Marcin Pilipczuk

List of Publications by Year in Descending Order

107 papers	1,727 citations	17 h-index	38 g-index
119 ext. papers	2,057 ext. citations	0.8 avg, IF	4.98 L-index

#	Paper	IF	Citations
107	Solving Connectivity Problems Parameterized by Treewidth in Single Exponential Time. *ACM Transactions on Algorithms*, **2022**, 18, 1-31	1.2	1
106	A Subexponential Parameterized Algorithm for Directed Subset Traveling Salesman Problem on Planar Graphs. *SIAM Journal on Computing*, **2022**, 51, 254-289	1.1	1
105	Constant Congestion Brambles in Directed Graphs. *SIAM Journal on Discrete Mathematics*, **2022**, 36, 922-938	0.7	
104	A Deterministic Polynomial Kernel for Odd Cycle Transversal and Vertex Multiway Cut in Planar Graphs. *SIAM Journal on Discrete Mathematics*, **2021**, 35, 2387-2429	0.7	
103	(Theta, triangle)-free and (even hole, K 4)-free graphs. Part 2: Bounds on treewidth. *Journal of Graph Theory*, **2021**, 97, 624-641	0.8	1
102	Polynomial Treedepth Bounds in Linear Colorings. *Algorithmica*, **2021**, 83, 361-386	0.9	
101	Randomized Contractions Meet Lean Decompositions. *ACM Transactions on Algorithms*, **2021**, 17, 1-30	1.2	3
100	Improved Bounds for the Excluded-Minor Approximation of Treedepth. *SIAM Journal on Discrete Mathematics*, **2021**, 35, 934-947	0.7	1
99	Quasi-polynomial-time algorithm for Independent Set in Pt-free graphs via shrinking the space of induced paths **2021**, 204-209		3
98	Quasi-polynomial time approximation schemes for the Maximum Weight Independent Set Problem in H-free graphs **2020**, 2260-2278		2
97	On the Maximum Weight Independent Set Problem in Graphs without Induced Cycles of Length at Least Five. *SIAM Journal on Discrete Mathematics*, **2020**, 34, 1472-1483	0.7	3
96	An Improved FPT Algorithm for Independent Feedback Vertex Set. *Theory of Computing Systems*, **2020**, 64, 1317-1330	0.6	
95	Multi-budgeted Directed Cuts. *Algorithmica*, **2020**, 82, 2135-2155	0.9	0
94	Turing Kernelization for Finding Long Paths in Graph Classes Excluding a Topological Minor. *Algorithmica*, **2019**, 81, 3936-3967	0.9	1
93	Minimum Bisection Is Fixed-Parameter Tractable. *SIAM Journal on Computing*, **2019**, 48, 417-450	1.1	6
92	Caterpillars in Erdős-Hajnal. *Journal of Combinatorial Theory Series B*, **2019**, 136, 33-43	1.1	6
91	Subexponential-Time Algorithms for Maximum Independent Set in (P_t)-Free and Broom-Free Graphs. *Algorithmica*, **2019**, 81, 421-438	0.9	9

