R Ravi

List of Publications by Year
in descending order

168 papers	5,193 citations	168829 31 h-index	145109 60 g-index
176 all docs	176 docs citations	176 times ranked	2906 citing authors

#	Article	IF	Citations
1	Combinatorial Heuristics for Inventory Routing Problems. INFORMS Journal on Computing, 2022, 34, 370-384.	1.0	3
2	Two-level hub Steiner trees. Information Processing Letters, 2022, 174, 106209.	0.4	0
3	Effective Online Order Acceptance Policies for Omnichannel Fulfillment. Manufacturing and Service Operations Management, 2022, 24, 1650-1663.	2.3	8
4	Approximation algorithm for the 2-stage stochastic matroid base problem. Operations Research Letters, 2022, 50, 129-132.	0.5	0
5	Approximation Algorithms for Replenishment Problems with Fixed Turnover Times. Algorithmica, 2022, 84, 2597-2621.	1.0	1
6	The Beneficial Effects of Ad Blockers. Management Science, 2021, 67, 2096-2125.	2.4	16
7	Local improvement algorithms for a path packing problem: A performance analysis based on linear programming. Operations Research Letters, 2021, 49, 62-68.	0.5	2
8	Shorter tours and longer detours: uniform covers and a bit beyond. Mathematical Programming, 2021, 185, 245-273.	1.6	6
9	First-Price Auctions in Online Display Advertising. Journal of Marketing Research, 2021, 58, 888-907.	3.0	13
10	A simple proof of the Moore-Hodgson Algorithm for minimizing the number of late jobs. Operations Research Letters, 2021, 49, 842-843.	0.5	0
11	The Approximability of Multiple Facility Location on Directed Networks with Random Arc Failures. Algorithmica, 2020, 82, 2474-2501.	1.0	2
12	Algorithms for automatic ranking of participants and tasks in an anonymized contest. Theoretical Computer Science, 2019, 789, 64-76.	0.5	0
13	Approximation Algorithms for Replenishment Problems with Fixed Turnover Times. Lecture Notes in Computer Science, 2018, , 217-230.	1.0	3
14	Plane Gossip: Approximating Rumor Spread in Planar Graphs. Lecture Notes in Computer Science, 2018, , 611-624.	1.0	2
15	Approximation Algorithms for Optimal Decision Trees and Adaptive TSP Problems. Mathematics of Operations Research, 2017, 42, 876-896.	0.8	25
16	Multiple facility location on a network with linear reliability order of edges. Journal of Combinatorial Optimization, 2017, 34, 931-955.	0.8	10
17	Expertise in Online Markets. Management Science, 2017, 63, 3895-3910.	2.4	8
18	Capacitated Vehicle Routing with Nonuniform Speeds. Mathematics of Operations Research, 2016, 41, 318-331.	0.8	7

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19	Robust and MaxMin Optimization under Matroid and Knapsack Uncertainty Sets. ACM Transactions on Algorithms, 2016, 12, 1-21.	0.9	13
20	Balls and Funnels: Energy Efficient Group-to-Group Anycasts. Lecture Notes in Computer Science, 2016, , 235-246.	1.0	0
21	Iterative Rounding Approximation Algorithms for Degree-Bounded Node-Connectivity Network Design. SIAM Journal on Computing, 2015, 44, 1202-1229.	0.8	8
22	Minimum Makespan Multi-Vehicle Dial-a-Ride. ACM Transactions on Algorithms, 2015, 11, 1-29.	0.9	5
23	Running Errands in Time: Approximation Algorithms for Stochastic Orienteering. Mathematics of Operations Research, 2015, 40, 56-79.	0.8	18
24	Improved approximations for two-stage min-cut and shortest path problems under uncertainty. Mathematical Programming, 2015, 149, 167-194.	1.6	9
25	Efficient cost-sharing mechanisms for prize-collecting problems. Mathematical Programming, 2015, 152, 147-188.	1.6	3
26	Sending Secrets Swiftly: Approximation Algorithms for Generalized Multicast Problems. Lecture Notes in Computer Science, 2014, , 568-607.	1.0	3
27	New approaches to multi-objective optimization. Mathematical Programming, 2014, 146, 525-554.	1.6	34
28	Complexity of transmission network expansion planning. Energy Systems, 2014, 5, 179-207.	1.8	5
29	The Geometry of Online Packing Linear Programs. Mathematics of Operations Research, 2014, 39, 46-59.	0.8	26
30	Thresholded covering algorithms for robust and maxâ€“min optimization. Mathematical Programming, 2014, 146, 583-615.	1.6	11
31	Short Tours through Large Linear Forests. Lecture Notes in Computer Science, 2014, , 273-284.	1.0	2
32	Graph-TSP from Steiner Cycles. Lecture Notes in Computer Science, 2014, , 312-323.	1.0	1
33	Approximating maxâ€“min weighted -joins. Operations Research Letters, 2013, 41, 321-324.	0.5	0
34	Coalescent-Based Method for Learning Parameters of Admixture Events from Large-Scale Genetic Variation Data. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2013, 10, 1137-1149.	1.9	0
35	An FPTAS for minimizing a class of low-rank quasi-concave functions over a convex set. Operations Research Letters, 2013, 41, 191-196.	0.5	11
36	Coalescent-based method for learning parameters of admixture events from large-scale genetic variation data. , 2012, , .		0

