Natashia L Boland

List of Publications by Year
in descending order

98 papers	2,945 citations	201674 27 h-index	182427 51 g-index
99 all docs	99 docs citations	99 times ranked	2069 citing authors

#	Article	IF	Citations
1	Learning generalized strong branching for set covering, set packing, and 0–1 knapsack problems. European Journal of Operational Research, 2022, 301, 828-840.	5.7	4
2	Near real-time loadplan adjustments for less-than-truckload carriers. European Journal of Operational Research, 2022, 301, 1021-1034.	5.7	1
3	Decomposition Branching for Mixed Integer Programming. Operations Research, 2022, 70, 1854-1872.	1.9	1
4	Decomposition of loosely coupled integer programs: a multiobjective perspective. Mathematical Programming, 2022, 196, 427-477.	2.4	2
5	Dynamic discretization discovery for solving the Continuous Time Inventory Routing Problem with Out-and-Back Routes. Computers and Operations Research, 2022, 141, 105686.	4.0	5
6	Dynamic Discretization Discovery Algorithms for Time-Dependent Shortest Path Problems. INFORMS Journal on Computing, 2022, 34, 1086-1114.	1.7	2
7	Time-Dependent Shortest Path Problems with Penalties and Limits on Waiting. INFORMS Journal on Computing, 2021, 33, 997-1014.	1.7	6
8	Interval-Based Dynamic Discretization Discovery for Solving the Continuous-Time Service Network Design Problem. Transportation Science, 2021, 55, 29-51.	4.4	15
9	The Value of Limited Flexibility in Service Network Designs. Transportation Science, 2021, 55, 52-74.	4.4	9
10	Sampling Scenario Set Partition Dual Bounds for Multistage Stochastic Programs. INFORMS Journal on Computing, 2020, 32, 145-163.	1.7	8
11	A Criterion Space Method for Biobjective Mixed Integer Programming: The Boxed Line Method. INFORMS Journal on Computing, 2020, 32, 16-39.	1.7	14
12	Dynamic Discretization Discovery for Solving the Time-Dependent Traveling Salesman Problem with Time Windows. Transportation Science, 2020, 54, 703-720.	4.4	39
13	Logistics optimization for a coal supply chain. Journal of Heuristics, 2020, 26, 269-300.	1.4	18
14	The Continuous-Time Inventory-Routing Problem. Transportation Science, 2020, 54, 375-399.	4.4	15
15	Rejoinder on: Perspectives on integer programming for time-dependent models. Top, 2019, 27, 184-186.	1.6	0
16	Throughput optimisation in a coal export system with multiple terminals and shared resources. Computers and Industrial Engineering, 2019, 134, 37-51.	6.3	26
17	Perspectives on integer programming for time-dependent models. Top, 2019, 27, 147-173.	1.6	24
18	Optimizing wind farm siting to reduce power system impacts of wind variability. Wind Energy, 2019, 22, 894-907.	4.2	13

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19	Preprocessing and cut generation techniques for multi-objective binary programming. European Journal of Operational Research, 2019, 274, 858-875.	5.7	6
20	The price of discretizing time: a study in service network design. EURO Journal on Transportation and Logistics, 2019, 8, 195-216.	2.2	21
21	A parallelizable augmented Lagrangian method applied to large-scale non-convex-constrained optimization problems. Mathematical Programming, 2019, 175, 503-536.	2.4	15
22	Active Management of Environmental Water to Improve Ecological Outcomes. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	2.6	13
23	A Dynamic Discretization Discovery Algorithm for the Minimum Duration Time-Dependent Shortest Path Problem. Lecture Notes in Computer Science, 2018, , 289-297.	1.3	3
24	Combining Progressive Hedging with a Frank--Wolfe Method to Compute Lagrangian Dual Bounds in Stochastic Mixed-Integer Programming. SIAM Journal on Optimization, 2018, 28, 1312-1336.	2.0	38
25	A new method for optimizing a linear function over the efficient set of a multiobjective integer program. European Journal of Operational Research, 2017, 260, 904-919.	5.7	37
26	The Quadrant Shrinking Method: A simple and efficient algorithm for solving tri-objective integer programs. European Journal of Operational Research, 2017, 260, 873-885.	5.7	41
27	A polynomially solvable case of the pooling problem. Journal of Global Optimization, 2017, 67, 621-630.	1.8	5
28	A Matheuristic for the Multivehicle Inventory Routing Problem. INFORMS Journal on Computing, 2017, 29, 377-387.	1.7	58
29	Bounding the gap between the McCormick relaxation and the convex hull for bilinear functions. Mathematical Programming, 2017, 162, 523-535.	2.4	20
30	Using optimization to develop a â€œdesignerâ€•environmental flow regime. Environmental Modelling and Software, 2017, 88, 188-199.	4.5	49
31	The Continuous-Time Service Network Design Problem. Operations Research, 2017, 65, 1303-1321.	1.9	103
32	Integrated Aircraft Routing, Crew Pairing, and Tail Assignment: Branch-and-Price with Many Pricing Problems. Transportation Science, 2017, 51, 177-195.	4.4	18
33	Solving the Traveling Salesman Problem with Time Windows Through Dynamically Generated Time-Expanded Networks. Lecture Notes in Computer Science, 2017, , 254-262.	1.3	9
34	Proximity Benders: a decomposition heuristic for stochastic programs. Journal of Heuristics, 2016, 22, 181-198.	1.4	17
35	Optimization tools for environmental water decisions: A review of strengths, weaknesses, and opportunities to improve adoption. Environmental Modelling and Software, 2016, 84, 326-338.	4.5	48
36	New multi-commodity flow formulations for the pooling problem. Journal of Global Optimization, 2016, 66, 669-710.	1.8	21

