

# Petr Hliněný<sup>1/2</sup>

## List of Publications by Year in descending order

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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	Isomorphism Testing for $\hat{A}$ T-graphs in $\hat{A}$ FPT. Lecture Notes in Computer Science, 2022, , 239-250.	1.3	3
2	Bounded Degree Conjecture Holds Precisely for $c$ -Crossing-Critical Graphs with $c \hat{\geq} 12$ . Combinatorica, 2022, 42, 701-728.	1.2	1
3	Clique-width of point configurations. Journal of Combinatorial Theory Series B, 2021, , .	1.0	0
4	Toroidal grid minors and stretch in embedded graphs. Journal of Combinatorial Theory Series B, 2020, 140, 323-371.	1.0	2
5	Clique-Width of Point Configurations. Lecture Notes in Computer Science, 2020, , 54-66.	1.3	0
6	A New Perspective on FO Model Checking of Dense Graph Classes. ACM Transactions on Computational Logic, 2020, 21, 1-23.	0.9	6
7	Parameterized shifted combinatorial optimization. Journal of Computer and System Sciences, 2019, 99, 53-71.	1.2	2
8	A deterministic approach for rapid identification of the critical links in networks. PLoS ONE, 2019, 14, e0219658.	2.5	4
9	FO model checking on geometric graphs. Computational Geometry: Theory and Applications, 2019, 78, 1-19.	0.5	5
10	On Conflict-Free Chromatic Guarding of $\hat{A}$ Simple Polygons. Lecture Notes in Computer Science, 2019, , 601-612.	1.3	6
11	On Degree Properties of Crossing-Critical Families of Graphs. Electronic Journal of Combinatorics, 2019, 26, .	0.4	1
12	Exact Crossing Number Parameterized by Vertex Cover. Lecture Notes in Computer Science, 2019, , 307-319.	1.3	5
13	Parameterized extension complexity of independent set and related problems. Discrete Applied Mathematics, 2018, 248, 56-67.	0.9	3
14	A Simpler Self-reduction Algorithm for Matroid Path-Width. SIAM Journal on Discrete Mathematics, 2018, 32, 1425-1440.	0.8	0
15	Deciding Parity of Graph Crossing Number. SIAM Journal on Discrete Mathematics, 2018, 32, 1962-1965.	0.8	1
16	A tighter insertion-based approximation of the crossing number. Journal of Combinatorial Optimization, 2017, 33, 1183-1225.	1.3	10
17	Kernelization using structural parameters on sparse graph classes. Journal of Computer and System Sciences, 2017, 84, 219-242.	1.2	54
18	First order limits of sparse graphs: Plane trees and path-width. Random Structures and Algorithms, 2017, 50, 612-635.	1.1	3

#	ARTICLE	IF	CITATIONS
19	Parameterized Shifted Combinatorial Optimization. Lecture Notes in Computer Science, 2017, , 224-236.	1.3	1
20	A New Perspective on FO Model Checking of Dense Graph Classes. , 2016, , .		9
21	Tree-depth and vertex-minors. European Journal of Combinatorics, 2016, 56, 46-56.	0.8	5
22	Are there any good digraph width measures?. Journal of Combinatorial Theory Series B, 2016, 116, 250-286.	1.0	22
23	Practical Exhaustive Generation of Small Multiway Cuts in Sparse Graphs. Lecture Notes in Computer Science, 2016, , 54-66.	1.3	0
24	FO Model Checking on Posets of Bounded Width. , 2015, , .		17
25	Planar emulators conjecture is nearly true for cubic graphs. European Journal of Combinatorics, 2015, 48, 63-70.	0.8	0
26	On Hardness of the Joint Crossing Number. Lecture Notes in Computer Science, 2015, , 603-613.	1.3	2
27	On Degree Properties of Crossing-Critical Families of Graphs. Lecture Notes in Computer Science, 2015, , 75-86.	1.3	0
28	FO Model Checking of Interval Graphs. Logical Methods in Computer Science, 2015, 11, .	0.4	5
29	Faster Existential FO Model Checking on Posets. Logical Methods in Computer Science, 2015, 11, .	0.4	3
30	Computing the Stretch of an Embedded Graph. SIAM Journal on Discrete Mathematics, 2014, 28, 1391-1401.	0.8	1
31	Digraph width measures in parameterized algorithmics. Discrete Applied Mathematics, 2014, 168, 88-107.	0.9	32
32	Lower bounds on the complexity ofMSO1model-checking. Journal of Computer and System Sciences, 2014, 80, 180-194.	1.2	8
33	Faster Existential FO Model Checking on Posets. Lecture Notes in Computer Science, 2014, , 441-451.	1.3	2
34	A unified approach to polynomial algorithms on graphs of bounded (bi-)rank-width. European Journal of Combinatorics, 2013, 34, 680-701.	0.8	11
35	How not to characterize planar-emulable graphs. Advances in Applied Mathematics, 2013, 50, 46-68.	0.7	3
36	Better Algorithms for Satisfiability Problems for Formulas of Bounded Rank-width. Fundamenta Informaticae, 2013, 123, 59-76.	0.4	14

