Thomas Erlebach

List of Publications by Year
in descending order

118 papers	1,719 citations	393982 19 h-index	329751 37 g-index
129 all docs	129 docs citations	129 times ranked	885 citing authors

#	Article	IF	Citations
1	Network Discovery and Verification. IEEE Journal on Selected Areas in Communications, 2006, 24, 2168-2181.	9.7	216
2	Polynomial-Time Approximation Schemes for Geometric Intersection Graphs. SIAM Journal on Computing, 2005, 34, 1302-1323.	0.8	124
3	Approximating Multiobjective Knapsack Problems. Management Science, 2002, 48, 1603-1612.	2.4	92
4	The complexity of path coloring and call scheduling. Theoretical Computer Science, 2001, 255, 33-50.	0.5	80
5	On the Spectrum and Structure of Internet Topology Graphs. Lecture Notes in Computer Science, 2002, , 83-95.	1.0	64
6	Optimal bandwidth reservation in hose-model VPNs with multi-path routing. , 0, , .		60
7	Optimal wavelength routing on directed fiber trees. Theoretical Computer Science, 1999, 221, 119-137.	0.5	55
8	Computing the Types of the Relationships Between Autonomous Systems. IEEE/ACM Transactions on Networking, 2007, 15, 267-280.	2.6	54
9	Interval selection: Applications, algorithms, and lower bounds. Journal of Algorithms, 2003, 46, 27-53.	0.9	44
10	A (4â€‰+â€‰Îµ)-Approximation for the Minimum-Weight Dominating Set Problem in Unit Disk Graphs. Lecture Notes in Computer Science, 2010, , 135-146.	1.0	36
11	Length-bounded cuts and flows. ACM Transactions on Algorithms, 2010, 7, 1-27.	0.9	31
12	Constrained bipartite edge coloring with applications to wavelength routing. Lecture Notes in Computer Science, 1997, , 493-504.	1.0	30
13	The Maximum Edge-Disjoint Paths Problem in Bidirected Trees. SIAM Journal on Discrete Mathematics, 2001, 14, 326-355.	0.4	30
14	On Temporal Graph Exploration. Lecture Notes in Computer Science, 2015, , 444-455.	1.0	30
15	On the Complexity of Scheduling Conditional Real-Time Code. Lecture Notes in Computer Science, 2001, , 38-49.	1.0	27
16	Learning one-variable pattern languages very efficiently on average, in parallel, and by asking queries. Theoretical Computer Science, 2001, 261, 119-156.	0.5	24
17	An Improved Randomized On-Line Algorithm for a Weighted Interval Selection Problem. Journal of Scheduling, 2004, 7, 293-311.	1.3	23
18	Scheduling With Release Times and Deadlines on A Minimum Number of Machines. , 2004, , 209-222.		19

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19	Cuts and Disjoint Paths in the Valley-Free Path Model of Internet BGP Routing. Lecture Notes in Computer Science, 2005, , 49-62.	1.0	19
20	Maximizing the number of Connections in Optical Tree Networks. Lecture Notes in Computer Science, 1998, , 179-189.	1.0	19
21	Online Coloring of Intervals with Bandwidth. Lecture Notes in Computer Science, 2004, , 1-12.	1.0	19
22	Algorithmic complexity of protein identification: combinatorics of weighted strings. Discrete Applied Mathematics, 2004, 137, 27-46.	0.5	18
23	NP-Hardness of Broadcast Scheduling and Inapproximability of Single-Source Unsplittable Min-Cost Flow. Journal of Scheduling, 2004, 7, 223-241.	1.3	17
24	An Adversarial Model for Scheduling with Testing. Algorithmica, 2020, 82, 3630-3675.	1.0	17
25	Approximating Multi-objective Knapsack Problems. Lecture Notes in Computer Science, 2001, , 210-221.	1.0	17
26	On temporal graph exploration. Journal of Computer and System Sciences, 2021, 119, 1-18.	0.9	16
27	An optimal greedy algorithm for wavelength allocation in directed tree networks. DIMACS Series in Discrete Mathematics and Theoretical Computer Science, 1998, , 117-129.	0.0	16
28	An Algorithmic View on OVSF Code Assignment. Algorithmica, 2007, 47, 269-298.	1.0	15
29	Query-competitive algorithms for cheapest set problems under uncertainty. Theoretical Computer Science, 2016, 613, 51-64.	0.5	15
30	Approximation Algorithms and Complexity Results for Path Problems in Trees of Rings. Lecture Notes in Computer Science, 2001, , 351-362.	1.0	15
31	Length-Bounded Cuts and Flows. Lecture Notes in Computer Science, 2006, , 679-690.	1.0	14
32	PTAS for Weighted Set Cover on Unit Squares. Lecture Notes in Computer Science, 2010, , 166-177.	1.0	14
33	Network Discovery and Verification. Lecture Notes in Computer Science, 2005, , 127-138.	1.0	13
34	Domination in Geometric Intersection Graphs. Lecture Notes in Computer Science, 2008, , 747-758.	1.0	13
35	On-line coloring of geometric intersection graphs. Computational Geometry: Theory and Applications, 2002, 23, 243-255.	0.3	12
36	On the Complexity of Train Assignment Problems. Lecture Notes in Computer Science, 2001, , 390-402.	1.0	12

