Ignasi Sau

List of Publications by Year
in descending order

101 papers	615 citations

759055

12 h-index	

794469

19 g-index	

105 all docs	105 docs citations
105 times ranked	288 citing authors

#	ARTICLE	IF	CITATIONS
1	Linear Kernels and Single-Exponential Algorithms Via Protrusion Decompositions. ACM Transactions on Algorithms, 2016, 12, 1-41.	0.9	65
2	Explicit Linear Kernels via Dynamic Programming. SIAM Journal on Discrete Mathematics, 2015, 29, 1864-1894.	0.4	42
3	Dynamic programming for graphs on surfaces. ACM Transactions on Algorithms, 2014, 10, 1-26.	0.9	29
4	Hardness and approximation of traffic grooming. Theoretical Computer Science, 2009, 410, 3751-3760.	0.5	28
5	The Recognition of Tolerance and Bounded Tolerance Graphs. SIAM Journal on Computing, 2011, 40, 1234-1257.	0.8	22
6	Faster parameterized algorithms for minor containment. Theoretical Computer Science, 2011, 412, 7018-7028.	0.5	22
7	Linear Kernels and Single-Exponential Algorithms via Protrusion Decompositions. Lecture Notes in Computer Science, 2013, , 613-624.	1.0	21
8	On the approximability of some degree-constrained subgraph problems. Discrete Applied Mathematics, 2012, 160, 1661-1679.	0.5	18
9	Subexponential parameterized algorithms for degree-constrained subgraph problems on planar graphs. Journal of Discrete Algorithms, 2010, 8, 330-338.	0.7	15
10	Placing Regenerators in Optical Networks to Satisfy Multiple Sets of Requests. IEEE/ACM Transactions on Networking, 2012, 20, 1870-1879.	2.6	14
11	A New Intersection Model and Improved Algorithms for Tolerance Graphs. SIAM Journal on Discrete Mathematics, 2010, 23, 1800-1813.	0.4	12
12	Hitting and Harvesting Pumpkins. SIAM Journal on Discrete Mathematics, 2014, 28, 1363-1390.	0.4	12
13	Degree-Constrained Subgraph Problems: Hardness and Approximation Results. Lecture Notes in Computer Science, 2009, , 29-42.	1.0	12
14	On the complexity of computing the k-restricted edge-connectivity of a graph. Theoretical Computer Science, 2017, 662, 31-39.	0.5	11
15	Parameterized Complexity of the Smallest Degree-Constrained Subgraph Problem. , 2008, , 13-29.		11
16	An FPT 2-Approximation for Tree-Cut Decomposition. Algorithmica, 2018, 80, 116-135.	1.0	10
17	How Much Does a Treedepth Modulator Help to Obtain Polynomial Kernels Beyond Sparse Graphs?. Algorithmica, 2019, 81, 4043-4068.	1.0	10
18	Parameterized complexity of finding small degree-constrained subgraphs. Journal of Discrete Algorithms, 2012, 10, 70-83.	0.7	9

