Oleg Prokopyev

List of Publications by Year
in descending order

123	2,176	257429 24	276858 41
papers	citations	h-index	g-index

125	125	125	1552
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Biclustering in data mining. Computers and Operations Research, 2008, 35, 2964-2987.	4.0	211
2	On equivalent reformulations for absolute valueÂequations. Computational Optimization and Applications, 2009, 44, 363-372.	1.6	99
3	The equitable dispersion problem. European Journal of Operational Research, 2009, 197, 59-67.	5.7	88
4	Higher moment coherent risk measures. Quantitative Finance, 2007, 7, 373-387.	1.7	86
5	An integer programming framework for critical elements detection in graphs. Journal of Combinatorial Optimization, 2014, 28, 233-273.	1.3	84
6	Stochastic Operating Room Scheduling for High-Volume Specialties Under Block Booking. INFORMS Journal on Computing, 2013, 25, 682-692.	1.7	75
7	Critical nodes for distanceâ€based connectivity and related problems in graphs. Networks, 2015, 66, 170-195.	2.7	73
8	A new linearization technique for multi-quadratic 0â€“1 programming problems. Operations Research Letters, 2004, 32, 517-522.	0.7	71
9	Electroencephalogram (EEG) time series classification: Applications in epilepsy. Annals of Operations Research, 2006, 148, 227-250.	4.1	62
10	Seizure warning algorithm based on optimization and nonlinear dynamics. Mathematical Programming, 2004, 101, 365.	2.4	58
11	Optimal Condition-Based Mission Abort Decisions. IEEE Transactions on Reliability, 2023, 72, 408-425.	4.6	57
12	Feature Selection for Consistent Biclustering via Fractional 0â€“1 Programming. Journal of Combinatorial Optimization, 2005, 10, 7-21.	1.3	47
13	Scheduling Preventive Maintenance as a Function of an Imperfect Inspection Interval. IEEE Transactions on Reliability, 2015, 64, 983-997.	4.6	46
14	Sequential Shortest Path Interdiction with Incomplete Information. Decision Analysis, 2016, 13, 68-98.	2.1	42
15	Optimizing the Societal Benefits of the Annual Influenza Vaccine: A Stochastic Programming Approach. Operations Research, 2011, 59, 1131-1143.	1.9	41
16	On complexity of unconstrained hyperbolic 0â€“1 programming problems. Operations Research Letters, 2005, 33, 312-318.	0.7	38
17	A note on linearized reformulations for a class of bilevel linear integer problems. Annals of Operations Research, 2019, 272, 99-117.	4.1	33
18	Fractional 0â€“1 programming: applications and algorithms. Journal of Global Optimization, 2017, 69, 255-282.	1.8	32

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19	Thermoacoustic heat engine modeling and design optimization. Applied Thermal Engineering, 2011, 31, 2518-2528.	6.0	30
20	Exact MIP-based approaches for finding maximum quasi-cliques and dense subgraphs. Computational Optimization and Applications, 2016, 64, 177-214.	1.6	29
21	Irregular polyomino tiling via integer programming with application in phased array antenna design. Journal of Global Optimization, 2016, 65, 137-173.	1.8	29
22	Lower Bound Improvement and Forcing Rule for Quadratic Binary Programming. Computational Optimization and Applications, 2006, 33, 187-208.	1.6	27
23	Computational Comparison Studies of Quadratic Assignment Like Formulations for the In Silico Sequence Selection Problem in De Novo Protein Design. Journal of Combinatorial Optimization, 2005, 10, 41-60.	1.3	26
24	Finding groups with maximum betweenness centrality. Optimization Methods and Software, 2017, 32, 369-399.	2.4	26
25	Sequential Interdiction with Incomplete Information and Learning. Operations Research, 2019, 67, 72-89.	1.9	26
26	Global equilibrium search applied to the unconstrained binary quadratic optimization problem. Optimization Methods and Software, 2008, 23, 129-140.	2.4	24
27	Wildfire fuel management: Network-based models and optimization of prescribed burning. European Journal of Operational Research, 2018, 264, 774-796.	5.7	24
28	Checking solvability of systems of interval linear equations and inequalities via mixed integer programming. European Journal of Operational Research, 2009, 199, 117-121.	5.7	23
29	On the number of local minima for the multidimensional assignment problem. Journal of Combinatorial Optimization, 2006, 13, 1-18.	1.3	22
30	The bilevel knapsack problem with stochastic right-hand sides. Operations Research Letters, 2010, 38, 328-333.	0.7	22
31	Optimal solutions to minimum total energy broadcasting problem in wireless ad hoc networks. Journal of Combinatorial Optimization, 2006, 11, 59-69.	1.3	21
32	Asymptotic behavior of the expected optimal value of the multidimensional assignment problem. Mathematical Programming, 2007, 109, 525-551.	2.4	21
33	A simple technique to improve linearized reformulations of fractional (hyperbolic) 0â€“1 programming problems. Operations Research Letters, 2016, 44, 479-486.	0.7	21
34	An algorithm for online detection of temporal changes in operator cognitive state using real-time psychophysiological data. Biomedical Signal Processing and Control, 2010, 5, 229-236.	5.7	20
35	On a Level-Set Characterization of the Value Function of an Integer Program and Its Application to Stochastic Programming. Operations Research, 2013, 61, 498-511.	1.9	20
36	On algorithm portfolios and restart strategies. Operations Research Letters, 2011, 39, 49-52.	0.7	18

