Oleg Prokopyev

List of Publications by Year
in descending order

123 papers	2,176 citations	293460 24 h-index	312153 41 g-index
125 all docs	125 docs citations	125 times ranked	1796 citing authors

#	Article	IF	Citations
1	Optimal Condition-Based Mission Abort Decisions. IEEE Transactions on Reliability, 2023, 72, 408-425.	3.5	57
2	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.	3.5	2
3	Learning in Sequential Bilevel Linear Programming. INFORMS Journal on Optimization, 2022, 4, 174-199.	0.9	3
4	Fractional 0â€"1 programming and submodularity. Journal of Global Optimization, 2022, 84, 77-93.	1.1	1
5	Sequence independent lifting for a set of submodular maximization problems. Mathematical Programming, 2022, 196, 69-114.	1.6	4
6	Analysis of process flexibility designs under disruptions. IISE Transactions, 2021, 53, 131-148.	1.6	9
7	On exact solution approaches for bilevel quadratic 0â€"1 knapsack problem. Annals of Operations Research, 2021, 298, 555-572.	2.6	4
8	Finding influential groups in networked systems: The most degree-central clique problem. Omega, 2021, 101, 102262.	3.6	12
9	Optimization Letters Best Paper Award for 2019. Optimization Letters, 2021, 15, 1-2.	0.9	0
10	Age-replacement policies under age-dependent replacement costs. IISE Transactions, 2021, 53, 425-436.	1.6	10
11	Solving a class of feature selection problems via fractional 0â€"1 programming. Annals of Operations Research, 2021, 303, 265-295.	2.6	5
12	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.	3.2	3
13	Optimal Age-Replacement in Anticipation of Time-Dependent, Unpunctual Policy Implementation. IEEE Transactions on Reliability, 2021, 70, 1177-1192.	3.5	6
14	On the maximum small-world subgraph problem. European Journal of Operational Research, 2020, 280, 818-831.	3.5	3
15	Optimization Letters Best Paper Award for 2018. Optimization Letters, 2020, 14, 1-1.	0.9	2
16	Twoâ€stage stochastic minimum sâ€‰â€”â€‰t cut problems: Formulations, complexity and decomposition algorithms. Networks, 2020, 75, 235-258.	1.6	5
17	On greedy and strategic evaders in sequential interdiction settings with incomplete information. Omega, 2020, 92, 102161.	3.6	4
18	On Robust Fractional 0-1 Programming. INFORMS Journal on Optimization, 2020, 2, 96-133.	0.9	3

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19	On Bilevel Optimization with Inexact Follower. Decision Analysis, 2020, 17, 74-95.	1.2	10
20	Solving Stochastic and Bilevel Mixed-Integer Programs via a Generalized Value Function. Operations Research, 2019, 67, 1659-1677.	1.2	11
21	Fractional 0–1 programs: links between mixed-integer linear and conic quadratic formulations. Journal of Global Optimization, 2019, 75, 273-339.	1.1	5
22	Sequential Interdiction with Incomplete Information and Learning. Operations Research, 2019, 67, 72-89.	1.2	26
23	Optimization Letters Best Paper Award for 2017. Optimization Letters, 2019, 13, 1-1.	0.9	5
24	On bilevel minimum and bottleneck spanning tree problems. Networks, 2019, 74, 251-273.	1.6	2
25	On exact solution approaches for the longest induced path problem. European Journal of Operational Research, 2019, 278, 546-562.	3.5	10
26	Finding Critical Links for Closeness Centrality. INFORMS Journal on Computing, 2019, 31, 367-389.	1.0	13
27	Optimization of Cascading Processes in Arbitrary Networks with Stochastic Interactions. IEEE Transactions on Network Science and Engineering, 2019, 6, 773-787.	4.1	3
28	A note on linearized reformulations for a class of bilevel linear integer problems. Annals of Operations Research, 2019, 272, 99-117.	2.6	33
29	Optimal sequencing of heterogeneous, non-instantaneous interventions. Annals of Operations Research, 2019, 276, 109-135.	2.6	1
30	Optimization Letters Best Paper Award for 2016. Optimization Letters, 2018, 12, 1-1.	0.9	4
31	On maximum degree–based –quasi–clique problem: Complexity and exact approaches. Networks, 2018, 71, 136-152.	1.6	18
32	Dynamic Abandon/Extract Decisions for Failed Cardiac Leads. Management Science, 2018, 64, 633-651.	2.4	7
33	Wildfire fuel management: Network-based models and optimization of prescribed burning. European Journal of Operational Research, 2018, 264, 774-796.	3.5	24
34	Critical arcs detection in influence networks. Networks, 2018, 71, 412-431.	1.6	7
35	On a class of bilevel linear mixed-integer programs in adversarial settings. Journal of Global Optimization, 2018, 71, 91-113.	1.1	13
36	Restart Strategies. , 2018, , 205-220.		0