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37	Connectivity Measures for Internet Topologies on the Level of Autonomous Systems. Operations Research, 2009, 57, 1006-1025.	1.2	11
38	Independence and Coloring Problems on Intersection Graphs of Disks. Lecture Notes in Computer Science, 2006, , 135-155.	1.0	11
39	Off-line and on-line call-scheduling in stars and trees. Lecture Notes in Computer Science, 1997, , 199-213.	1.0	10
40	Simple Algorithms for a Weighted Interval Selection Problem. Lecture Notes in Computer Science, 2000, , 228-240.	1.0	10
41	Discovery of network properties with all-shortest-paths queries. Theoretical Computer Science, 2010, 411, 1626-1637.	0.5	10
42	On Shortest-Path All-Optical Networks without Wavelength Conversion Requirements. Lecture Notes in Computer Science, 2003, , 133-144.	1.0	10
43	Call Control in Rings. Algorithmica, 2007, 47, 217-238.	1.0	8
44	Broadcast scheduling. ACM Transactions on Algorithms, 2011, 7, 1-14.	0.9	8
45	Off-line Admission Control for Advance Reservations in Star Networks. Lecture Notes in Computer Science, 2005, , 211-224.	1.0	8
46	Call control with k rejections. Journal of Computer and System Sciences, 2003, 67, 707-722.	0.9	7
47	Scheduling AND/OR-Networks on Identical Parallel Machines. Lecture Notes in Computer Science, 2004, , 123-136.	1.0	7
48	Network Discovery and Verification with Distance Queries. Lecture Notes in Computer Science, 2006, , 69-80.	1.0	7
49	Scheduling Multicast Transmissions under SINR Constraints. Lecture Notes in Computer Science, 2010, , 47-61.	1.0	7
50	Conversion of coloring algorithms into maximum weight independent set algorithms. Discrete Applied Mathematics, 2005, 148, 107-125.	0.5	6
51	Cuts and Disjoint Paths in the Valley-Free Path Model. Internet Mathematics, 2006, 3, 333-359.	0.7	6
52	Trimming of Graphs, with Application to Point Labeling. Theory of Computing Systems, 2010, 47, 613-636.	0.7	6
53	Assigning AS relationships to satisfy the Gao-Rexford conditions. , 2010, , .		6
54	Energy Aware Scheduling of HPC Tasks in Decentralised Cloud Systems. , 2016, , .		6