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37	Polyhedral approximations inp-order cone programming. Optimization Methods and Software, 2014, 29, 1210-1237.	2.4	18
38	On maximum degreeâ€based â€quasiâ€clique problem: Complexity and exact approaches. Networks, 2018, 71, 136-152.	2.7	18
39	Optimal planning of life-depleting maintenance activities. IIE Transactions, 2014, 46, 636-652.	2.1	16
40	Finding maximum subgraphs with relatively large vertex connectivity. European Journal of Operational Research, 2014, 239, 349-362.	5.7	16
41	Two-stage quadratic integer programs with stochastic right-hand sides. Mathematical Programming, 2012, 133, 121-158.	2.4	14
42	Exact solution approaches for bilevel assignment problems. Computational Optimization and Applications, 2016, 64, 215-242.	1.6	13
43	On a class of bilevel linear mixed-integer programs in adversarial settings. Journal of Global Optimization, 2018, 71, 91-113.	1.8	13
44	Finding Critical Links for Closeness Centrality. INFORMS Journal on Computing, 2019, 31, 367-389.	1.7	13
45	Exact solution approach for a class of nonlinear bilevel knapsack problems. Journal of Global Optimization, 2015, 61, 291-310.	1.8	12
46	Optimal planning of unpunctual preventive maintenance. IISE Transactions, 2017, 49, 127-143.	2.4	12
47	Finding influential groups in networked systems: The most degree-central clique problem. Omega, 2021, 101, 102262.	5.9	12
48	Solving the Order-Preserving Submatrix Problem via Integer Programming. INFORMS Journal on Computing, 2010, 22, 387-400.	1.7	11
49	How much do we â€œpayâ€•for using default parameters?. Computational Optimization and Applications, 2011, 48, 91-108.	1.6	11
50	Optimal Design of the Seasonal Influenza Vaccine with Manufacturing Autonomy. INFORMS Journal on Computing, 2018, 30, 371-387.	1.7	11
51	Solving Stochastic and Bilevel Mixed-Integer Programs via a Generalized Value Function. Operations Research, 2019, 67, 1659-1677.	1.9	11
52	Maintaining shared belief in a large multiagent team. , 2007, , .		10
53	The Surgical Patient Routing Problem: A Central Planner Approach. INFORMS Journal on Computing, 2016, 28, 657-673.	1.7	10
54	On exact solution approaches for the longest induced path problem. European Journal of Operational Research, 2019, 278, 546-562.	5.7	10