90	Deleting Vertices to Graphs of Bounded Genus. *Algorithmica*, **2019**, 81, 3655-3691	0.9	3
89	Polynomial-time algorithm for Maximum Weight Independent Set on P6-free graphs **2019**, 1257-1271		16
88	Finding Hamiltonian Cycle in Graphs of Bounded Treewidth. *Journal of Experimental Algorithmics*, **2019**, 24, 1-18	1.1	1
87	An Exponential Lower Bound for Cut Sparsifiers in Planar Graphs. *Algorithmica*, **2019**, 81, 4029-4042	0.9	2
86	Edge Bipartization Faster than (2^k). *Algorithmica*, **2019**, 81, 917-966	0.9	1
85	Independence and Efficient Domination on P 6 -free Graphs. *ACM Transactions on Algorithms*, **2018**, 14, 1-30	1.2	4
84	Subexponential Parameterized Algorithm for I nterval C ompletion. *ACM Transactions on Algorithms* , **2018**, 14, 1-62	1.2	3
83	Directed Multicut is W[1]-hard, Even for Four Terminal Pairs. *ACM Transactions on Computation Theory*, **2018**, 10, 1-18	0.6	7
82	Excluding Hooks and their Complements. *Electronic Journal of Combinatorics*, **2018**, 25,	1.1	3
81	Planar Digraphs. *Springer Monographs in Mathematics*, **2018**, 207-243	1.3	
80	An Improved FPT Algorithm for Independent Feedback Vertex Set. *Lecture Notes in Computer Science*, **2018**, 344-355	0.9	2
79	On Subexponential Parameterized Algorithms for Steiner Tree and Directed Subset TSP on Planar Graphs **2018**,		7
78	Network Sparsification for Steiner Problems on Planar and Bounded-Genus Graphs. *ACM Transactions on Algorithms*, **2018**, 14, 1-73	1.2	8
77	Constant Congestion Routing of Symmetric Demands in Planar Directed Graphs. *SIAM Journal on Discrete Mathematics*, **2018**, 32, 2134-2160	0.7	2
76	Approximation and Kernelization for Chordal Vertex Deletion. *SIAM Journal on Discrete Mathematics*, **2018**, 32, 2258-2301	0.7	11
75	Approximation and Kernelization for Chordal Vertex Deletion **2017**,		6
74	Fixed-Parameter Tractable Canonization and Isomorphism Test for Graphs of Bounded Treewidth. *SIAM Journal on Computing*, **2017**, 46, 161-189	1.1	15
73	Polynomial Kernelization for Removing Induced Claws and Diamonds. *Theory of Computing Systems*, **2017**, 60, 615-636	0.6	5

72	A tight lower bound for Vertex Planarization on graphs of bounded treewidth. *Discrete Applied Mathematics*, **2017**, 231, 211-216	1	4
71	Independence and Efficient Domination on P6-free Graphs **2016**,		13
70	On Group Feedback Vertex Set Parameterized by the Size of the Cutset. *Algorithmica*, **2016**, 74, 630-642	0.9	5
69	A Fast Branching Algorithm for Cluster Vertex Deletion. *Theory of Computing Systems*, **2016**, 58, 357-376	0.6	26
68	Subexponential parameterized algorithm for Interval Completion **2016**,		8
67	Directed multicut is W[1]-hard, even for four terminal pairs **2016**,		3
66	Subexponential Parameterized Algorithms for Planar and Apex-Minor-Free Graphs via Low Treewidth Pattern Covering **2016**,		8
65	Known Algorithms for Edge Clique Cover are Probably Optimal. *SIAM Journal on Computing*, **2016**, 45, 67-83	1.1	18
64	Polynomial Kernelization for Removing Induced Claws and Diamonds. *Lecture Notes in Computer Science*, **2016**, 440-455	0.9	1
63	Designing FPT Algorithms for Cut Problems Using Randomized Contractions. *SIAM Journal on Computing*, **2016**, 45, 1171-1229	1.1	27
62	Sitting Closer to Friends than Enemies, Revisited. *Theory of Computing Systems*, **2015**, 56, 394-405	0.6	5
61	Parameterized Algorithms **2015**,		650
60	Fixed-Parameter Tractability of Multicut in Directed Acyclic Graphs. *SIAM Journal on Discrete Mathematics*, **2015**, 29, 122-144	0.7	17
59	Kernel Lower Bounds using Co-Nondeterminism: Finding Induced Hereditary Subgraphs. *ACM Transactions on Computation Theory*, **2015**, 7, 1-18	0.6	2
58	Faster exponential-time algorithms in graphs of bounded average degree. *Information and Computation*, **2015**, 243, 75-85	0.8	7
57	A Subexponential Parameterized Algorithm for Proper Interval Completion. *SIAM Journal on Discrete Mathematics*, **2015**, 29, 1961-1987	0.7	9
56	Faster deterministic Feedback Vertex Set. *Information Processing Letters*, **2014**, 114, 556-560	0.8	53
55	Tight bounds for parameterized complexity of Cluster Editing with a small number of clusters. *Journal of Computer and System Sciences*, **2014**, 80, 1430-1447	1	28

