	1.0	0
72	Nonconvex Representations of Plane Graphs. SIAM Journal on Discrete Mathematics, 2012, 26, 1670-1681.	0.4	0

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73	Straight-line drawings of outerplanar graphs in $O(dn\log n)$... xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mi>O</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>d</mml:mi><mml:mi>n</mml:mi><mml:mi) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 731	0.5	201
74	Acyclically 3-colorable planar graphs. Journal of Combinatorial Optimization, 2012, 24, 116-130.	0.8	11
75	Testing the simultaneous embeddability of two graphs whose intersection is a biconnected or a connected graph. Journal of Discrete Algorithms, 2012, 14, 150-172.	0.7	35
76	Succinct greedy drawings do not always exist. Networks, 2012, 59, 267-274.	1.6	10
77	Large Angle Crossing Drawings of Planar Graphs in Subquadratic Area. Lecture Notes in Computer Science, 2012, , 200-209.	1.0	7
78	Monotone Drawings of Graphs. Journal of Graph Algorithms and Applications, 2012, 16, 5-35.	0.4	31
79	Orthogeodesic Point-Set Embedding of Trees. Lecture Notes in Computer Science, 2012, , 52-63.	1.0	3
80	On the Page Number of Upward Planar Directed Acyclic Graphs. Lecture Notes in Computer Science, 2012, , 391-402.	1.0	2
81	Colored Simultaneous Geometric Embeddings andÂUniversal Pointsets. Algorithmica, 2011, 60, 569-592.	1.0	10
82	Straight-Line Rectangular Drawings of Clustered Graphs. Discrete and Computational Geometry, 2011, 45, 88-140.	0.4	12
83	Polynomial area bounds for MST embeddings of trees. Computational Geometry: Theory and Applications, 2011, 44, 529-543.	0.3	7
84	Upward Geometric Graph Embeddings into Point Sets. Lecture Notes in Computer Science, 2011, , 25-37.	1.0	12
85	On the Perspectives Opened by Right Angle Crossing Drawings. Journal of Graph Algorithms and Applications, 2011, 15, 53-78.	0.4	30
86	Monotone Drawings of Graphs. Lecture Notes in Computer Science, 2011, , 13-24.	1.0	3
87	Improved Lower Bounds on the Area Requirements of Series-Parallel Graphs. Lecture Notes in Computer Science, 2011, , 220-225.	1.0	1
88	Testing the Simultaneous Embeddability of Two Graphs Whose Intersection Is a Biconnected Graph or a Tree. Lecture Notes in Computer Science, 2011, , 212-225.	1.0	4
89	Simultaneous Embedding of Embedded Planar Graphs. Lecture Notes in Computer Science, 2011, , 271-280.	1.0	1
90	A note on isosceles planar graph drawing. Information Processing Letters, 2010, 110, 507-509.	0.4	0

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91	Upward straight-line embeddings of directed graphs into point sets. Computational Geometry: Theory and Applications, 2010, 43, 219-232.	0.3	17
92	On the Queue Number of Planar Graphs. , 2010, , .		8
93	Acyclically 3-Colorable Planar Graphs. Lecture Notes in Computer Science, 2010, , 113-124.	1.0	3
94	Testing Planarity of Partially Embedded Graphs. , 2010, , .		24
95	An Algorithm to Construct Greedy Drawings of Triangulations. Journal of Graph Algorithms and Applications, 2010, 14, 19-51.	0.4	39
96	Splitting Clusters to Get C-Planarity. Lecture Notes in Computer Science, 2010, , 57-68.	1.0	3
97	Crossings between Curves with Many Tangencies. Lecture Notes in Computer Science, 2010, , 1-8.	1.0	2
98	Small Area Drawings of Outerplanar Graphs. Algorithmica, 2009, 54, 25-53.	1.0	24
99	On Embedding a Graph in the Grid with the Maximum Number of Bends and Other Bad Features. Theory of Computing Systems, 2009, 44, 143-159.	0.7	0
100	How to draw a clustered tree. Journal of Discrete Algorithms, 2009, 7, 479-499.	0.7	7
101	Planar packing of trees and spider trees. Information Processing Letters, 2009, 109, 301-307.	0.4	9
102	Non-convex Representations of Graphs. Lecture Notes in Computer Science, 2009, , 390-395.	1.0	2
103	An Algorithm to Construct Greedy Drawings of Triangulations. Lecture Notes in Computer Science, 2009, , 26-37.	1.0	17
104	Efficient C-Planarity Testing for Embedded Flat Clustered Graphs with Small Faces. Journal of Graph Algorithms and Applications, 2009, 13, 349-378.	0.4	24
105	Constrained Simultaneous and Near-Simultaneous Embeddings. Journal of Graph Algorithms and Applications, 2009, 13, 447-465.	0.4	4
106	Straight-Line Rectangular Drawings of Clustered Graphs. Lecture Notes in Computer Science, 2009, , 25-36.	1.0	1
107	ON MINIMUM AREA PLANAR UPWARD DRAWINGS OF DIRECTED TREES AND OTHER FAMILIES OF DIRECTED ACYCLIC GRAPHS. International Journal of Computational Geometry and Applications, 2008, 18, 251-271.	0.3	9
108	Efficient C-Planarity Testing for Embedded Flat Clustered Graphs with Small Faces. Lecture Notes in Computer Science, 2008, , 291-302.	1.0	12

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109	Upward Straight-Line Embeddings of Directed Graphs into Point Sets. Lecture Notes in Computer Science, 2008, , 122-133.	1.0	2
110	A Lower Bound on the Area Requirements of Series-Parallel Graphs. Lecture Notes in Computer Science, 2008, , 159-170.	1.0	4
111	C-Planarity of C-Connected Clustered Graphs. Journal of Graph Algorithms and Applications, 2008, 12, 225-262.	0.4	28
112	Three-Dimensional Drawings of Bounded Degree Trees. Lecture Notes in Computer Science, 2007, , 89-94.	1.0	3
113	Straight-Line Orthogonal Drawings of Binary and Ternary Trees. , 2007, , 76-87.		10
114	A Note on Minimum-Area Straight-Line Drawings of Planar Graphs. , 2007, , 339-344.		10
115	On Embedding a Graph in the Grid with the Maximum Number of Bends and Other Bad Features. Lecture Notes in Computer Science, 2007, , 1-13.	1.0	0
116	How to Draw a Clustered Tree. Lecture Notes in Computer Science, 2007, , 89-101.	1.0	3
117	On Minimum Area Planar Upward Drawings of Directed Trees and Other Families of Directed Acyclic Graphs. , 2007, , 133-144.		0
118	Constrained Simultaneous and Near-Simultaneous Embeddings. , 2007, , 268-279.		5
119	Small Area Drawings of Outerplanar Graphs. Lecture Notes in Computer Science, 2006, , 89-100.	1.0	10
120	Embedding Graphs Simultaneously with Fixed Edges. , 2006, , 108-113.		22
121	How to Morph a Tree on a Small Grid. Discrete and Computational Geometry, 0, , .	0.4	0
122	Drawing Graphs as Spanners. Discrete and Computational Geometry, 0, , .	0.4	0