Naoki Katoh

List of Publications by Year
in descending order

72 papers	949 citations	471509 17 h-index	552781 26 g-index
74 all docs	74 docs citations	74 times ranked	505 citing authors

#	Article	IF	Citations
1	Improving Upper and Lower Bounds for the Total Number of Edge Crossings of Euclidean Minimum Weight Laman Graphs. Lecture Notes in Computer Science, 2021, , 244-256.	1.3	1
2	A Survey on Facility Location Problems in Dynamic Flow Networks. The Review of Socionetwork Strategies, 2019, 13, 163-208.	1.5	5
3	A population-based algorithm for solving linear assignment problems with two objectives. Computers and Operations Research, 2017, 79, 291-303.	4.0	1
4	Extended formulations for sparsity matroids. Mathematical Programming, 2016, 158, 565-574.	2.4	6
5	Characterizing redundant rigidity and redundant global rigidity of body-hinge graphs. Information Processing Letters, 2016, 116, 175-178.	0.6	1
6	An Inductive Construction of Rigid Panel-Hinge Graphs and Their Applications to Form Design. International Journal of Architectural Computing, 2015, 13, 45-63.	1.5	1
7	Enumeration of Floor Plans Based on a Zero-Suppressed Binary Decision Diagram. International Journal of Architectural Computing, 2015, 13, 25-44.	1.5	3
8	A Linear-Time Algorithm for Testing Outer-1-Planarity. Algorithmica, 2015, 72, 1033-1054.	1.3	31
9	Online graph exploration algorithms for cycles and trees by multiple searchers. Journal of Combinatorial Optimization, 2014, 28, 480-495.	1.3	24
10	An inductive construction of minimally rigid body–hinge simple graphs. Theoretical Computer Science, 2014, 556, 2-12.	0.9	1
11	The universally quickest transshipment problem in a certain class of dynamic networks with uniform path-lengths. Discrete Applied Mathematics, 2014, 178, 89-100.	0.9	3
12	A linear time algorithm for testing maximal 1-planarity of graphs with a rotation system. Theoretical Computer Science, 2013, 513, 65-76.	0.9	34
13	Independent arborescences in directed graphs. Discrete Mathematics, 2013, 313, 453-459.	0.7	1
14	Rooted-Tree Decompositions with Matroid Constraints and the Infinitesimal Rigidity of Frameworks with Boundaries. SIAM Journal on Discrete Mathematics, 2013, 27, 155-185.	0.8	19
15	Online Vertex Exploration Problems in a Simple Polygon. IEICE Transactions on Information and Systems, 2013, E96.D, 489-497.	0.7	0
16	Resource Allocation Problems. , 2013, , 2897-2988.		21
17	A Linear-Time Algorithm for Testing Outer-1-Planarity. Lecture Notes in Computer Science, 2013, , 71-82.	1.3	7
18	An Inductive Construction of Minimally Rigid Body-Hinge Simple Graphs. Lecture Notes in Computer Science, 2013, , 165-177.	1.3	0

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19	A rooted-forest partition with uniform vertex demand. Journal of Combinatorial Optimization, 2012, 24, 67-98.	1.3	4
20	An Emergency Evacuation Planning Model Using the Universally Quickest Flow. The Review of Socionetwork Strategies, 2012, 6, 15-28.	1.5	15
21	Covering directed graphs by in-trees. Journal of Combinatorial Optimization, 2011, 21, 2-18.	1.3	1
22	A Proof of the Molecular Conjecture. Discrete and Computational Geometry, 2011, 45, 647-700.	0.6	60
23	Discovering Distinctive Spatial Patterns of Snatch Theft in Kyoto City with CAEP. Journal of Asian Architecture and Building Engineering, 2010, 9, 103-110.	2.0	14
24	Parametric search: three new applications. Frontiers of Mathematics in China, 2010, 5, 65-73.	0.7	2
25	A GEOMETRIC SPANNER OF SEGMENTS. International Journal of Computational Geometry and Applications, 2010, 20, 43-67.	0.5	1
26	Fast Enumeration Algorithms for Non-crossing Geometric Graphs. Discrete and Computational Geometry, 2009, 42, 443-468.	0.6	7
27	Arc-disjoint in-trees in directed graphs. Combinatorica, 2009, 29, 197-214.	1.2	26
28	An efficient algorithm for the evacuation problem in a certain class of networks with uniform path-lengths. Discrete Applied Mathematics, 2009, 157, 3665-3677.	0.9	17
29	Enumerating edge-constrained triangulations and edge-constrained non-crossing geometric spanning trees. Discrete Applied Mathematics, 2009, 157, 3569-3585.	0.9	4
30	Voronoi diagrams with respect to criteria on vision information. Japan Journal of Industrial and Applied Mathematics, 2008, 25, 149-164.	0.9	0
31	Enumerating Constrained Non-crossing Minimally Rigid Frameworks. Discrete and Computational Geometry, 2008, 40, 31-46.	0.6	6
32	Finding an Optimal Location of Line Facility using Evolutionary Algorithm and Integer Program. Journal of Computational Science and Technology, 2008, 2, 362-370.	0.4	5
33	Applying graph mining to discover substructures of room layouts which affect the rent of apartments. , 2007, , .		3
34	Voronoi Diagram with Respect to Criteria on Vision Information. , 2007, , .		5
35	Enumerating Non-crossing Minimally Rigid Frameworks. Graphs and Combinatorics, 2007, 23, 117-134.	0.4	7
36	An Efficient Algorithm for the Evacuation Problem in a Certain Class of a Network with Uniform Path-Lengths. , 2007, , 178-190.		2