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37	FO Model Checking of Interval Graphs. Lecture Notes in Computer Science, 2013, , 250-262.	1.3	6
38	Kernelization Using Structural Parameters on Sparse Graph Classes. Lecture Notes in Computer Science, 2013, , 529-540.	1.3	14
39	Vertex insertion approximates the crossing number of apex graphs. European Journal of Combinatorics, 2012, 33, 326-335.	0.8	16
40	When Trees Grow Low: Shrubs and Fast MSO1. Lecture Notes in Computer Science, 2012, , 419-430.	1.3	21
41	Generalized Maneuvers in Route Planning. Lecture Notes in Computer Science, 2012, , 155-166.	1.3	1
42	A Tighter Insertion-Based Approximation of the Crossing Number. Lecture Notes in Computer Science, 2011, , 122-134.	1.3	12
43	Scope-Based Route Planning. Lecture Notes in Computer Science, 2011, , 445-456.	1.3	2
44	20 Years of Negami's Planar Cover Conjecture. Graphs and Combinatorics, 2010, 26, 525-536.	0.4	8
45	On parse trees and Myhill's Nerode-type tools for handling graphs of bounded rank-width. Discrete Applied Mathematics, 2010, 158, 851-867.	0.9	45
46	Stars and bonds in crossing-critical graphs. Journal of Graph Theory, 2010, 65, 198-215.	0.9	4
47	New Results on the Complexity of Oriented Colouring on Restricted Digraph Classes. Lecture Notes in Computer Science, 2010, , 428-439.	1.3	5
48	Approximating the Crossing Number of Graphs Embeddable in Any Orientable Surface. , 2010, ,		9
49	Addendum to matroid tree-width. European Journal of Combinatorics, 2009, 30, 1036-1044.	0.8	10
50	Better Polynomial Algorithms on Graphs of Bounded Rank-Width. Lecture Notes in Computer Science, 2009, , 266-277.	1.3	7
51	On Digraph Width Measures in Parameterized Algorithmics. Lecture Notes in Computer Science, 2009, , 185-197.	1.3	19
52	Stars and Bonds in Crossing-Critical Graphs. Electronic Notes in Discrete Mathematics, 2008, 31, 271-275.	0.4	1
53	Finding Branch-Decompositions and Rank-Decompositions. SIAM Journal on Computing, 2008, 38, 1012-1032.	1.0	93
54	New Infinite Families of Almost-Planar Crossing-Critical Graphs. Electronic Journal of Combinatorics, 2008, 15, .	0.4	10

