Petr HlinÄ›nÃ½

List of Publications by Year
in descending order

89 papers	1,153 citations	471509 17 h-index	477307 29 g-index
98 all docs	98 docs citations	98 times ranked	366 citing authors

#	Article	IF	Citations
1	Width Parameters Beyond Tree-width and their Applications. Computer Journal, 2007, 51, 326-362.	2.4	111
2	Finding Branch-Decompositions and Rank-Decompositions. SIAM Journal on Computing, 2008, 38, 1012-1032.	1.0	93
3	Representing graphs by disks and balls (a survey of recognition-complexity results). Discrete Mathematics, 2001, 229, 101-124.	0.7	60
4	Kernelization using structural parameters on sparse graph classes. Journal of Computer and System Sciences, 2017, 84, 219-242.	1.2	54
5	Crossing number is hard for cubic graphs. Journal of Combinatorial Theory Series B, 2006, 96, 455-471.	1.0	47
6	Branch-width, parse trees, and monadic second-order logic for matroids. Journal of Combinatorial Theory Series B, 2006, 96, 325-351.	1.0	45
7	On parse trees and Myhillâ€“Nerode-type tools for handling graphs of bounded rank-width. Discrete Applied Mathematics, 2010, 158, 851-867.	0.9	45
8	A Parametrized Algorithm for Matroid Branch-Width. SIAM Journal on Computing, 2005, 35, 259-277.	1.0	32
9	Digraph width measures in parameterized algorithmics. Discrete Applied Mathematics, 2014, 168, 88-107.	0.9	32
10	Crossing-number critical graphs have bounded path-width. Journal of Combinatorial Theory Series B, 2003, 88, 347-367.	1.0	27
11	Matroid tree-width. European Journal of Combinatorics, 2006, 27, 1117-1128.	0.8	26
12	Classes and Recognition of Curve Contact Graphs. Journal of Combinatorial Theory Series B, 1998, 74, 87-103.	1.0	23
13	Computing the Tutte Polynomial on Graphs of Bounded Cliqueâ€Width. SIAM Journal on Discrete Mathematics, 2006, 20, 932-946.	0.8	22
14	Are there any good digraph width measures?. Journal of Combinatorial Theory Series B, 2016, 116, 250-286.	1.0	22
15	When Trees Grow Low: Shrubs and Fast MSO1. Lecture Notes in Computer Science, 2012, , 419-430.	1.3	21
16	On Digraph Width Measures in Parameterized Algorithmics. Lecture Notes in Computer Science, 2009, , 185-197.	1.3	19
17	The Tutte Polynomial for Matroids of Bounded Branch-Width. Combinatorics Probability and Computing, 2006, 15, 397.	1.3	17
18	FO Model Checking on Posets of Bounded Width. , 2015, , .		17

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19	On the Crossing Number of Almost Planar Graphs. , 2006, , 162-173.		17
20	Vertex insertion approximates the crossing number of apex graphs. European Journal of Combinatorics, 2012, 33, 326-335.	0.8	16
21	On Matroid Properties Definable in the MSO Logic. Lecture Notes in Computer Science, 2003, , 470-479.	1.3	16
22	Contact graphs of line segments are NP-complete. Discrete Mathematics, 2001, 235, 95-106.	0.7	14
23	Better Algorithms for Satisfiability Problems for Formulas of Bounded Rank-width. Fundamenta Informaticae, 2013, 123, 59-76.	0.4	14
24	Kernelization Using Structural Parameters on Sparse Graph Classes. Lecture Notes in Computer Science, 2013, , 529-540.	1.3	14
25	A Tighter Insertion-Based Approximation of the Crossing Number. Lecture Notes in Computer Science, 2011, , 122-134.	1.3	12
26	Trees, grids, and MSO decidability: From graphs to matroids. Theoretical Computer Science, 2006, 351, 372-393.	0.9	11
27	A unified approach to polynomial algorithms on graphs of bounded (bi-)rank-width. European Journal of Combinatorics, 2013, 34, 680-701.	0.8	11
28	Crossing-Critical Graphs and Path-Width. Lecture Notes in Computer Science, 2002, , 102-114.	1.3	11
29	On possible counterexamples to Negami's planar cover conjecture. Journal of Graph Theory, 2004, 46, 183-206.	0.9	10
30	The crossing number of a projective graph is quadratic in the faceâ€“width. Electronic Notes in Discrete Mathematics, 2007, 29, 219-223.	0.4	10
31	Addendum to matroid tree-width. European Journal of Combinatorics, 2009, 30, 1036-1044.	0.8	10
32	A tighter insertion-based approximation of the crossing number. Journal of Combinatorial Optimization, 2017, 33, 1183-1225.	1.3	10
33	Branch-Width, Parse Trees, and Monadic Second-Order Logic for Matroids. Lecture Notes in Computer Science, 2003, , 319-330.	1.3	10
34	New Infinite Families of Almost-Planar Crossing-Critical Graphs. Electronic Journal of Combinatorics, 2008, 15, .	0.4	10
35	A New Perspective on FO Model Checking of Dense Graph Classes. , 2016, , .		9
36	Approximating the Crossing Number of Toroidal Graphs. Lecture Notes in Computer Science, 2007, , 148-159.	1.3	9