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37	Online and Stochastic Survivable Network Design. SIAM Journal on Computing, 2012, 41, 1649-1672.	0.8	8
38	Iterative Rounding Approximation Algorithms for Degree-Bounded Node-Connectivity Network Design. , 2012, , .		8
39	A near Pareto optimal auction with budget constraints. Games and Economic Behavior, 2012, 74, 699-708.	0.4	31
40	Technical Noteâ€"Approximation Algorithms for VRP with Stochastic Demands. Operations Research, 2012, 60, 123-127.	1.2	30
41	Approximation algorithms for distance constrained vehicle routing problems. Networks, 2012, 59, 209-214.	1.6	65
42	Geometry of Online Packing Linear Programs. Lecture Notes in Computer Science, 2012, , 701-713.	1.0	9
43	Approximation Algorithms for Online Weighted Rank Function Maximization under Matroid Constraints. Lecture Notes in Computer Science, 2012, , 145-156.	1.0	1
44	A Consensus Tree Approach for Reconstructing Human Evolutionary History and Detecting Population Substructure. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2011, 8, 918-928.	1.9	5
45	Sampling and Cost-Sharing: Approximation Algorithms for Stochastic Optimization Problems. SIAM Journal on Computing, 2011, 40, 1361-1401.	0.8	15
46	An Optimization-Based Sampling Scheme for Phylogenetic Trees. Journal of Computational Biology, 2011, 18, 1599-1609.	0.8	0
47	The Directed Orienteering Problem. Algorithmica, 2011, 60, 1017-1030.	1.0	16
48	An FPTAS for minimizing the product of two non-negative linear cost functions. Mathematical Programming, 2011, 126, 401-405.	1.6	16
49	Approximation Algorithms for Correlated Knapsacks and Non-martingale Bandits. , 2011, , .		33
50	Generalized Buneman Pruning for Inferring the Most Parsimonious Multi-State Phylogeny. Journal of Computational Biology, 2011, 18, 445-457.	0.8	7
51	We know who you followed last summer. , 2011, , .		48
52	Capacitated Vehicle Routing with Non-uniform Speeds. Lecture Notes in Computer Science, 2011, , 235-247.	1.0	4
53	An Optimization-Based Sampling Scheme for Phylogenetic Trees. Lecture Notes in Computer Science, 2011, , 252-266.	1.0	1
54	Tree Embeddings for Two-Edge-Connected Network Design. , 2010, , .		4

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55	Approximation Algorithms for Requirement Cut onÂGraphs. Algorithmica, 2010, 56, 198-213.	1.0	4
56	A PTAS for the chance-constrained knapsack problem with random item sizes. Operations Research Letters, 2010, 38, 161-164.	0.5	39
57	An improved approximation algorithm for requirement cut. Operations Research Letters, 2010, 38, 322-325.	0.5	14
58	Simpler analysis of LP extreme points for traveling salesman and survivable network design problems. Operations Research Letters, 2010, 38, 156-160.	0.5	16
59	Integrated optimization of customer and supplier logistics at Robert Bosch LLC. European Journal of Operational Research, 2010, 207, 456-464.	3.5	15
60	Dial a Ride from k -forest. ACM Transactions on Algorithms, 2010, 6, 1-21.	0.9	25
61	Approximation Algorithms for Multicommodity Facility Location Problems. SIAM Journal on Discrete Mathematics, 2010, 24, 538-551.	0.4	5
62	Thresholded Covering Algorithms for Robust and Max-min Optimization. Lecture Notes in Computer Science, 2010, , 262-274.	1.0	8
63	Approximation Algorithms for Optimal Decision Trees and Adaptive TSP Problems. Lecture Notes in Computer Science, 2010, , 690-701.	1.0	17
64	A Consensus Tree Approach for Reconstructing Human Evolutionary History and Detecting Population Substructure. Lecture Notes in Computer Science, 2010, , 167-178.	1.0	1
65	Generalized Buneman Pruning for Inferring the Most Parsimonious Multi-state Phylogeny. Lecture Notes in Computer Science, 2010, , 369-383.	1.0	1
66	Online and stochastic survivable network design. , 2009, , .		7
67	Line-of-Sight Networks. Combinatorics Probability and Computing, 2009, 18, 145-163.	0.8	17
68	Tractable Cases of Facility Location on a Network with a Linear Reliability Order of Links. Lecture Notes in Computer Science, 2009, , 275-276.	1.0	4
69	Minimum Makespan Multi-vehicle Dial-a-Ride. Lecture Notes in Computer Science, 2009, , 540-552.	1.0	10
70	Iterative Rounding for Multi-Objective Optimization Problems. Lecture Notes in Computer Science, 2009, , 95-106.	1.0	20
71	Approximation Algorithms for Degree-Constrained Minimum-Cost Network-Design Problems. , 2009, , 241-266.		0
72	Approximating k-cuts using network strength as a Lagrangean relaxation. European Journal of Operational Research, 2008, 186, 77-90.	3.5	24