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37	Optimal Design of the Seasonal Influenza Vaccine with Manufacturing Autonomy. INFORMS Journal on Computing, 2018, 30, 371-387.	1.0	11
38	A simple greedy heuristic for linear assignment interdiction. Annals of Operations Research, 2017, 249, 39-53.	2.6	5
39	Finding groups with maximum betweenness centrality. Optimization Methods and Software, 2017, 32, 369-399.	1.6	26
40	Optimal planning of unpunctual preventive maintenance. IISE Transactions, 2017, 49, 127-143.	1.6	12
41	Detecting resilient structures in stochastic networks: A two‐stage stochastic optimization approach. Networks, 2017, 69, 189-204.	1.6	6
42	Fractional 0–1 programming: applications and algorithms. Journal of Global Optimization, 2017, 69, 255-282.	1.1	32
43	Optimization Letters Best Paper Award for 2015. Optimization Letters, 2017, 11, 1-2.	0.9	1
44	Robustness of solutions to critical node detection problems with imperfect data: a computational study. Optimization Methods and Software, 2017, 32, 250-273.	1.6	3
45	A Model for Optimal Reinforcement of Error- and Attack-Resilient Clusters in Networks Under Uncertainty. Springer Optimization and Its Applications, 2017, , 97-117.	0.6	1
46	Operations Research Techniques in Wildfire Fuel Management. Springer Optimization and Its Applications, 2017, , 119-135.	0.6	0
47	On provably best construction heuristics for hard combinatorial optimization problems. Networks, 2016, 67, 238-245.	1.6	9
48	Exact solution approaches for bilevel assignment problems. Computational Optimization and Applications, 2016, 64, 215-242.	0.9	13
49	A simple technique to improve linearized reformulations of fractional (hyperbolic) 0–1 programming problems. Operations Research Letters, 2016, 44, 479-486.	0.5	21
50	The Surgical Patient Routing Problem: A Central Planner Approach. INFORMS Journal on Computing, 2016, 28, 657-673.	1.0	10
51	Optimization Letters Best Paper Award. Optimization Letters, 2016, 10, 1-1.	0.9	7
52	Exact MIP-based approaches for finding maximum quasi-cliques and dense subgraphs. Computational Optimization and Applications, 2016, 64, 177-214.	0.9	29
53	Sequential Shortest Path Interdiction with Incomplete Information. Decision Analysis, 2016, 13, 68-98.	1.2	42
54	Irregular polyomino tiling via integer programming with application in phased array antenna design. Journal of Global Optimization, 2016, 65, 137-173.	1.1	29