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37	An approximation algorithm for the pickup and delivery vehicle routing problem on trees. Discrete Applied Mathematics, 2006, 154, 2335-2349.	0.9	17
38	123 Optimal Design of Flexible Structures utilizing Enumeration Algorithms for Rigid Framework. The Proceedings of OPTIS, 2006, 2006.7, 203-208.	0.0	0
39	124 Enumerating Non-crossing Minimally Rigid Frameworks for Mechanism Optimization Problems. The Proceedings of OPTIS, 2006, 2006.7, 209-214.	0.0	0
40	COST PLANNING SYSTEM FOR PUBLIC BUILDING CONSTRUCTION PROJECTS(Building Economics and) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.3	0
41	Efficient Algorithms and Implementations for Optimizing the Sum of Linear Fractional Functions, with Applications. Journal of Combinatorial Optimization, 2005, 9, 69-90.	1.3	19
42	Data Mining Oriented CRM Systems Based on MUSASHI: C-MUSASHI. Lecture Notes in Computer Science, 2005, , 152-173.	1.3	8
43	On Geometric Structure of Global Roundings for Graphs and Range Spaces. Lecture Notes in Computer Science, 2004, , 455-467.	1.3	2
44	Efficient Algorithms for Approximating a Multi-dimensional Voxel Terrain by a Unimodal Terrain. Lecture Notes in Computer Science, 2004, , 238-248.	1.3	15
45	EVOLUTIONARY OPERATORS BASED ON ELITE SOLUTIONS FOR BI-OBJECTIVE COMBINATORIAL OPTIMIZATION. Advances in Natural Computation, 2004, , 555-579.	0.1	4
46	Matrix Rounding under the Lp-Discrepancy Measure and Its Application to Digital Halftoning. SIAM Journal on Computing, 2003, 32, 1423-1435.	1.0	20
47	Combining Information Fusion with String Pattern Analysis: A New Method for Predicting Future Purchase Behavior. Studies in Fuzziness and Soft Computing, 2003, , 161-187.	0.8	11
48	PARAMETRIC POLYMATROID OPTIMIZATION AND ITS GEOMETRIC APPLICATIONS. International Journal of Computational Geometry and Applications, 2002, 12, 429-443.	0.5	5
49	A Machine Learning Algorithm for Analyzing String Patterns Helps to Discover Simple and Interpretable Business Rules from Purchase History. Lecture Notes in Computer Science, 2002, , 565-575.	1.3	9
50	A unified scheme for detecting fundamental curves in binary edge images. Computational Geometry: Theory and Applications, 2001, 18, 73-93.	0.5	5
51	Group Symmetry in Interior-Point Methods for Semidefinite Program. Optimization and Engineering, 2001, 2, 293-320.	2.4	40
52	A New Approximation Algorithm for the Capacitated Vehicle Routing Problem on a Tree. Journal of Combinatorial Optimization, 2001, 5, 213-231.	1.3	23
53	EFFICIENT ALGORITHMS FOR OPTIMIZATION-BASED IMAGE SEGMENTATION. International Journal of Computational Geometry and Applications, 2001, 11, 145-166.	0.5	29
54	Discovering Interpretable Rules that Explain Customersâ€™ Brand Choice Behavior. Lecture Notes in Computer Science, 2000, , 263-267.	1.3	1

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55	Finding Subsets Maximizing Minimum Structures. SIAM Journal on Discrete Mathematics, 1999, 12, 342-359.	0.8	11
56	Approximation of Optimal Two-Dimensional Association Rules for Categorical Attributes Using Semidefinite Programming. Lecture Notes in Computer Science, 1999, , 148-159.	1.3	9
57	Mining Pharmacy Data Helps to Make Profits. Data Mining and Knowledge Discovery, 1998, 2, 391-398.	3.7	38
58	Resource Allocation Problems. , 1998, , 905-1006.		87
59	A new probabilistic analysis of Karger's randomized algorithm for minimum cut problems. Information Processing Letters, 1997, 64, 255-261.	0.6	1
60	Variants for the Hough transform for line detection. Computational Geometry: Theory and Applications, 1996, 6, 231-252.	0.5	14
61	Efficient algorithms for minimum range cut problems. Networks, 1994, 24, 395-407.	2.7	14
62	A multiversion cautious scheduler with dynamic serialization constraints for database concurrency control. Discrete Applied Mathematics, 1992, 40, 379-395.	0.9	0
63	An Îµ-approximation scheme for combinatorial optimization problems with minimum variance criterion. Discrete Applied Mathematics, 1992, 35, 131-141.	0.9	7
64	Finding k points with minimum diameter and related problems. Journal of Algorithms, 1991, 12, 38-56.	0.9	105
65	A two-commodity sharing problem on networks. Networks, 1991, 21, 547-563.	2.7	2
66	A 1â€Version Cautious Transaction Scheduler with Dynamic Version Selection. Systems and Computers in Japan, 1989, 20, 91-100.	0.2	1
67	The Fair Resource Allocation Problem with Submodular Constraints. Mathematics of Operations Research, 1988, 13, 164-173.	1.3	14
68	A cautious scheduler for multistep transactions. Algorithmica, 1987, 2, 1-26.	1.3	10
69	A parametric characterization and an Îµ-approximation scheme for the minimization of a quasiconcave program. Discrete Applied Mathematics, 1987, 17, 39-66.	0.9	26
70	An efficient algorithm for the parametric resource allocation problem. Discrete Applied Mathematics, 1985, 10, 261-274.	0.9	3
71	Cautious transaction schedulers with admission control. ACM Transactions on Database Systems, 1985, 10, 205-229.	2.8	28
72	A polynomial time algorithm for a chance-constrained single machine scheduling problem. Operations Research Letters, 1983, 2, 62-65.	0.7	14