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37	Approximating the Crossing Number of Graphs Embeddable in Any Orientable Surface. , 2010, , .		9
38	20 Years of Negamiâ€™s Planar Cover Conjecture. Graphs and Combinatorics, 2010, 26, 525-536.	0.4	8
39	Lower bounds on the complexity ofMSO1model-checking. Journal of Computer and System Sciences, 2014, 80, 180-194.	1.2	8
40	Finding Branch-Decompositions and Rank-Decompositions. , 2007, , 163-174.		8
41	Contact graphs of curves. Lecture Notes in Computer Science, 1996, , 312-323.	1.3	7
42	The maximal clique and colourability of curve contact graphs. Discrete Applied Mathematics, 1998, 81, 59-68.	0.9	7
43	Some Hard Problems on Matroid Spikes. Theory of Computing Systems, 2007, 41, 551-562.	1.1	7
44	Better Polynomial Algorithms on Graphs ofÂBounded Rank-Width. Lecture Notes in Computer Science, 2009, , 266-277.	1.3	7
45	On the Excluded Minors for Matroids of Branch-Width Three. Electronic Journal of Combinatorics, 2002, 9, .	0.4	7
46	Computing the Tutte Polynomial on Graphs of Bounded Clique-Width. Lecture Notes in Computer Science, 2005, , 59-68.	1.3	7
47	Another two graphs with no planar covers. Journal of Graph Theory, 2001, 37, 227-242.	0.9	6
48	Touching graphs of unit balls. Lecture Notes in Computer Science, 1997, , 350-358.	1.3	6
49	On Conflict-Free Chromatic Guarding ofÂSimple Polygons. Lecture Notes in Computer Science, 2019, , 601-612.	1.3	6
50	FO Model Checking of Interval Graphs. Lecture Notes in Computer Science, 2013, , 250-262.	1.3	6
51	A New Perspective on FO Model Checking of Dense Graph Classes. ACM Transactions on Computational Logic, 2020, 21, 1-23.	0.9	6
52	A note on possible extensions of Negami's conjecture. Journal of Graph Theory, 1999, 32, 234-240.	0.9	5
53	Bridging Separations in Matroids. SIAM Journal on Discrete Mathematics, 2004, 18, 638-646.	0.8	5
54	Tree-depth and vertex-minors. European Journal of Combinatorics, 2016, 56, 46-56.	0.8	5