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19	On the (parameterized) complexity of recognizing well-covered (r,â"")-graph. Theoretical Computer Science, 2018, 746, 36-48.	0.5	9
20	An edge variant of the ErdÅ's–PÃ³sa property. Discrete Mathematics, 2016, 339, 2027-2035.	0.4	8
21	Hitting Minors on Bounded Treewidth Graphs. I. General Upper Bounds. SIAM Journal on Discrete Mathematics, 2020, 34, 1623-1648.	0.4	8
22	Hardness and Approximation of Traffic Grooming. , 2007, , 561-573.		8
23	Dynamic Programming for Graphs on Surfaces. Lecture Notes in Computer Science, 2010, , 372-383.	1.0	8
24	Parameterized complexity of the MINCCA problem on graphs of bounded decomposability. Theoretical Computer Science, 2017, 690, 91-103.	0.5	7
25	Weighted proper orientations of trees and graphs of bounded treewidth. Theoretical Computer Science, 2019, 771, 39-48.	0.5	7
26	Fast Minor Testing in Planar Graphs. Algorithmica, 2012, 64, 69-84.	1.0	6
27	Efficient FPT Algorithms for (Strict) Compatibility of Unrooted Phylogenetic Trees. Bulletin of Mathematical Biology, 2017, 79, 920-938.	0.9	6
28	An $$O(\log \mathrm{OPT})$$ O (log OPT) -Approximation for Covering and Packing Minor Models of $$\theta _r$$ Î¸ r. Algorithmica, 2018, 80, 1330-1356.	1.0	6
29	Traffic Grooming in Unidirectional WDM Rings with Bounded Degree Request Graph. Lecture Notes in Computer Science, 2008, , 300-311.	1.0	6
30	Placing Regenerators in Optical Networks to Satisfy Multiple Sets of Requests. Lecture Notes in Computer Science, 2010, , 333-344.	1.0	6
31	<i>k</i> -apices of Minor-closed Graph Classes. II. Parameterized Algorithms. ACM Transactions on Algorithms, 2022, 18, 1-30.	0.9	6
32	The role of planarity in connectivity problems parameterized by treewidth. Theoretical Computer Science, 2015, 570, 1-14.	0.5	5
33	On the parameterized complexity of the Edge Monitoring problem. Information Processing Letters, 2017, 121, 39-44.	0.4	5
34	Counting Gallai 3-colorings of complete graphs. Discrete Mathematics, 2019, 342, 2618-2631.	0.4	5
35	Explicit Linear Kernels for Packing Problems. Algorithmica, 2019, 81, 1615-1656.	1.0	5
36	Hitting minors on bounded treewidth graphs. III. Lower bounds. Journal of Computer and System Sciences, 2020, 109, 56-77.	0.9	5

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37	Hitting minors on bounded treewidth graphs. II. Single-exponential algorithms. Theoretical Computer Science, 2020, 814, 135-152.	0.5	5
38	An FPT 2-Approximation for Tree-cut Decomposition. Lecture Notes in Computer Science, 2015, , 35-46.	1.0	5
39	Faster Parameterized Algorithms for Minor Containment. Lecture Notes in Computer Science, 2010, , 322-333.	1.0	5
40	Traffic Grooming in Bidirectional WDM Ring Networks. , 2006, , .		4
41	Parameterized Domination in Circle Graphs. Theory of Computing Systems, 2014, 54, 45-72.	0.7	4
42	Improved FPT algorithms for weighted independent set in bull-free graphs. Discrete Mathematics, 2018, 341, 451-462.	0.4	4
43	Ruling out FPT algorithms for Weighted Coloring on forests. Theoretical Computer Science, 2018, 729, 11-19.	0.5	4
44	Finding Cuts of Bounded Degree: Complexity, FPT and Exact Algorithms, and Kernelization. Algorithmica, 2021, 83, 1677-1706.	1.0	4
45	Uniquely Restricted Matchings andÂEdgeÂColorings. Lecture Notes in Computer Science, 2017, , 100-112.	1.0	4
46	A complexity dichotomy for hitting connected minors on bounded treewidth graphs: the chair and the banner draw the boundary. , 2020, , 951-970.		4
47	MPLS Label Stacking on the Line Network. Lecture Notes in Computer Science, 2009, , 809-820.	1.0	4
48	Hitting forbidden induced subgraphs on bounded treewidth graphs. Information and Computation, 2021, 281, 104812.	0.5	4
49	Target set selection with maximum activation time. Procedia Computer Science, 2021, 195, 86-96.	1.2	4
50	Subexponential Parameterized Algorithms for Bounded-Degree Connected Subgraph Problems on Planar Graphs. Electronic Notes in Discrete Mathematics, 2009, 32, 59-66.	0.4	3
51	Drop Cost and Wavelength Optimal Two-Period Grooming with Ratio 4. SIAM Journal on Discrete Mathematics, 2010, 24, 400-419.	0.4	3
52	Edge-Partitioning Regular Graphs for Ring Traffic Grooming with a Priori Placement of the ADMs. SIAM Journal on Discrete Mathematics, 2011, 25, 1490-1505.	0.4	3
53	Simpler multicoloring of triangle-free hexagonal graphs. Discrete Mathematics, 2012, 312, 181-187.	0.4	3
54	Asymptotic enumeration of non-crossing partitions on surfaces. Discrete Mathematics, 2013, 313, 635-649.	0.4	3