54	A Subexponential Parameterized Algorithm for Proper Interval Completion. *Lecture Notes in Computer Science*, **2014**, 173-184	0.9	5
53	**2014**,		14
52	Clique Cover and Graph Separation. *ACM Transactions on Computation Theory*, **2014**, 6, 1-19	0.6	37
51	Fixed-Parameter Tractable Canonization and Isomorphism Test for Graphs of Bounded Treewidth **2014**,		12
50	Minimum bisection is fixed parameter tractable **2014**,		17
49	On the Hardness of Losing Width. *Theory of Computing Systems*, **2014**, 54, 73-82	0.6	10
48	Solving the 2-Disjoint Connected Subgraphs Problem Faster than 2n. *Algorithmica*, **2014**, 70, 195-207	0.9	27
47	On Cutwidth Parameterized by Vertex Cover. *Algorithmica*, **2014**, 68, 940-953	0.9	7
46	Scheduling Partially Ordered Jobs Faster than 2n. *Algorithmica*, **2014**, 68, 692-714	0.9	1
45	Parameterized Complexity of Eulerian Deletion Problems. *Algorithmica*, **2014**, 68, 41-61	0.9	20
44	A Fast Branching Algorithm for Cluster Vertex Deletion. *Lecture Notes in Computer Science*, **2014**, 111-124	0.9	7
43	Hitting Forbidden Subgraphs in Graphs of Bounded Treewidth. *Lecture Notes in Computer Science*, **2014**, 189-200	0.9	
42	The Planar Directed K-Vertex-Disjoint Paths Problem Is Fixed-Parameter Tractable **2013**,		17
41	Split Vertex Deletion meets Vertex Cover: New fixed-parameter and exact exponential-time algorithms. *Information Processing Letters*, **2013**, 113, 179-182	0.8	16
40	Known algorithms for Edge Clique Cover are probably optimal **2013**,		4
39	Towards optimal kernel for connected vertex cover in planar graphs. *Discrete Applied Mathematics*, **2013**, 161, 1154-1161	1	5
38	On multiway cut parameterized above lower bounds. *ACM Transactions on Computation Theory*, **2013**, 5, 1-11	0.6	42
37	Subset Feedback Vertex Set Is Fixed-Parameter Tractable. *SIAM Journal on Discrete Mathematics*, **2013**, 27, 290-309	0.7	38