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37	Scheduling arc shut downs in a network to maximize flow over time with a bounded number of jobs per time period. Journal of Combinatorial Optimization, 2016, 32, 885-905.	1.3	6
38	A Bucket Indexed Formulation for Nonpreemptive Single Machine Scheduling Problems. INFORMS Journal on Computing, 2016, 28, 14-30.	1.7	10
39	Minimum cardinality non-anticipativity constraint sets for multistage stochastic programming. Mathematical Programming, 2016, 157, 69-93.	2.4	8
40	The L-shape search method for triobjective integer programming. Mathematical Programming Computation, 2016, 8, 217-251.	4.8	44
41	A Criterion Space Search Algorithm for Biobjective Integer Programming: The Balanced Box Method. INFORMS Journal on Computing, 2015, 27, 735-754.	1.7	64
42	A Trust Region Method for the Solution of the Surrogate Dual in Integer Programming. Journal of Optimization Theory and Applications, 2015, 167, 558-584.	1.5	3
43	A Criterion Space Search Algorithm for Biobjective Mixed Integer Programming: The Triangle Splitting Method. INFORMS Journal on Computing, 2015, 27, 597-618.	1.7	48
44	Scheduling network maintenance jobs with release dates and deadlines to maximize total flow over time: Bounds and solution strategies. Computers and Operations Research, 2015, 64, 113-129.	4.0	8
45	On the augmented Lagrangian dual for integer programming. Mathematical Programming, 2015, 150, 491-509.	2.4	12
46	A decision support tool for generating shipping data for the Hunter Valley coal chain. Computers and Operations Research, 2015, 53, 54-67.	4.0	4
47	Scheduling unit time arc shutdowns to maximize network flow over time: Complexity results. Networks, 2014, 63, 196-202.	2.7	5
48	Comparison of Mixed-Integer Programming and Genetic Algorithm Methods for Distributed Generation Planning. IEEE Transactions on Power Systems, 2014, 29, 833-843.	6.5	49
49	Pricing to accelerate demand learning in dynamic assortment planning for perishable products. European Journal of Operational Research, 2014, 237, 555-565.	5.7	23
50	Boosting the feasibility pump. Mathematical Programming Computation, 2014, 6, 255-279.	4.8	23
51	Scheduling arc maintenance jobs in a network to maximize total flow over time. Discrete Applied Mathematics, 2014, 163, 34-52.	0.9	24
52	Local Search for a Cargo Assembly Planning Problem. Lecture Notes in Computer Science, 2014, , 159-175.	1.3	11
53	The Triangle Splitting Method for Biobjective Mixed Integer Programming. Lecture Notes in Computer Science, 2014, , 162-173.	1.3	7
54	Mixed integer programming based maintenance scheduling for the Hunter Valley coal chain. Journal of Scheduling, 2013, 16, 649-659.	1.9	27

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55	Airline planning benchmark problems—Part I:. Computers and Operations Research, 2013, 40, 775-792.	4.0	2
56	Airline planning benchmark problems—Part II: Passenger groups, utility and demand allocation. Computers and Operations Research, 2013, 40, 793-804.	4.0	6
57	Transport scheduling: Meeting the challenges of scale, complexity and uncertainty. Computers and Operations Research, 2013, 40, 655-656.	4.0	0
58	Switch and Tap-Changer Reconfiguration of Distribution Networks Using Evolutionary Algorithms. IEEE Transactions on Power Systems, 2013, 28, 85-92.	6.5	52
59	A New Approach to the Feasibility Pump in Mixed Integer Programming. SIAM Journal on Optimization, 2012, 22, 831-861.	2.0	19
60	Assortment and Pricing with Demand Learning. SSRN Electronic Journal, 2012, , .	0.4	1
61	Clique-based facets for the precedence constrained knapsack problem. Mathematical Programming, 2012, 133, 481-511.	2.4	12
62	Solving shortest path problems with a weight constraint and replenishment arcs. Computers and Operations Research, 2012, 39, 964-984.	4.0	59
63	Optimizing the Hunter Valley Coal Chain. , 2012, , 275-302.		12
64	Multi-objective Optimisation of Power Restoration in Electricity Distribution Systems. Lecture Notes in Computer Science, 2011, , 779-788.	1.3	1
65	CP and IP approaches to cancer radiotherapy delivery optimization. Constraints, 2011, 16, 173-194.	0.7	13
66	A strengthened formulation and cutting planes for the open pit mine production scheduling problem. Computers and Operations Research, 2010, 37, 1641-1647.	4.0	86
67	(N-1) contingency planning in radial distribution networks using genetic algorithms. , 2010, , .		11
68	A New Sequential Extraction Heuristic for Optimizing the Delivery of Cancer Radiation Treatment Using Multileaf Collimators. INFORMS Journal on Computing, 2009, 21, 224-241.	1.7	5
69	Simultaneous solution of Lagrangean dual problems interleaved with preprocessing for the weight constrained shortest path problem. Networks, 2009, 53, 358-381.	2.7	19
70	Mixed integer programming approaches to exact minimization of total treatment time in cancer radiotherapy using multileaf collimators. Computers and Operations Research, 2009, 36, 795-810.	4.0	24
71	LP-based disaggregation approaches to solving the open pit mining production scheduling problem with block processing selectivity. Computers and Operations Research, 2009, 36, 1064-1089.	4.0	119
72	Convergent Network Approximation for the Continuous Euclidean Length Constrained Minimum Cost Path Problem. SIAM Journal on Optimization, 2009, 20, 54-77.	2.0	6