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55	On approximating thed-girth of a graph. Discrete Applied Mathematics, 2013, 161, 2587-2596.	0.5	3
56	A linear kernel for planar redâ€"blue dominating set. Discrete Applied Mathematics, 2017, 217, 536-547.	0.5	3
57	Maximum cuts in edge-colored graphs. Discrete Applied Mathematics, 2020, 281, 229-234.	0.5	3
58	Parameterized Domination in Circle Graphs. Lecture Notes in Computer Science, 2012, , 308-319.	1.0	3
59	Dynamic Programming for H-minor-free Graphs. Lecture Notes in Computer Science, 2012, , 86-97.	1.0	3
60	GMPLS label space minimization through hypergraph layouts. Theoretical Computer Science, 2012, 444, 3-16.	0.5	2
61	Minors in graphs of large Îr-girth. European Journal of Combinatorics, 2017, 65, 106-121.	0.5	2
62	A polynomial-time algorithm for Outerplanar Diameter Improvement. Journal of Computer and System Sciences, 2017, 89, 315-327.	0.9	2
63	Parameterized Complexity Dichotomy for (r, â„")-Vertex Deletion. Theory of Computing Systems, 2017, 61, 777-794.	0.7	2
64	On the number of labeled graphs of bounded treewidth. European Journal of Combinatorics, 2018, 71, 12-21.	0.5	2
65	A Tight ErdÃ¶s–PÃ³sa Function for Wheel Minors. SIAM Journal on Discrete Mathematics, 2018, 32, 2302-2312.	0.4	2
66	Adapting The Directed Grid Theorem into an FPT Algorithm. Electronic Notes in Theoretical Computer Science, 2019, 346, 229-240.	0.9	2
67	Approximating maximum uniquely restricted matchings in bipartite graphs. Discrete Applied Mathematics, 2019, 267, 30-40.	0.5	2
68	Upper bounds on the uniquely restricted chromatic index. Journal of Graph Theory, 2019, 91, 251-258.	0.5	2
69	Parameterized complexity of finding a spanning tree with minimum reload cost diameter. Networks, 2020, 75, 259-277.	1.6	2
70	On the Complexity of Finding Large Odd Induced Subgraphs and Odd Colorings. Algorithmica, 2021, 83, 2351-2373.	1.0	2
71	Reducing graph transversals via edge contractions. Journal of Computer and System Sciences, 2021, 120, 62-74.	0.9	2
72	Traffic Grooming: Combinatorial Results and Practical Resolutions. Texts in Theoretical Computer Science, 2009, , 63-94.	0.5	2

