Claudia D'Ambrosio

List of Publications by Year
in descending order

58 papers	1,350 citations	623734 14 h-index	361022 35 g-index
59 all docs	59 docs citations	59 times ranked	1180 citing authors

#	Article	IF	Citations
1	An MILP Approach for Short-Term Hydro Scheduling and Unit Commitment With Head-Dependent Reservoir. IEEE Transactions on Power Systems, 2008, 23, 1115-1124.	6.5	271
2	On the optimal design of water distribution networks: a practical MINLP approach. Optimization and Engineering, 2012, 13, 219-246.	2.4	162
3	Piecewise linear approximation of functions of two variables in MILP models. Operations Research Letters, 2010, 38, 39-46.	0.7	140
4	Mathematical programming techniques in water network optimization. European Journal of Operational Research, 2015, 243, 774-788.	5.7	102
5	Surrogate‐based methods for black‐box optimization. International Transactions in Operational Research, 2017, 24, 393-424.	2.7	94
6	An overview on mathematical programming approaches for the deterministic unit commitment problem in hydro valleys. Energy Systems, 2017, 8, 57-79.	3.0	63
7	A storm of feasibility pumps for nonconvex MINLP. Mathematical Programming, 2012, 136, 375-402.	2.4	52
8	Mixed integer nonlinear programming tools: a practical overview. 4or, 2011, 9, 329-349.	1.6	43
9	Mixed integer nonlinear programming tools: an updated practical overview. Annals of Operations Research, 2013, 204, 301-320.	4.1	41
10	A new mixed integer non-linear programming model for optimal PAT and PRV location in water distribution networks. Urban Water Journal, 2021, 18, 394-409.	2.1	26
11	On interval-subgradient and no-good cuts. Operations Research Letters, 2010, 38, 341-345.	0.7	20
12	An MINLP Solution Method for a Water Network Problem. Lecture Notes in Computer Science, 2006, , 696-707.	1.3	18
13	New Error Measures and Methods for Realizing Protein Graphs from Distance Data. Discrete and Computational Geometry, 2017, 57, 371-418.	0.6	16
14	Heuristic algorithms for the general nonlinear separable knapsack problem. Computers and Operations Research, 2011, 38, 505-513.	4.0	15
15	A branch-and-bound based heuristic algorithm for convex multi-objective MINLPs. European Journal of Operational Research, 2017, 260, 920-933.	5.7	15
16	Complex portfolio selection via convex mixed‐integer quadratic programming: a survey. International Transactions in Operational Research, 2019, 26, 389-414.	2.7	15
17	The power edge set problem. Networks, 2016, 68, 104-120.	2.7	14
18	Feasibility pump for aircraft deconfliction with speed regulation. Journal of Global Optimization, 2018, 71, 501-515.	1.8	14

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19	Experiments with a Feasibility Pump Approach for Nonconvex MINLPs. Lecture Notes in Computer Science, 2010, , 350-360.	1.3	14
20	Valid Inequalities for the Pooling Problem with Binary Variables. Lecture Notes in Computer Science, 2011, , 117-129.	1.3	14
21	Application-oriented mixed integer non-linear programming. 4or, 2010, 8, 319-322.	1.6	13
22	Real-world hydro-power unit-commitment: Dealing with numerical errors and feasibility issues. Energy, 2019, 184, 91-104.	8.8	13
23	Optimistic MILP modeling of non-linear optimization problems. European Journal of Operational Research, 2014, 239, 32-45.	5.7	12
24	On the Product Knapsack Problem. Optimization Letters, 2018, 12, 691-712.	1.6	10
25	Relaxations and heuristics for the multiple non-linear separable knapsack problem. Computers and Operations Research, 2018, 93, 79-89.	4.0	10
26	Aircraft Deconfliction via Mathematical Programming: Review and Insights. Transportation Science, 2022, 56, 118-140.	4.4	10
27	e4clim 1.0: The Energy for a Climate Integrated Model: Description and Application to Italy. Energies, 2019, 12, 4299.	3.1	9
28	Lower and upper bounds for the non-linear generalized assignment problem. Computers and Operations Research, 2020, 120, 104933.	4.0	9
29	An Algorithmic Framework for MINLP with Separable Non-Convexity. The IMA Volumes in Mathematics and Its Applications, 2012, , 315-347.	0.5	9
30	Random projections for quadratic programs. Mathematical Programming, 2020, 183, 619-647.	2.4	8
31	A New Preliminary Model to Optimize PATs Location in a Water Distribution Network. Environmental Sciences Proceedings, 2020, 2, .	0.3	7
32	Detecting and solving aircraft conflicts using bilevel programming. Journal of Global Optimization, 2021, 81, 529-557.	1.8	7
33	Decomposition and shortest path problem formulation for solving the hydro unit commitment and scheduling in a hydro valley. European Journal of Operational Research, 2021, 291, 935-943.	5.7	7
34	A Global-Optimization Algorithm for Mixed-Integer Nonlinear Programs Having Separable Non-convexity. Lecture Notes in Computer Science, 2009, , 107-118.	1.3	7
35	Monomial-wise optimal separable underestimators for mixed-integer polynomial optimization. Journal of Global Optimization, 2017, 67, 759-786.	1.8	6
36	Strong Convex Nonlinear Relaxations of the Pooling Problem. SIAM Journal on Optimization, 2020, 30, 1582-1609.	2.0	6

