James Luedtke

List of Publications by Year
in descending order

37 papers	1,957 citations	567281 15 h-index	395702 33 g-index
38 all docs	38 docs citations	38 times ranked	1685 citing authors

#	Article	IF	Citations
1	Mixed-integer nonlinear optimization. Acta Numerica, 2013, 22, 1-131.	10.7	535
2	A Sample Approximation Approach for Optimization with Probabilistic Constraints. SIAM Journal on Optimization, 2008, 19, 674-699.	2.0	438
3	An integer programming approach for linear programs with probabilistic constraints. Mathematical Programming, 2010, 122, 247-272.	2.4	245
4	A branch-and-cut decomposition algorithm for solving chance-constrained mathematical programs with finite support. Mathematical Programming, 2014, 146, 219-244.	2.4	111
5	Staffing Call Centers with Uncertain Demand Forecasts: A Chance-Constrained Optimization Approach. Management Science, 2010, 56, 1093-1115.	4.1	77
6	New Formulations for Optimization under Stochastic Dominance Constraints. SIAM Journal on Optimization, 2008, 19, 1433-1450.	2.0	73
7	Decomposition algorithms for two-stage chance-constrained programs. Mathematical Programming, 2016, 157, 219-243.	2.4	66
8	Some results on the strength of relaxations of multilinear functions. Mathematical Programming, 2012, 136, 325-351.	2.4	48
9	Strengthened Benders Cuts for Stochastic Integer Programs with Continuous Recourse. INFORMS Journal on Computing, 2017, 29, 77-91.	1.7	42
10	Nonanticipative duality, relaxations, and formulations for chance-constrained stochastic programs. Mathematical Programming, 2017, 162, 51-81.	2.4	40
11	Models and formulations for multivariate dominance-constrained stochastic programs. IIE Transactions, 2015, 47, 1-14.	2.1	39
12	Exact algorithms for the chance-constrained vehicle routing problem. Mathematical Programming, 2018, 172, 105-138.	2.4	38
13	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
14	Solving Chance-Constrained Problems via a Smooth Sample-Based Nonlinear Approximation. SIAM Journal on Optimization, 2020, 30, 2221-2250.	2.0	30
15	Locally ideal formulations for piecewise linear functions with indicator variables. Operations Research Letters, 2013, 41, 627-632.	0.7	28
16	Applications and algorithms for mixed integer nonlinear programming. Journal of Physics: Conference Series, 2009, 180, 012014.	0.4	16
17	Lift-and-project cuts for convex mixed integer nonlinear programs. Mathematical Programming Computation, 2017, 9, 499-526.	4.8	14
18	Optimization-based dispatching policies for open-pit mining. Optimization and Engineering, 2021, 22, 1347-1387.	2.4	9

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19	Stochastic DC optimal power flow with reserve saturation. Electric Power Systems Research, 2020, 189, 106566.	3.6	7
20	Mixed-integer linear programming for scheduling unconventional oil field development. Optimization and Engineering, 2021, 22, 1459-1489.	2.4	7
21	New solution approaches for the maximum-reliability stochastic network interdiction problem. Computational Management Science, 2018, 15, 455-477.	1.3	6
22	Service network design with equilibrium-driven demands. IISE Transactions, 2018, 50, 959-969.	2.4	6
23	Strong Convex Nonlinear Relaxations of the Pooling Problem. SIAM Journal on Optimization, 2020, 30, 1582-1609.	2.0	6
24	Strong-branching inequalities for convex mixed integer nonlinear programs. Computational Optimization and Applications, 2014, 59, 639-665.	1.6	5
25	Models and solution techniques for production planning problems with increasing byproducts. Journal of Global Optimization, 2014, 59, 597-631.	1.8	5
26	Call Center Arrivals: When to Jointly Forecast Multiple Streams?. Production and Operations Management, 2019, 28, 27-42.	3.8	5
27	Linearization-based algorithms for mixed-integer nonlinear programs with convex continuous relaxation. Journal of Global Optimization, 2014, 59, 343-365.	1.8	4
28	Minotaur: a mixed-integer nonlinear optimization toolkit. Mathematical Programming Computation, 2021, 13, 301-338.	4.8	4
29	On sample average approximation for two-stage stochastic programs without relatively complete recourse. Mathematical Programming, 2022, 196, 719-754.	2.4	4
30	On Generating Lagrangian Cuts for Two-Stage Stochastic Integer Programs. INFORMS Journal on Computing, 0, , .	1.7	2
31	New valid inequalities and formulations for the static joint Chance-constrained Lot-sizing problem. Mathematical Programming, 2023, 199, 639-669.	2.4	2
32	Valid inequalities for separable concave constraints with indicator variables. Mathematical Programming, 2018, 172, 415-442.	2.4	1
33	Computing and maximizing the exact reliability of wireless backhaul networks. Electronic Notes in Discrete Mathematics, 2018, 64, 85-94.	0.4	1
34	Intersection Disjunctions for Reverse Convex Sets. Mathematics of Operations Research, 2022, 47, 297-319.	1.3	1
35	Sparse Multi-term Disjunctive Cuts forÂtheÂEpigraph ofÂaÂFunction ofÂBinary Variables. Lecture Notes in Computer Science, 2022, , 98-111.	1.3	1
36	Strategic Planning with Start-Time Dependent Variable Costs. Operations Research, 2009, 57, 1250-1261.	1.9	0

#	Article	IF	Citations
37	Parallelizing Subgradient Methods for the Lagrangian Dual in Stochastic Mixed-Integer Programming. INFORMS Journal on Optimization, 2021, 3, 1-22.	1.4	0