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73	Mixed Integer Linear Programming for Maximum-Parsimony Phylogeny Inference. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2008, 5, 323-331.	1.9	50
74	Solving the Capacitated Local Access Network Design Problem. INFORMS Journal on Computing, 2008, 20, 243-254.	1.0	13
75	The Directed Minimum Latency Problem. Lecture Notes in Computer Science, 2008, , 193-206.	1.0	16
76	LP Rounding Approximation Algorithms for Stochastic Network Design. Mathematics of Operations Research, 2007, 32, 345-364.	0.8	26
77	Algorithms for Efficient Near-Perfect Phylogenetic Tree Reconstruction in Theory and Practice. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2007, 4, 561-571.	1.9	20
78	Direct maximum parsimony phylogeny reconstruction from genotype data. BMC Bioinformatics, 2007, 8, 472.	1.2	13
79	Efficiently Finding the Most Parsimonious Phylogenetic Tree Via Linear Programming. , 2007, , 37-48.		15
80	Poly-logarithmic Approximation Algorithms for Directed Vehicle Routing Problems. Lecture Notes in Computer Science, 2007, , 257-270.	1.0	16
81	Dial a Ride from k-Forest. , 2007, , 241-252.		8
82	Pricing Tree Access Networks with Connected Backbones. Lecture Notes in Computer Science, 2007, , 498-509.	1.0	1
83	Approximation Algorithms for Problems Combining Facility Location and Network Design. Operations Research, 2006, 54, 73-81.	1.2	43
84	Min–Max payoffs in a two-player location game. Operations Research Letters, 2006, 34, 499-507.	0.5	21
85	Hedging Uncertainty: Approximation Algorithms for Stochastic Optimization Problems. Mathematical Programming, 2006, 108, 97-114.	1.6	82
86	Approximation Algorithms for Minimizing Average Distortion. Theory of Computing Systems, 2006, 39, 93-111.	0.7	3
87	Matching Based Augmentations for Approximating Connectivity Problems. Lecture Notes in Computer Science, 2006, , 13-24.	1.0	7
88	Simple Reconstruction of Binary Near-Perfect Phylogenetic Trees. Lecture Notes in Computer Science, 2006, , 799-806.	1.0	9
89	Delegate and Conquer: An LP-Based Approximation Algorithm for Minimum Degree MSTs. Lecture Notes in Computer Science, 2006, , 169-180.	1.0	20
90	Fixed Parameter Tractability of Binary Near-Perfect Phylogenetic Tree Reconstruction. Lecture Notes in Computer Science, 2006, , 667-678.	1.0	14