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55	Width Parameters Beyond Tree-width and their Applications. <i>Computer Journal</i> , 2007, 51, 326-362.	2.4	111
56	The crossing number of a projective graph is quadratic in the face-width. <i>Electronic Notes in Discrete Mathematics</i> , 2007, 29, 219-223.	0.4	10
57	Some Hard Problems on Matroid Spikes. <i>Theory of Computing Systems</i> , 2007, 41, 551-562.	1.1	7
58	Finding Branch-Decompositions and Rank-Decompositions. , 2007, , 163-174.		8
59	Approximating the Crossing Number of Toroidal Graphs. <i>Lecture Notes in Computer Science</i> , 2007, , 148-159.	1.3	9
60	COMBINATORIAL GENERATION OF MATROID REPRESENTATIONS: THEORY AND PRACTICE. , 2007, , .		1
61	Computing the Tutte Polynomial on Graphs of Bounded Clique-Width. <i>SIAM Journal on Discrete Mathematics</i> , 2006, 20, 932-946.	0.8	22
62	The Tutte Polynomial for Matroids of Bounded Branch-Width. <i>Combinatorics Probability and Computing</i> , 2006, 15, 397.	1.3	17
63	Equivalence-free exhaustive generation of matroid representations. <i>Discrete Applied Mathematics</i> , 2006, 154, 1210-1222.	0.9	2
64	Matroid tree-width. <i>European Journal of Combinatorics</i> , 2006, 27, 1117-1128.	0.8	26
65	Crossing number is hard for cubic graphs. <i>Journal of Combinatorial Theory Series B</i> , 2006, 96, 455-471.	1.0	47
66	Trees, grids, and MSO decidability: From graphs to matroids. <i>Theoretical Computer Science</i> , 2006, 351, 372-393.	0.9	11
67	Branch-width, parse trees, and monadic second-order logic for matroids. <i>Journal of Combinatorial Theory Series B</i> , 2006, 96, 325-351.	1.0	45
68	Balanced Signings and the Chromatic Number of Oriented Matroids. <i>Combinatorics Probability and Computing</i> , 2006, 15, 523.	1.3	4
69	On the Crossing Number of Almost Planar Graphs. , 2006, , 162-173.		17
70	A Parametrized Algorithm for Matroid Branch-Width. <i>SIAM Journal on Computing</i> , 2005, 35, 259-277.	1.0	32
71	Computing the Tutte Polynomial on Graphs of Bounded Clique-Width. <i>Lecture Notes in Computer Science</i> , 2005, , 59-68.	1.3	7
72	On possible counterexamples to Negami's planar cover conjecture. <i>Journal of Graph Theory</i> , 2004, 46, 183-206.	0.9	10

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73	Bridging Separations in Matroids. SIAM Journal on Discrete Mathematics, 2004, 18, 638-646.	0.8	5
74	On Decidability of MSO Theories of Representable Matroids. Lecture Notes in Computer Science, 2004, , 96-107.	1.3	1
75	Crossing-number critical graphs have bounded path-width. Journal of Combinatorial Theory Series B, 2003, 88, 347-367.	1.0	27
76	Branch-Width, Parse Trees, and Monadic Second-Order Logic for Matroids. Lecture Notes in Computer Science, 2003, , 319-330.	1.3	10
77	On Matroid Properties Definable in the MSO Logic. Lecture Notes in Computer Science, 2003, , 470-479.	1.3	16
78	Crossing-Critical Graphs and Path-Width. Lecture Notes in Computer Science, 2002, , 102-114.	1.3	11
79	On the Excluded Minors for Matroids of Branch-Width Three. Electronic Journal of Combinatorics, 2002, 9, .	0.4	7
80	An addition to art galleries with interior walls. Discrete and Computational Geometry, 2001, 25, 311-314.	0.6	1
81	Another two graphs with no planar covers. Journal of Graph Theory, 2001, 37, 227-242.	0.9	6
82	Representing graphs by disks and balls (a survey of recognition-complexity results). Discrete Mathematics, 2001, 229, 101-124.	0.7	60
83	Contact graphs of line segments are NP-complete. Discrete Mathematics, 2001, 235, 95-106.	0.7	14
84	A note on possible extensions of Negami's conjecture. Journal of Graph Theory, 1999, 32, 234-240.	0.9	5
85	Classes and Recognition of Curve Contact Graphs. Journal of Combinatorial Theory Series B, 1998, 74, 87-103.	1.0	23
86	The maximal clique and colourability of curve contact graphs. Discrete Applied Mathematics, 1998, 81, 59-68.	0.9	7
87	Touching graphs of unit balls. Lecture Notes in Computer Science, 1997, , 350-358.	1.3	6
88	Contact graphs of curves. Lecture Notes in Computer Science, 1996, , 312-323.	1.3	7
89	Kernelizing MSO Properties of Trees of Fixed Height, and Some Consequences. Logical Methods in Computer Science, 0, Volume 11, Issue 1, .	0.4	5