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55	FO model checking on geometric graphs. Computational Geometry: Theory and Applications, 2019, 78, 1-19.	0.5	5
56	New Results on the Complexity of Oriented Colouring on Restricted Digraph Classes. Lecture Notes in Computer Science, 2010, , 428-439.	1.3	5
57	Kernelizing MSO Properties of Trees of Fixed Height, and Some Consequences. Logical Methods in Computer Science, 0, Volume 11, Issue 1, .	0.4	5
58	FO Model Checking of Interval Graphs. Logical Methods in Computer Science, 2015, 11, .	0.4	5
59	Exact Crossing Number Parameterized by Vertex Cover. Lecture Notes in Computer Science, 2019, , 307-319.	1.3	5
60	Balanced Signings and the Chromatic Number of Oriented Matroids. Combinatorics Probability and Computing, 2006, 15, 523.	1.3	4
61	Stars and bonds in crossingâ€critical graphs. Journal of Graph Theory, 2010, 65, 198-215.	0.9	4
62	A deterministic approach for rapid identification of the critical links in networks. PLoS ONE, 2019, 14, e0219658.	2.5	4
63	How not to characterize planar-emulable graphs. Advances in Applied Mathematics, 2013, 50, 46-68.	0.7	3
64	First order limits of sparse graphs: Plane trees and path-width. Random Structures and Algorithms, 2017, 50, 612-635.	1.1	3
65	Parameterized extension complexity of independent set and related problems. Discrete Applied Mathematics, 2018, 248, 56-67.	0.9	3
66	Faster Existential FO Model Checking on Posets. Logical Methods in Computer Science, 2015, 11, .	0.4	3
67	Isomorphism Testing forÂT-graphs inÂFPT. Lecture Notes in Computer Science, 2022, , 239-250.	1.3	3
68	Equivalence-free exhaustive generation of matroid representations. Discrete Applied Mathematics, 2006, 154, 1210-1222.	0.9	2
69	Parameterized shifted combinatorial optimization. Journal of Computer and System Sciences, 2019, 99, 53-71.	1.2	2
70	Toroidal grid minors and stretch in embedded graphs. Journal of Combinatorial Theory Series B, 2020, 140, 323-371.	1.0	2
71	Scope-Based Route Planning. Lecture Notes in Computer Science, 2011, , 445-456.	1.3	2
72	Faster Existential FO Model Checking on Posets. Lecture Notes in Computer Science, 2014, , 441-451.	1.3	2

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73	On Hardness of the Joint Crossing Number. Lecture Notes in Computer Science, 2015, , 603-613.	1.3	2
74	An addition to art galleries with interior walls. Discrete and Computational Geometry, 2001, 25, 311-314.	0.6	1
75	Stars and Bonds in Crossing-Critical Graphs. Electronic Notes in Discrete Mathematics, 2008, 31, 271-275.	0.4	1
76	Computing the Stretch of an Embedded Graph. SIAM Journal on Discrete Mathematics, 2014, 28, 1391-1401.	0.8	1
77	Parameterized Shifted Combinatorial Optimization. Lecture Notes in Computer Science, 2017, , 224-236.	1.3	1
78	Deciding Parity of Graph Crossing Number. SIAM Journal on Discrete Mathematics, 2018, 32, 1962-1965.	0.8	1
79	On Decidability of MSO Theories of Representable Matroids. Lecture Notes in Computer Science, 2004, , 96-107.	1.3	1
80	COMBINATORIAL GENERATION OF MATROID REPRESENTATIONS: THEORY AND PRACTICE. , 2007, , .		1
81	On Degree Properties of Crossing-Critical Families of Graphs. Electronic Journal of Combinatorics, 2019, 26, .	0.4	1
82	Generalized Maneuvers in Route Planning. Lecture Notes in Computer Science, 2012, , 155-166.	1.3	1
83	Bounded Degree Conjecture Holds Precisely for c-Crossing-Critical Graphs with c â‰¥ 12. Combinatorica, 2022, 42, 701-728.	1.2	1
84	Planar emulators conjecture is nearly true for cubic graphs. European Journal of Combinatorics, 2015, 48, 63-70.	0.8	0
85	A Simpler Self-reduction Algorithm for Matroid Path-Width. SIAM Journal on Discrete Mathematics, 2018, 32, 1425-1440.	0.8	0
86	Clique-width of point configurations. Journal of Combinatorial Theory Series B, 2021, , .	1.0	0
87	On Degree Properties of Crossing-Critical Families of Graphs. Lecture Notes in Computer Science, 2015, , 75-86.	1.3	0
88	Practical Exhaustive Generation of Small Multiway Cuts in Sparse Graphs. Lecture Notes in Computer Science, 2016, , 54-66.	1.3	0
89	Clique-Width of Point Configurations. Lecture Notes in Computer Science, 2020, , 54-66.	1.3	0