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55	On speed scaling via integer programming. Operations Research Letters, 2015, 43, 537-544.	0.5	0
56	Critical nodes for distance‐based connectivity and related problems in graphs. Networks, 2015, 66, 170-195.	1.6	73
57	Scheduling Preventive Maintenance as a Function of an Imperfect Inspection Interval. IEEE Transactions on Reliability, 2015, 64, 983-997.	3.5	46
58	A note on constraint aggregation and value functions for two-stage stochastic integer programs. Discrete Optimization, 2015, 15, 37-45.	0.6	6
59	Exact solution approach for a class of nonlinear bilevel knapsack problems. Journal of Global Optimization, 2015, 61, 291-310.	1.1	12
60	Restart Strategies. , 2015, , 1-16.		0
61	Optimization Letters Best Paper Award. Optimization Letters, 2014, 8, 2153-2154.	0.9	0
62	Polyhedral approximations in p-order cone programming. Optimization Methods and Software, 2014, 29, 1210-1237.	1.6	18
63	On greedy approximation algorithms for a class of two-stage stochastic assignment problems. Optimization Methods and Software, 2014, 29, 42-67.	1.6	4
64	Optimal planning of life-depleting maintenance activities. IIE Transactions, 2014, 46, 636-652.	2.1	16
65	Optimal Implantable Cardioverter Defibrillator (ICD) Generator Replacement. INFORMS Journal on Computing, 2014, 26, 599-615.	1.0	6
66	An integer programming framework for critical elements detection in graphs. Journal of Combinatorial Optimization, 2014, 28, 233-273.	0.8	84
67	Preface: Honoring the 60th birthday of Panos M. Pardalos. Journal of Global Optimization, 2014, 59, 207-207.	1.1	0
68	Finding maximum subgraphs with relatively large vertex connectivity. European Journal of Operational Research, 2014, 239, 349-362.	3.5	16
69	A global optimization algorithm for solving the minimum multiple ratio spanning tree problem. Journal of Global Optimization, 2013, 56, 1029-1043.	1.1	7
70	On characterization of maximal independent sets via quadratic optimization. Journal of Heuristics, 2013, 19, 629-644.	1.1	7
71	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.	1.2	20
72	On Maximum Speedup Ratio of Restart Algorithm Portfolios. INFORMS Journal on Computing, 2013, 25, 222-229.	1.0	8

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73	Stochastic Operating Room Scheduling for High-Volume Specialties Under Block Booking. INFORMS Journal on Computing, 2013, 25, 682-692.	1.0	75
74	Dense Percolation in Large-Scale Mean-Field Random Networks Is Provably "Explosive". PLoS ONE, 2012, 7, e51883.	1.1	6
75	Two-stage quadratic integer programs with stochastic right-hand sides. Mathematical Programming, 2012, 133, 121-158.	1.6	14
76	Managing patient backlog in a surgical suite that uses a block-booking scheduling system. , 2011, , .		4
77	Thermoacoustic heat engine modeling and design optimization. Applied Thermal Engineering, 2011, 31, 2518-2528.	3.0	30
78	How much do we "pay" for using default parameters?. Computational Optimization and Applications, 2011, 48, 91-108.	0.9	11
79	On optimality of a polynomial algorithm for random linear multidimensional assignment problem. Optimization Letters, 2011, 5, 153-164.	0.9	4
80	Integrated design and operation of remnant inventory supply chains under uncertainty. European Journal of Operational Research, 2011, 214, 358-364.	3.5	6
81	On algorithm portfolios and restart strategies. Operations Research Letters, 2011, 39, 49-52.	0.5	18
82	A short note on solvability of systems of interval linear equations. Linear and Multilinear Algebra, 2011, 59, 707-710.	0.5	5
83	Optimizing the Societal Benefits of the Annual Influenza Vaccine: A Stochastic Programming Approach. Operations Research, 2011, 59, 1131-1143.	1.2	41
84	On the Hamming distance in combinatorial optimization problems on hypergraph matchings. Optimization Letters, 2010, 4, 609-617.	0.9	3
85	Finding checkerboard patterns via fractional 0–1 programming. Journal of Combinatorial Optimization, 2010, 20, 1-26.	0.8	6
86	The bilevel knapsack problem with stochastic right-hand sides. Operations Research Letters, 2010, 38, 328-333.	0.5	22
87	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.	3.5	20
88	Solving the Order-Preserving Submatrix Problem via Integer Programming. INFORMS Journal on Computing, 2010, 22, 387-400.	1.0	11
89	Effective management policies for remnant inventory supply chains. IIE Transactions, 2009, 41, 437-447.	2.1	3
90	Checking solvability of systems of interval linear equations and inequalities via mixed integer programming. European Journal of Operational Research, 2009, 199, 117-121.	3.5	23