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91	Minimum Vehicle Routing with a Common Deadline. Lecture Notes in Computer Science, 2006, , 212-223.	1.0	8
92	Bayesian Optimal No-Deficit Mechanism Design. Lecture Notes in Computer Science, 2006, , 136-148.	1.0	2
93	OPTIMAL IMPERFECT PHYLOGENY RECONSTRUCTION AND HAPLOTYPING (IPPH). , 2006, , .		9
94	Optimal imperfect phylogeny reconstruction and haplotyping (IPPH). Computational Systems Bioinformatics / Life Sciences Society Computational Systems Bioinformatics Conference, 2006, , 199-210.	0.4	3
95	On Two-Stage Stochastic Minimum Spanning Trees. Lecture Notes in Computer Science, 2005, , 321-334.	1.0	29
96	Finding effective support-tree preconditioners. , 2005, , .		14
97	Primal-Dual Meets Local Search: Approximating MSTs With Nonuniform Degree Bounds. SIAM Journal on Computing, 2005, 34, 763-773.	0.8	33
98	Boosted sampling. , 2004, , .		98
99	Worst-case payoffs of a location game. , 2004, , .		1
100	Approximation Algorithms for a Capacitated Network Design Problem. Algorithmica, 2004, 38, 417-431.	1.0	26
101	Approximation algorithms for finding low-degree subgraphs. Networks, 2004, 44, 203-215.	1.6	21
102	Min–max tree covers of graphs. Operations Research Letters, 2004, 32, 309-315.	0.5	90
103	A linear-time algorithm to compute a MAD tree of an interval graph. Information Processing Letters, 2004, 89, 255-259.	0.4	6
104	Approximation Algorithms for Minimizing Average Distortion. Lecture Notes in Computer Science, 2004, , 234-245.	1.0	4
105	Hedging Uncertainty: Approximation Algorithms for Stochastic Optimization Problems. Lecture Notes in Computer Science, 2004, , 101-115.	1.0	43
106	On the Crossing Spanning Tree Problem. Lecture Notes in Computer Science, 2004, , 51-60.	1.0	19
107	Approximation algorithms for the test cover problem. Mathematical Programming, 2003, 98, 477-491.	1.6	76
108	Reconstructing edge-disjoint paths. Operations Research Letters, 2003, 31, 273-276.	0.5	8

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109	Profit guaranteeing mechanisms for multicast networks. , 2003, , .		1
110	Primal-dual meets local search. , 2003, , .		22
111	Covering Graphs Using Trees and Stars. Lecture Notes in Computer Science, 2003, , 24-35.	1.0	12
112	A Matter of Degree: Improved Approximation Algorithms for Degree-Bounded Minimum Spanning Trees. SIAM Journal on Computing, 2002, 31, 1783-1793.	0.8	78
113	Approximation algorithms for the covering Steiner problem. Random Structures and Algorithms, 2002, 20, 465-482.	0.6	25
114	Randomized Approximation Algorithms for Query Optimization Problems on Two Processors. Lecture Notes in Computer Science, 2002, , 649-661.	1.0	1
115	Approximation Algorithms for Degree-Constrained Minimum-Cost Network-Design Problems. Algorithmica, 2001, 31, 58-78.	1.0	101
116	Approximating the Single-Sink Link-Installation Problem in Network Design. SIAM Journal on Optimization, 2001, 11, 595-610.	1.2	70
117	On approximating planar metrics by tree metrics. Information Processing Letters, 2001, 80, 213-219.	0.4	32
118	Scheduling and Reliable Lead-Time Quotation for Orders with Availability Intervals and Lead-Time Sensitive Revenues. Management Science, 2001, 47, 264-279.	2.4	364
119	On the Approximability of the Minimum Test Collection Problem. Lecture Notes in Computer Science, 2001, , 158-169.	1.0	19
120	On the Integrality Gap of a Natural Formulation of the Single-sink Buy-at-Bulk Network Design Problem. Lecture Notes in Computer Science, 2001, , 170-184.	1.0	29
121	A Polylogarithmic Approximation Algorithm for the Group Steiner Tree Problem. Journal of Algorithms, 2000, 37, 66-84.	0.9	201
122	Semi-definite relaxations for minimum bandwidth and other vertex-ordering problems. Theoretical Computer Science, 2000, 235, 25-42.	0.5	25
123	Approximation Algorithms for the Multiple Knapsack Problem with Assignment Restrictions. Journal of Combinatorial Optimization, 2000, 4, 171-186.	0.8	108
124	A matter of degree. , 2000, , .		20
125	A Polynomial-Time Approximation Scheme for Minimum Routing Cost Spanning Trees. SIAM Journal on Computing, 2000, 29, 761-778.	0.8	103
126	Improving spanning trees by upgrading nodes. Theoretical Computer Science, 1999, 221, 139-155.	0.5	15