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55	On Bilevel Optimization with Inexact Follower. Decision Analysis, 2020, 17, 74-95.	2.1	10
56	Age-replacement policies under age-dependent replacement costs. IISE Transactions, 2021, 53, 425-436.	2.4	10
57	An optimization-based approach for data classification. Optimization Methods and Software, 2007, 22, 3-9.	2.4	9
58	Solving weighted MAX-SAT via global equilibrium search. Operations Research Letters, 2008, 36, 434-438.	0.7	9
59	On provably best construction heuristics for hard combinatorial optimization problems. Networks, 2016, 67, 238-245.	2.7	9
60	Analysis of process flexibility designs under disruptions. IISE Transactions, 2021, 53, 131-148.	2.4	9
61	Selective support vector machines. Journal of Combinatorial Optimization, 2009, 17, 3-20.	1.3	8
62	On Maximum Speedup Ratio of Restart Algorithm Portfolios. INFORMS Journal on Computing, 2013, 25, 222-229.	1.7	8
63	A global optimization algorithm for solving the minimum multiple ratio spanning tree problem. Journal of Global Optimization, 2013, 56, 1029-1043.	1.8	7
64	On characterization of maximal independent sets via quadratic optimization. Journal of Heuristics, 2013, 19, 629-644.	1.4	7
65	Optimization Letters Best Paper Award. Optimization Letters, 2016, 10, 1-1.	1.6	7
66	Dynamic Abandon/Extract Decisions for Failed Cardiac Leads. Management Science, 2018, 64, 633-651.	4.1	7
67	Critical arcs detection in influence networks. Networks, 2018, 71, 412-431.	2.7	7
68	Effects of cueing in cooperative search. Naval Research Logistics, 2006, 53, 814-821.	2.2	6
69	Finding checkerboard patterns via fractional 0â€“1 programming. Journal of Combinatorial Optimization, 2010, 20, 1-26.	1.3	6
70	Integrated design and operation of remnant inventory supply chains under uncertainty. European Journal of Operational Research, 2011, 214, 358-364.	5.7	6
71	Dense Percolation in Large-Scale Mean-Field Random Networks Is Provably â€œExplosiveâ€• PLoS ONE, 2012, 7, e51883.	2.5	6
72	Optimal Implantable Cardioverter Defibrillator (ICD) Generator Replacement. INFORMS Journal on Computing, 2014, 26, 599-615.	1.7	6

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73	A note on constraint aggregation and value functions for two-stage stochastic integer programs. Discrete Optimization, 2015, 15, 37-45.	0.9	6
74	Detecting resilient structures in stochastic networks: A twoâ€stage stochastic optimization approach. Networks, 2017, 69, 189-204.	2.7	6
75	Optimal Age-Replacement in Anticipation of Time-Dependent, Unpunctual Policy Implementation. IEEE Transactions on Reliability, 2021, 70, 1177-1192.	4.6	6
76	A short note on solvability of systems of interval linear equations. Linear and Multilinear Algebra, 2011, 59, 707-710.	1.0	5
77	A simple greedy heuristic for linear assignment interdiction. Annals of Operations Research, 2017, 249, 39-53.	4.1	5
78	Fractional 0â€“1 programs: links between mixed-integer linear and conic quadratic formulations. Journal of Global Optimization, 2019, 75, 273-339.	1.8	5
79	Optimization Letters Best Paper Award for 2017. Optimization Letters, 2019, 13, 1-1.	1.6	5
80	Twoâ€stage stochastic minimum sâ€‰â€“â€‰t cut problems: Formulations, complexity and decomposition algorithms. Networks, 2020, 75, 235-258.	2.7	5
81	Solving a class of feature selection problems via fractional 0â€“1 programming. Annals of Operations Research, 2021, 303, 265-295.	4.1	5
82	Network-Based Techniques in EEG Data Analysis and Epileptic Brain Modeling. Springer Optimization and Its Applications, 2007, , 559-573.	0.9	5
83	Managing patient backlog in a surgical suite that uses a block-booking scheduling system. , 2011, , .		4
84	On optimality of a polynomial algorithm for random linear multidimensional assignment problem. Optimization Letters, 2011, 5, 153-164.	1.6	4
85	On greedy approximation algorithms for a class of two-stage stochastic assignment problems. Optimization Methods and Software, 2014, 29, 42-67.	2.4	4
86	Optimization Letters Best Paper Award for 2016. Optimization Letters, 2018, 12, 1-1.	1.6	4
87	On greedy and strategic evaders in sequential interdiction settings with incomplete information. Omega, 2020, 92, 102161.	5.9	4
88	On exact solution approaches for bilevel quadratic 0â€“1 knapsack problem. Annals of Operations Research, 2021, 298, 555-572.	4.1	4
89	A Token-Based Approach to Sharing Beliefs in a Large Multiagent Team. Lecture Notes in Control and Information Sciences, 2009, , 417-429.	1.0	4
90	Sequence independent lifting for a set of submodular maximization problems. Mathematical Programming, 2022, 196, 69-114.	2.4	4