36	Faster Exponential-Time Algorithms in Graphs of Bounded Average Degree. *Lecture Notes in Computer Science*, **2013**, 364-375	0.9	3
35	Bandwidth and distortion revisited. *Discrete Applied Mathematics*, **2012**, 160, 494-504	1	5
34	A Polynomial Algorithm for 3-Compatible Coloring and the Stubborn List Partition Problem (The Stubborn Problem Is Stubborn No More). *SIAM Journal on Computing*, **2012**, 41, 815-828	1.1	2
33	Designing FPT Algorithms for Cut Problems Using Randomized Contractions **2012**,		10
32	Kernelization hardness of connectivity problems in d-degenerate graphs. *Discrete Applied Mathematics*, **2012**, 160, 2131-2141	1	35
31	Some results on Vizing's conjecture and related problems. *Discrete Applied Mathematics*, **2012**, 160, 2484-2490	1	5
30	An Improved FPT Algorithm and a Quadratic Kernel for Pathwidth One Vertex Deletion. *Algorithmica*, **2012**, 64, 170-188	0.9	5
29	Even Faster Exact Bandwidth. *ACM Transactions on Algorithms*, **2012**, 8, 1-14	1.2	4
28	On Multiway Cut Parameterized above Lower Bounds. *Lecture Notes in Computer Science*, **2012**, 1-12	0.9	18
27	On the Hardness of Losing Width. *Lecture Notes in Computer Science*, **2012**, 159-168	0.9	7
26	On Cutwidth Parameterized by Vertex Cover. *Lecture Notes in Computer Science*, **2012**, 246-258	0.9	6
25	Solving the 2-Disjoint Connected Subgraphs Problem Faster Than 2n. *Lecture Notes in Computer Science*, **2012**, 195-206	0.9	3
24	Kernel Lower Bounds Using Co-nondeterminism: Finding Induced Hereditary Subgraphs. *Lecture Notes in Computer Science*, **2012**, 364-375	0.9	5
23	Clique Cover and Graph Separation: New Incompressibility Results. *Lecture Notes in Computer Science*, **2012**, 254-265	0.9	8
22	Fixed-Parameter Tractability of Multicut in Directed Acyclic Graphs. *Lecture Notes in Computer Science*, **2012**, 581-593	0.9	7
21	Sitting Closer to Friends Than Enemies, Revisited. *Lecture Notes in Computer Science*, **2012**, 296-307	0.9	11
20	A Path-Decomposition Theorem with Applications to Pricing and Covering on Trees. *Lecture Notes in Computer Science*, **2012**, 349-360	0.9	2
19	Finding a Maximum Induced Degenerate Subgraph Faster Than 2n. *Lecture Notes in Computer Science*, **2012**, 3-12	0.9	9

18	On Group Feedback Vertex Set Parameterized by the Size of the Cutset. *Lecture Notes in Computer Science*, **2012**, 194-205	0.9	3
17	Dominating set is fixed parameter tractable in claw-free graphs. *Theoretical Computer Science*, **2011**, 412, 6982-7000	1.1	19
16	Capacitated domination faster than O(2n). *Information Processing Letters*, **2011**, 111, 1099-1103	0.8	7
15	On the Zagreb index inequality of graphs with prescribed vertex degrees. *Discrete Applied Mathematics*, **2011**, 159, 852-858	1	5
14	Solving Connectivity Problems Parameterized by Treewidth in Single Exponential Time **2011**,		127
13	Breaking the . *Journal of Discrete Algorithms*, **2011**, 9, 214-230		17
12	The stubborn problem is stubborn no more (a polynomial algorithm for 3 compatible colouring and the stubborn list partition problem) **2011**,		4
11	Scheduling Partially Ordered Jobs Faster Than 2n. *Lecture Notes in Computer Science*, **2011**, 299-310	0.9	6
10	Parameterized Complexity of Eulerian Deletion Problems. *Lecture Notes in Computer Science*, **2011**, 131-142	0.9	4
9	Subset Feedback Vertex Set Is Fixed-Parameter Tractable. *Lecture Notes in Computer Science*, **2011**, 449-461	0.9	9
8	Exact and approximate bandwidth. *Theoretical Computer Science*, **2010**, 411, 3701-3713	1.1	42
7	Irredundant Set Faster Than O(2n). *Lecture Notes in Computer Science*, **2010**, 288-298	0.9	1
6	Capacitated Domination Faster Than O(2n). *Lecture Notes in Computer Science*, **2010**, 74-80	0.9	7
5	Kernelization Hardness of Connectivity Problems in d-Degenerate Graphs. *Lecture Notes in Computer Science*, **2010**, 147-158	0.9	8
4	An Improved FPT Algorithm and Quadratic Kernel for Pathwidth One Vertex Deletion. *Lecture Notes in Computer Science*, **2010**, 95-106	0.9	5
3	Exact and Approximate Bandwidth. *Lecture Notes in Computer Science*, **2009**, 304-315	0.9	3
2	The negative association property for the absolute values of random variables equidistributed on a generalized Orlicz ball. *Positivity*, **2008**, 12, 421-474	0.6	6
1	Faster Exact Bandwidth. *Lecture Notes in Computer Science*, **2008**, 101-109	0.9	8