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55	Path Splicing with Guaranteed Fault Tolerance. , 2009, , .		5
56	Maximising lifetime for fault-tolerant target coverage in sensor networks. , 2011, , .		5
57	Learning one-variable pattern languages very efficiently on average, in parallel, and by asking queries. Lecture Notes in Computer Science, 1997, , 260-276.	1.0	5
58	Non-strict Temporal Exploration. Lecture Notes in Computer Science, 2020, , 129-145.	1.0	5
59	Minimum Spanning Tree Verification Under Uncertainty. Lecture Notes in Computer Science, 2014, , 164-175.	1.0	5
60	Approximate Discovery of Random Graphs. Lecture Notes in Computer Science, 2007, , 82-92.	1.0	5
61	Routing and Call Control Algorithms for Ring Networks. Lecture Notes in Computer Science, 2003, , 186-197.	1.0	5
62	Wavelength Conversion in All-Optical Networks with Shortest-Path Routing. Algorithmica, 2005, 43, 43-61.	1.0	4
63	An Efficient Algorithm for the Fast Delivery Problem. Lecture Notes in Computer Science, 2019, , 171-184.	1.0	4
64	Car-Sharing Between Two Locations: Online Scheduling with Flexible Advance Bookings. Lecture Notes in Computer Science, 2018, , 242-254.	1.0	4
65	Approximating Maximum Disjoint Coverage in Wireless Sensor Networks. Lecture Notes in Computer Science, 2013, , 148-159.	1.0	4
66	Approximation Algorithms for Disjoint st-Paths with Minimum Activation Cost. Lecture Notes in Computer Science, 2013, , 1-12.	1.0	4
67	Path problems in generalized stars, complete graphs, and brick wall graphs. Discrete Applied Mathematics, 2006, 154, 673-683.	0.5	3
68	Approximating node-weighted multicast trees in wireless ad-hoc networks. , 2009, , .		3
69	Maximising lifetime for fault-tolerant target coverage in sensor networks. Sustainable Computing: Informatics and Systems, 2011, 1, 213-225.	1.6	3
70	Reducing Idle Listening during Data Collection in Wireless Sensor Networks. , 2014, , .		3
71	On the fast delivery problem with one or two packages. Journal of Computer and System Sciences, 2021, 115, 246-263.	0.9	3
72	Approximation Algorithms for Edge-Disjoint Paths and Unsplittable Flow. Lecture Notes in Computer Science, 2006, , 97-134.	1.0	3

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73	A Game of Cops and Robbers on Graphs with Periodic Edge-Connectivity. Lecture Notes in Computer Science, 2020, , 64-75.	1.0	3
74	Variable Sized Online Interval Coloring withÂBandwidth. Algorithmica, 2009, 53, 385-401.	1.0	2
75	Online Capacitated Interval Coloring. SIAM Journal on Discrete Mathematics, 2009, 23, 822-841.	0.4	2
76	A new resource mapping technique for Grid workflows in advance reservation environments. , 2010, , .		2
77	CMAB. , 2010, , .		2
78	An Energy Efficient and Restricted Tour Construction for Mobile Sink in Wireless Sensor Networks. , 2015, , .		2
79	Computational complexity of traffic hijacking under BGP and S-BGP. Theoretical Computer Science, 2015, 600, 143-154.	0.5	2
80	Robustness of the Internet at the Topology and Routing Level. Lecture Notes in Computer Science, 2006, , 260-274.	1.0	2
81	Implementation of approximation algorithms for weighted and unweighted edge-disjoint paths in bidirected trees. Journal of Experimental Algorithmics, 2002, 7, 6.	0.7	1
82	Routing Flow Through a Strongly Connected Graph. Algorithmica, 2002, 32, 467-473.	1.0	1
83	Joint Base Station Scheduling. Lecture Notes in Computer Science, 2005, , 225-238.	1.0	1
84	WAOA 2005 Special Issue of TOCS. Theory of Computing Systems, 2008, 43, 1-2.	0.7	1
85	Delay and interference aware metric in multi-channel wireless mesh network. , 2016, , .		1
86	A Bi-objective Scheduling Approach for Energy Optimisation of Executing and Transmitting HPC Applications in Decentralised Multi-cloud Systems. , 2017, , .		1
87	The extra-bit technique for reducing idle listening in data collection. International Journal of Sensor Networks, 2017, 25, 31.	0.2	1
88	Complexity and online algorithms for minimum skyline coloring of intervals. Theoretical Computer Science, 2019, 788, 66-78.	0.5	1
89	Exploration of k-Edge-Deficient TemporalÂGraphs. Lecture Notes in Computer Science, 2021, , 371-384.	1.0	1
90	â€œGreenâ€•barrier coverage with mobile sensors. Theoretical Computer Science, 2021, 860, 117-134.	0.5	1