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73	Graph Partitioning and Traffic Grooming with Bounded Degree Request Graph. Lecture Notes in Computer Science, 2010, , 250-261.	1.0	2
74	Designing Hypergraph Layouts to GMPLS Routing Strategies. Lecture Notes in Computer Science, 2010, , 57-71.	1.0	2
75	On self-duality of branchwidth in graphs of bounded genus. Discrete Applied Mathematics, 2011, 159, 2184-2186.	0.5	1
76	Parameterized algorithms for min-max multiway cut and list digraph homomorphism. Journal of Computer and System Sciences, 2017, 86, 191-206.	0.9	1
77	Dual Parameterization of Weighted Coloring. Algorithmica, 2020, 82, 2316-2336.	1.0	1
78	On the Complexity of Finding Internally Vertex-Disjoint Long Directed Paths. Algorithmica, 2020, 82, 1616-1639.	1.0	1
79	Coloring Problems on Bipartite Graphs of Small Diameter. Electronic Journal of Combinatorics, 2021, 28, .	0.2	1
80	A unifying model for locally constrained spanning tree problems. Journal of Combinatorial Optimization, 2021, 42, 125-150.	0.8	1
81	On the Number of Labeled Graphs of Bounded Treewidth. Lecture Notes in Computer Science, 2017, , 88-99.	1.0	1
82	A New Intersection Model and Improved Algorithms for Tolerance Graphs. Lecture Notes in Computer Science, 2010, , 285-295.	1.0	1
83	On Approximating the d-Girth of a Graph. Lecture Notes in Computer Science, 2011, , 467-481.	1.0	1
84	The Role of Planarity in Connectivity Problems Parameterized by Treewidth. Lecture Notes in Computer Science, 2014, , 63-74.	1.0	1
85	Improved FPT Algorithms for Weighted Independent Set in Bull-Free Graphs. Lecture Notes in Computer Science, 2014, , 282-293.	1.0	1
86	An $O(\log \mathrm{OPT})$ O (log OPT) -Approximation for Covering/Packing Minor Models of θ_{r} î r. Lecture Notes in Computer Science, 2015, , 122-132.	1.0	1
87	On the Complexity of Finding Internally Vertex-Disjoint Long Directed Paths. Lecture Notes in Computer Science, 2018, , 66-79.	1.0	1
88	(â„“, k)-ROUTING ON PLANE GRIDS. Journal of Interconnection Networks, 2009, 10, 27-57.	0.6	0
89	CIRCUITS IN GRAPHS THROUGH A PRESCRIBED SET OF ORDERED VERTICES. Journal of Interconnection Networks, 2010, 11, 121-141.	0.6	0
90	Traffic grooming in bidirectional WDM ring networks. Networks, 2011, 58, 20-35.	1.6	0

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91	On the (Parameterized) Complexity of Recognizing Well-Covered $$(r,\ell)$$ -graphs. Lecture Notes in Computer Science, 2016, , 423-437.	1.0	0
92	Parameterized Complexity of the MINCCA Problem on Graphs of Bounded Decomposability. Lecture Notes in Computer Science, 2016, , 195-206.	1.0	0
93	Maximum Cuts in Edge-colored Graphs. Electronic Notes in Discrete Mathematics, 2017, 62, 87-92.	0.4	0
94	Ruling out FPT algorithms for Weighted Coloring on forests. Electronic Notes in Discrete Mathematics, 2017, 62, 195-200.	0.4	0
95	Complexity dichotomies for the Minimum F-Overlay problem. Journal of Discrete Algorithms, 2018, 52-53, 133-142.	0.7	0
96	Edge-Simple Circuits through 10 Ordered Vertices in Square Grids. Lecture Notes in Computer Science, 2009, , 134-145.	1.0	0
97	Traffic Grooming in Star Networks via Matching Techniques. Lecture Notes in Computer Science, 2010, , 41-56.	1.0	0
98	On the Complexity of Computing the k-restricted Edge-connectivity of a Graph. Lecture Notes in Computer Science, 2016, , 219-233.	1.0	0
99	On the Complexity of Finding Large Odd Induced Subgraphs and Odd Colorings. Lecture Notes in Computer Science, 2020, , 67-79.	1.0	0
100	A relaxation of the Directed Disjoint Paths problem: A global congestion metric helps. Theoretical Computer Science, 2021, 898, 75-75.	0.5	0
101	Introducing lop-Kernels: A Framework for Kernelization Lower Bounds. Algorithmica, 0, , .	1.0	0