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91	Streaming cache placement problems: complexity and algorithms. International Journal of Computational Science and Engineering, 2007, 3, 173.	0.5	3
92	Effective management policies for remnant inventory supply chains. IIE Transactions, 2009, 41, 437-447.	2.1	3
93	On the Hamming distance in combinatorial optimization problems on hypergraph matchings. Optimization Letters, 2010, 4, 609-617.	1.6	3
94	Robustness of solutions to critical node detection problems with imperfect data: a computational study. Optimization Methods and Software, 2017, 32, 250-273.	2.4	3
95	Optimization of Cascading Processes in Arbitrary Networks with Stochastic Interactions. IEEE Transactions on Network Science and Engineering, 2019, 6, 773-787.	6.4	3
96	On the maximum small-world subgraph problem. European Journal of Operational Research, 2020, 280, 818-831.	5.7	3
97	On Robust Fractional 0-1 Programming. INFORMS Journal on Optimization, 2020, 2, 96-133.	1.4	3
98	A Mixed-Integer Fractional Optimization Approach to Best Subset Selection. INFORMS Journal on Computing, 0, , .	1.7	3
99	Rewiring the Domestic U.S. Rice Trade for Reducing Irrigation Impactsâ€”Implications for the Foodâ€“Energyâ€“Water Nexus. ACS Sustainable Chemistry and Engineering, 2021, 9, 9188-9198.	6.7	3
100	Fractional Zero-One Programming. , 2008, , 1091-1094.		3
101	Learning in Sequential Bilevel Linear Programming. INFORMS Journal on Optimization, 2022, 4, 174-199.	1.4	3
102	On bilevel minimum and bottleneck spanning tree problems. Networks, 2019, 74, 251-273.	2.7	2
103	Optimization Letters Best Paper Award for 2018. Optimization Letters, 2020, 14, 1-1.	1.6	2
104	On integer programming models for the maximum 2-club problem and its robust generalizations in sparse graphs. European Journal of Operational Research, 2022, 297, 86-101.	5.7	2
105	On maximum ratio clique relaxations. Networks, 0, , .	2.7	2
106	Minimum ?-equivalent Circuit Size Problem. Journal of Combinatorial Optimization, 2004, 8, 495-502.	1.3	1
107	Optimization Letters Best Paper Award for 2015. Optimization Letters, 2017, 11, 1-2.	1.6	1
108	A Model for Optimal Reinforcement of Error- and Attack-Resilient Clusters in Networks Under Uncertainty. Springer Optimization and Its Applications, 2017, , 97-117.	0.9	1

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109	Optimal sequencing of heterogeneous, non-instantaneous interventions. Annals of Operations Research, 2019, 276, 109-135.	4.1	1
110	Fractional 0â€“1 programming and submodularity. Journal of Global Optimization, 2022, 84, 77-93.	1.8	1
111	Exact solution approaches for a class of bilevel fractional programs. Optimization Letters, 0, , 1.	1.6	1
112	On Approximability of Boolean Formula Minimization. Journal of Combinatorial Optimization, 2004, 8, 129-135.	1.3	0
113	Optimization Letters Best Paper Award. Optimization Letters, 2014, 8, 2153-2154.	1.6	0
114	Preface: Honoring the 60th birthday of Panos M. Pardalos. Journal of Global Optimization, 2014, 59, 207-207.	1.8	0
115	On speed scaling via integer programming. Operations Research Letters, 2015, 43, 537-544.	0.7	0
116	Restart Strategies. , 2018, , 205-220.		0
117	Optimization Letters Best Paper Award for 2019. Optimization Letters, 2021, 15, 1-2.	1.6	0
118	Fortification Against Cascade Propagation Under Uncertainty. INFORMS Journal on Computing, 0, , .	1.7	0
119	Sequential Shortest Path Interdiction with Incomplete Information and Limited Feedback. Decision Analysis, 0, , .	2.1	0
120	ON BICLUSTERING WITH FEATURE SELECTION FOR MICROARRAY DATA SETS. , 2006, , .		0
121	Restart Strategies. , 2015, , 1-16.		0
122	Operations Research Techniques in Wildfire Fuel Management. Springer Optimization and Its Applications, 2017, , 119-135.	0.9	0
123	Planning of life-depleting preventive maintenance activities with replacements. Annals of Operations Research, 0, , .	4.1	0