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91	Discovery of Network Properties with All-Shortest-Paths Queries. Lecture Notes in Computer Science, 2008, , 89-103.	1.0	1
92	Query-Competitive Algorithms for Cheapest Set Problems under Uncertainty. Lecture Notes in Computer Science, 2014, , 263-274.	1.0	1
93	Algorithmic Complexity of Protein Identification: Searching in Weighted Strings. , 2002, , 143-156.		1
94	Computational Complexity of Traffic Hijacking under BGP and S-BGP. Lecture Notes in Computer Science, 2012, , 476-487.	1.0	1
95	Least Channel Variation Multi-channel MAC (LCV-MMAC). Lecture Notes in Computer Science, 2013, , 160-171.	1.0	1
96	Computing and Scheduling with Explorable Uncertainty. Lecture Notes in Computer Science, 2018, , 156-160.	1.0	1
97	Car-sharing between two locations: Online scheduling with flexible advance bookings. Discrete Applied Mathematics, 2022, 313, 53-66.	0.5	1
98	Parallel Load Balancing for Problems with Good Bisectors. Journal of Parallel and Distributed Computing, 2000, 60, 1047-1073.	2.7	0
99	Routing to reduce the cost of wavelength conversion. Discrete Applied Mathematics, 2008, 156, 2911-2923.	0.5	0
100	WAOA 2006 Special Issue of TOCS. Theory of Computing Systems, 2009, 45, 427-428.	0.7	0
101	Approximating fault-tolerant Steiner subgraphs in heterogeneous wireless networks. , 2010, , .		0
102	A hybrid scheduling technique for grid workflows in advance reservation environments. , 2011, , .		0
103	A simple scheme to improve the throughput of small multi-hop wireless networks. , 2012, , .		0
104	An experimental study of small multi-hop wireless networks using chirp spread spectrum. Wireless Networks, 2014, 20, 89-103.	2.0	0
105	Special Issue on Approximation and Online Algorithms. Theory of Computing Systems, 2015, 56, 135-136.	0.7	0
106	Throughput Improvement by Reducing Dropped Packets at Interface Queue (IFQ) in Multi-channel Wireless Mesh Networks. , 2017, , .		0
107	Special Issue on Approximation and Online Algorithms. Theory of Computing Systems, 2020, 64, 569-570.	0.7	0
108	Algorithms that Access the Input via Queries. Lecture Notes in Computer Science, 2021, , 3-12.	1.0	0

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109	On-line Algorithms for Edge-Disjoint Paths in Trees of Rings. Lecture Notes in Computer Science, 2002, , 584-597.	1.0	0
110	Call Control with k Rejections. Lecture Notes in Computer Science, 2002, , 308-317.	1.0	0
111	Real and generated internet AS topologies. Computer Communication Review, 2002, 32, 13-13.	1.5	0
112	Variable Sized Online Interval Coloring with Bandwidth. Lecture Notes in Computer Science, 2006, , 29-40.	1.0	0
113	Congestion and Network Density Adaptive Broadcasting in Mobile Ad Hoc Networks. Studies in Computational Intelligence, 2010, , 53-67.	0.7	0
114	Majority - Who Gets Elected Class Rep?. , 2011, , 239-247.		0
115	Minimum Activation Cost Edge-Disjoint Paths in Graphs with Bounded Tree-Width. Lecture Notes in Computer Science, 2016, , 13-24.	1.0	0
116	Algorithms for Queryable Uncertainty. Lecture Notes in Computer Science, 2016, , 1-7.	1.0	0
117	Online Algorithms for Non-preemptive Speed Scaling on Power-Heterogeneous Processors. Lecture Notes in Computer Science, 2017, , 457-465.	1.0	0
118	Complexity and Online Algorithms for Minimum Skyline Coloring of Intervals. Lecture Notes in Computer Science, 2017, , 317-332.	1.0	0