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37	Distance Geometry in Linearizable Norms. Lecture Notes in Computer Science, 2017, , 830-837.	1.3	6
38	MILP models for the selection of a small set of well-distributed points. Operations Research Letters, 2017, 45, 46-52.	0.7	5
39	Shortest Path Problem variants for the Hydro Unit Commitment Problem. Electronic Notes in Discrete Mathematics, 2018, 69, 309-316.	0.4	5
40	Algorithms and applications for a class of bilevel MILPs. Discrete Applied Mathematics, 2020, 272, 75-89.	0.9	5
41	Observing the State of a Smart Grid Using Bilevel Programming. Lecture Notes in Computer Science, 2015, , 364-376.	1.3	4
42	Strengthening the sequential convex MINLP technique by perspective reformulations. Optimization Letters, 2019, 13, 673-684.	1.6	4
43	Random Projections for Quadratic Programs over a Euclidean Ball. Lecture Notes in Computer Science, 2019, , 442-452.	1.3	4
44	On a Nonconvex MINLP Formulation of the Euclidean Steiner Tree Problem in n-Space. Lecture Notes in Computer Science, 2015, , 122-133.	1.3	4
45	Complexity and inapproximability results for the Power Edge Set problem. Journal of Combinatorial Optimization, 2018, 35, 895-905.	1.3	3
46	On a nonconvex MINLP formulation of the Euclidean Steiner tree problem in n-space: missing proofs. Optimization Letters, 2020, 14, 409-415.	1.6	3
47	Box-Constrained Mixed-Integer Polynomial Optimization Using Separable Underestimators. Lecture Notes in Computer Science, 2014, , 198-209.	1.3	3
48	A Learning-Based Mathematical Programming Formulation for the Automatic Configuration of Optimization Solvers. Lecture Notes in Computer Science, 2020, , 700-712.	1.3	3
49	Heuristics for the General Multiple Non-linear Knapsack Problem. Electronic Notes in Discrete Mathematics, 2016, 55, 69-72.	0.4	2
50	Learning to Configure Mathematical Programming Solvers by Mathematical Programming. Lecture Notes in Computer Science, 2020, , 377-389.	1.3	2
51	Extrapolating curvature lines in rough concept sketches using mixed-integer nonlinear optimization. Optimization and Engineering, 2019, 20, 337-347.	2.4	1
52	Optimal Scheduling of a Multiunit Hydro Power Station in a Short-Term Planning Horizon. Profiles in Operations Research, 2015, , 167-181.	0.4	1
53	Optimizing the Design of Water Distribution Networks Using Mathematical Optimization. Profiles in Operations Research, 2015, , 183-198.	0.4	1
54	Flying Safely by Bilevel Programming. AIRO Springer Series, 2019, , 197-206.	0.6	1

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55	Handling Separable Non-convexities Using Disjunctive Cuts. Lecture Notes in Computer Science, 2020, , 102-114.	1.3	1
56	Special issue on: Nonlinear and combinatorial methods for energy optimization. EURO Journal on Computational Optimization, 2017, 5, 1-3.	2.4	0
57	Learning discontinuous piecewise affine fitting functions using mixed integer programming over lattice. Journal of Global Optimization, 2021, 81, 85-108.	1.8	0
58	On the Observability of Smart Grids and Related Optimization Methods. Operations Research Proceedings: Papers of the Annual Meeting = Vorträge Der Jahrestagung / DGOR, 2020, , 281-287.	0.1	0