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127	Improving Minimum Cost Spanning Trees by Upgrading Nodes. Journal of Algorithms, 1999, 33, 92-111.	0.9	18
128	A Constant-Factor Approximation Algorithm for thek-MST Problem. Journal of Computer and System Sciences, 1999, 58, 101-108.	0.9	35
129	GESTALT: Genomic Steiner Alignments. Lecture Notes in Computer Science, 1999, , 101-114.	1.0	14
130	Approximation Algorithms for the Traveling Purchaser Problem and Its Variants in Network Design. Lecture Notes in Computer Science, 1999, , 29-40.	1.0	30
131	On 2-Coverings and 2-Packings of Laminar Families. Lecture Notes in Computer Science, 1999, , 510-520.	1.0	31
132	The p-neighbor k-center problem. Information Processing Letters, 1998, 65, 131-134.	0.4	40
133	Approximation Algorithms for Certain Network Improvement Problems. Journal of Combinatorial Optimization, 1998, 2, 257-288.	0.8	40
134	Bicriteria Network Design Problems. Journal of Algorithms, 1998, 28, 142-171.	0.9	150
135	Approximating Maximum Leaf Spanning Trees in Almost Linear Time. Journal of Algorithms, 1998, 29, 132-141.	0.9	91
136	Approximation algorithms for multiple sequence alignment under a fixed evolutionary tree. Discrete Applied Mathematics, 1998, 88, 355-366.	0.5	9
137	Optimal circuits for parallel multipliers. IEEE Transactions on Computers, 1998, 47, 273-285.	2.4	117
138	Semi-definite relaxations for minimum bandwidth and other vertex-ordering problems. , 1998, , .		20
139	A New Bound for the 2-Edge Connected Subgraph Problem. Lecture Notes in Computer Science, 1998, , 112-125.	1.0	17
140	An approximation algorithm for minimum-cost vertex-connectivity problems. Algorithmica, 1997, 18, 21-43.	1.0	74
141	Improving spanning trees by upgrading nodes. Lecture Notes in Computer Science, 1997, , 281-291.	1.0	5
142	Banishing bias from consensus sequences. Lecture Notes in Computer Science, 1997, , 247-261.	1.0	43
143	Spanning Treesâ€"Short or Small. SIAM Journal on Discrete Mathematics, 1996, 9, 178-200.	0.4	102
144	Nonoverlapping local alignments (weighted independent sets of axis-parallel rectangles). Discrete Applied Mathematics, 1996, 71, 41-53.	0.5	49

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145	A constant-factor approximation algorithm for the k MST problem (extended abstract). , 1996, , .		25
146	The constrained minimum spanning tree problem. Lecture Notes in Computer Science, 1996, , 66-75.	1.0	81
147	A Nearly Best-Possible Approximation Algorithm for Node-Weighted Steiner Trees. Journal of Algorithms, 1995, 19, 104-115.	0.9	320
148	An approximate max-flow min-cut relation for undirected multicommodity flow, with applications. Combinatorica, 1995, 15, 187-202.	0.6	44
149	Bicriteria network design problems. Lecture Notes in Computer Science, 1995, , 487-498.	1.0	29
150	When Trees Collide: An Approximation Algorithm for the Generalized Steiner Problem on Networks. SIAM Journal on Computing, 1995, 24, 440-456.	0.8	292
151	Computing similarity between RNA strings. Lecture Notes in Computer Science, 1995, , 1-16.	1.0	44
152	Approximation algorithms for multiple sequence alignment under a fixed evolutionary tree. Lecture Notes in Computer Science, 1995, , 330-339.	1.0	8
153	Nonoverlapping local alignments (weighted independent sets of axis parallel rectangles). Lecture Notes in Computer Science, 1995, , 506-517.	1.0	6
154	A primal-dual approximation algorithm for the Steiner forest problem. Information Processing Letters, 1994, 50, 185-189.	0.4	10
155	Many birds with one stone. , 1993, , .		98
156	Generalized vertex covering in interval graphs. Discrete Applied Mathematics, 1992, 39, 87-93.	0.5	10
157	An optimal algorithm to solve the all-pair shortest path problem on interval graphs. Networks, 1992, 22, 21-35.	1.6	28
158	Approximation through local optimality: Designing networks with small degree. Lecture Notes in Computer Science, 1992, , 279-290.	1.0	11
159	When trees collide. , 1991, , .		49
160	Ordering problems approximated: single-processor scheduling and interval graph completion. Lecture Notes in Computer Science, 1991, , 751-762.	1.0	33
161	Approximation through multicommodity flow. , 0, , .		48
162	Rapid rumor ramification: approximating the minimum broadcast time. , 0, , .		79

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163	Design strategies for optimal multiplier circuits. , 0, , .		12
164	A fast approximation algorithm for maximum-leaf spanning tree. , 0, , .		0
165	Parallelizing elimination orders with linear fill. , 0, , .		2
166	An Edge in Time Saves Nine: LP Rounding Approximation Algorithms for Stochastic Network Design. , 0, , .		22
167	How to Pay, Come What May: Approximation Algorithms for Demand-Robust Covering Problems. , 0, , .		27
168	Vertex downgrading to minimize connectivity. Mathematical Programming, 0, , .	1.6	0