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73	New integer linear programming approaches for course timetabling. Computers and Operations Research, 2008, 35, 2209-2233.	4.0	34
74	Path inequalities for the vehicle routing problem with time windows. Networks, 2007, 49, 273-293.	2.7	22
75	Polyhedral results and exact algorithms for the asymmetric travelling salesman problem with replenishment arcs. Discrete Applied Mathematics, 2007, 155, 2093-2110.	0.9	7
76	Minimum Cardinality Matrix Decomposition into Consecutive-Ones Matrices: CP and IP Approaches. Lecture Notes in Computer Science, 2007, , 1-15.	1.3	22
77	Exact procedures for solving the discrete ordered median problem. Computers and Operations Research, 2006, 33, 3270-3300.	4.0	50
78	Accelerated label setting algorithms for the elementary resource constrained shortest path problem. Operations Research Letters, 2006, 34, 58-68.	0.7	141
79	Facets of the polytope of the asymmetric travelling salesman problem with replenishment arcs. Discrete Optimization, 2006, 3, 33-49.	0.9	5
80	Preprocessing and cutting for multiple allocation hub location problems. European Journal of Operational Research, 2004, 155, 638-653.	5.7	118
81	Minimizing beam-on time in cancer radiation treatment using multileaf collimators. Networks, 2004, 43, 226-240.	2.7	82
82	Amplifier Placement Methods for Metropolitan WDM Ring Networks. Journal of Lightwave Technology, 2004, 22, 2509-2522.	4.6	17
83	Improved preprocessing, labeling and scaling algorithms for the Weight-Constrained Shortest Path Problem. Networks, 2003, 42, 135-153.	2.7	155
84	A Hybrid Algorithm for the Examination Timetabling Problem. Lecture Notes in Computer Science, 2003, , 207-231.	1.3	106
85	Efficient Intelligent Backtracking Using Linear Programming. INFORMS Journal on Computing, 2002, 14, 373-386.	1.7	16
86	Title is missing!. Annals of Operations Research, 2001, 108, 143-156.	4.1	3
87	Algorithms for the Weight Constrained Shortest Path Problem. International Transactions in Operational Research, 2001, 8, 15-29.	2.7	50
88	The capacitated multiple allocation hub location problem: Formulations and algorithms. European Journal of Operational Research, 2000, 120, 614-631.	5.7	232
89	The asymmetric traveling salesman problem with replenishment arcs. European Journal of Operational Research, 2000, 123, 408-427.	5.7	32
90	An outer approximate subdifferential method for piecewise affine optimization. Mathematical Programming, 2000, 87, 57-86.	2.4	8

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91	Flight String Models for Aircraft Fleeting and Routing. Transportation Science, 1998, 32, 208-220.	4.4	256
92	Optimal Two-commodity Flows with Non-linear Cost Functions. Journal of the Operational Research Society, 1995, 46, 1192-1107.	3.4	2
93	A faster version of the ASG algorithm. Applied Mathematics Letters, 1994, 7, 23-27.	2.7	22
94	An Algorithm for Non-linear Network Programming: Implementation, Results and Comparisons. Journal of the Operational Research Society, 1992, 43, 979-992.	3.4	1
95	An algorithm for solving quadratic network flow problems. Applied Mathematics Letters, 1991, 4, 61-64.	2.7	9
96	New methods for multi-commodity flows. Computers and Mathematics With Applications, 1990, 20, 29-38.	2.7	1
97	Multivariable Branching: A 0-1 Knapsack Problem Case Study. INFORMS Journal on Computing, 0, , .	1.7	6
98	Corrigendum to â€œA Bucket Indexed Formulation for Nonpreemptive Single Machine Scheduling Problems,â€•INFORMS Journal on Computing 28(1):14â€"30, 2016. INFORMS Journal on Computing, 0, , .	1.7	0