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91	On equivalent reformulations for absolute valueÂequations. Computational Optimization and Applications, 2009, 44, 363-372.	0.9	99
92	Selective support vector machines. Journal of Combinatorial Optimization, 2009, 17, 3-20.	0.8	8
93	The equitable dispersion problem. European Journal of Operational Research, 2009, 197, 59-67.	3.5	88
94	A Token-Based Approach to Sharing Beliefs in a Large Multiagent Team. Lecture Notes in Control and Information Sciences, 2009, , 417-429.	0.6	4
95	Biclustering in data mining. Computers and Operations Research, 2008, 35, 2964-2987.	2.4	211
96	Solving weighted MAX-SAT via global equilibrium search. Operations Research Letters, 2008, 36, 434-438.	0.5	9
97	Global equilibrium search applied to the unconstrained binary quadratic optimization problem. Optimization Methods and Software, 2008, 23, 129-140.	1.6	24
98	Fractional Zero-One Programming. , 2008, , 1091-1094.		3
99	Streaming cache placement problems: complexity and algorithms. International Journal of Computational Science and Engineering, 2007, 3, 173.	0.4	3
100	Maintaining shared belief in a large multiagent team. , 2007, , .		10
101	Higher moment coherent risk measures. Quantitative Finance, 2007, 7, 373-387.	0.9	86
102	An optimization-based approach for data classification. Optimization Methods and Software, 2007, 22, 3-9.	1.6	9
103	Asymptotic behavior of the expected optimal value of the multidimensional assignment problem. Mathematical Programming, 2007, 109, 525-551.	1.6	21
104	Network-Based Techniques in EEG Data Analysis and Epileptic Brain Modeling. Springer Optimization and Its Applications, 2007, , 559-573.	0.6	5
105	Optimal solutions to minimum total energy broadcasting problem in wireless ad hoc networks. Journal of Combinatorial Optimization, 2006, 11, 59-69.	0.8	21
106	On the number of local minima for the multidimensional assignment problem. Journal of Combinatorial Optimization, 2006, 13, 1-18.	0.8	22
107	Lower Bound Improvement and Forcing Rule for Quadratic Binary Programming. Computational Optimization and Applications, 2006, 33, 187-208.	0.9	27
108	Electroencephalogram (EEG) time series classification: Applications in epilepsy. Annals of Operations Research, 2006, 148, 227-250.	2.6	62

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109	Effects of cueing in cooperative search. Naval Research Logistics, 2006, 53, 814-821.	1.4	6
110	ON BICLUSTERING WITH FEATURE SELECTION FOR MICROARRAY DATA SETS. , 2006, , .		0
111	On complexity of unconstrained hyperbolic 0–1 programming problems. Operations Research Letters, 2005, 33, 312-318.	0.5	38
112	Feature Selection for Consistent Biclustering via Fractional 0–1 Programming. Journal of Combinatorial Optimization, 2005, 10, 7-21.	0.8	47
113	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.	0.8	26
114	On Approximability of Boolean Formula Minimization. Journal of Combinatorial Optimization, 2004, 8, 129-135.	0.8	0
115	Seizure warning algorithm based on optimization and nonlinear dynamics. Mathematical Programming, 2004, 101, 365.	1.6	58
116	Minimum ?-equivalent Circuit Size Problem. Journal of Combinatorial Optimization, 2004, 8, 495-502.	0.8	1
117	A new linearization technique for multi-quadratic 0–1 programming problems. Operations Research Letters, 2004, 32, 517-522.	0.5	71
118	A Mixed-Integer Fractional Optimization Approach to Best Subset Selection. INFORMS Journal on Computing, 0, , .	1.0	3
119	Fortification Against Cascade Propagation Under Uncertainty. INFORMS Journal on Computing, 0, , .	1.0	0
120	Sequential Shortest Path Interdiction with Incomplete Information and Limited Feedback. Decision Analysis, 0, , .	1.2	0
121	On maximum ratio clique relaxations. Networks, 0, , .	1.6	2
122	Exact solution approaches for a class of bilevel fractional programs. Optimization Letters, 0, , 1.	0.9	1
123	Planning of life-depleting preventive maintenance activities with replacements. Annals of Operations Research, 0, , .	2.6	0