Stephan Dempe

List of Publications by Year
in descending order

113 papers	2,751 citations	218381 26 h-index	205818 48 g-index
121 all docs	121 docs citations	121 times ranked	1048 citing authors

#	Article	IF	Citations
1	A Bicriteria Approach for Saving a Path Maximizing Dynamic Contraflow. Asia-Pacific Journal of Operational Research, 2022, 39, .	0.9	2
2	Second order optimality conditions for a bilevel optimization problem in terms of approximate Hessians. Journal of Mathematical Analysis and Applications, 2022, 509, 125932.	0.5	0
3	Necessary optimality conditions for a semivectorial bilevel problem under a partial calmness condition. Optimization, 2021, 70, 1937-1957.	1.0	5
4	Simple bilevel programming and extensions. Mathematical Programming, 2021, 188, 227-253.	1.6	5
5	Genericity Analysis of Multi-Leader-Disjoint-Followers Game. SIAM Journal on Optimization, 2021, 31, 2055-2079.	1.2	2
6	Optimality Conditions for a Nonsmooth Semivectorial Bilevel Optimization Problem. Numerical Functional Analysis and Optimization, 2021, 42, 298-319.	0.6	0
7	Dynamic network flow location models and algorithms for quickest evacuation planning. Journal of Industrial and Management Optimization, 2021, 17, 2943.	0.8	9
8	Universal Maximum Flow with Intermediate Storage for Evacuation Planning. Springer Optimization and Its Applications, 2021, , 229-241.	0.6	8
9	Maximum Multi-Commodity Flow with Proportional and Flow-Dependent Capacity Sharing. , 2021, 2, .		0
10	New optimality conditions for bilevel programs by using an exact separation principle. Optimization Letters, 2020, 14, 1381-1392.	0.9	1
11	Minimizing the difference of two quasiconvex functions over a vector-valued quasiconvex system. Optimization, 2020, 69, 997-1012.	1.0	0
12	Semivectorial bilevel programming versus scalar bilevel programming. Optimization, 2020, 69, 657-679.	1.0	18
13	A special three-level optimization problem. Journal of Global Optimization, 2020, 76, 519-531.	1.1	3
14	Minimizing the difference of two quasiconvex functions. Optimization Letters, 2020, 14, 1765-1779.	0.9	1
15	Network Flow with Intermediate Storage: Models and Algorithms. SN Operations Research Forum, 2020, 1, 1.	0.6	17
16	Risk-Averse Models in Bilevel Stochastic Linear Programming. SIAM Journal on Optimization, 2020, 30, 377-406.	1.2	18
17	Optimality conditions for pessimistic bilevel problems using convexificator. Positivity, 2020, 24, 1399-1417.	0.3	3
18	Optimality conditions in terms of convexificators for a bilevel multiobjective optimization problem. Optimization, 2020, 69, 1811-1830.	1.0	9

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19	Bilevel Optimization: Theory, Algorithms, Applications and a Bibliography. Springer Optimization and Its Applications, 2020, , 581-672.	0.6	27
20	Computing Locally Optimal Solutions of the Bilevel Optimization Problem Using the KKT Approach. Lecture Notes in Computer Science, 2019, , 147-157.	1.0	3
21	Solution of bilevel optimization problems using the KKT approach. Optimization, 2019, 68, 1471-1489.	1.0	29
22	Solving inverse optimal control problems via value functions to global optimality. Journal of Global Optimization, 2019, 74, 297-325.	1.1	15
23	Efficient Dynamic Flow Algorithms for Evacuation Planning Problems with Partial Lane Reversal. Mathematics, 2019, 7, 993.	1.1	21
24	Two-level value function approach to non-smooth optimistic and pessimistic bilevel programs. Optimization, 2019, 68, 433-455.	1.0	11
25	Optimality conditions for mixed discrete bilevel optimization problems. Optimization, 2018, 67, 737-756.	1.0	5
26	Sufficient Optimality Conditions for a Bilevel Semivectorial D.C. Problem. Numerical Functional Analysis and Optimization, 2018, 39, 1622-1634.	0.6	2
27	Optimality Conditions for Special Semidefinite Bilevel Optimization Problems. SIAM Journal on Optimization, 2018, 28, 1564-1587.	1.2	4
28	Efficient continuous contraflow algorithms for evacuation planning problems. Annals of Operations Research, 2017, 254, 335-364.	2.6	26
29	Reduction of the bilevel stochastic optimization problem with quantile objective function to a mixed‐integer problem. Applied Stochastic Models in Business and Industry, 2017, 33, 544-554.	0.9	10
30	Optimality Conditions for Bilevel Vector Optimization Problems with a Variable Ordering Structure. Numerical Functional Analysis and Optimization, 2017, 38, 988-1007.	0.6	2
31	Solving discrete linear bilevel optimization problems using the optimal value reformulation. Journal of Global Optimization, 2017, 68, 255-277.	1.1	23
32	Bilevel Optimization: Reformulation andÂFirst Optimality Conditions. Forum for Interdisciplinary Mathematics, 2017, , 1-20.	0.8	0
33	Bilevel Optimal Control, Equilibrium, and Combinatorial Problems with Applications to Engineering. Mathematical Problems in Engineering, 2017, 2017, 1-3.	0.6	6
34	Bilevel Programming, Equilibrium, and Combinatorial Problems with Applications to Engineering 2016. Mathematical Problems in Engineering, 2016, 2016, 1-3.	0.6	5
35	Optimality Conditions for Set-Valued Optimisation Problems Using a Modified Demyanov Difference. Journal of Optimization Theory and Applications, 2016, 171, 402-421.	0.8	10
36	Bilevel Optimal Control Problems with Pure State Constraints and Finite-dimensional Lower Level. SIAM Journal on Optimization, 2016, 26, 564-588.	1.2	16

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37	Special issue of the 6th German Polish Conference on Optimization in Wittenberg. Optimization, 2016, 65, 569-570.	1.0	0
38	On the solution of convex bilevel optimization problems. Computational Optimization and Applications, 2016, 63, 685-703.	0.9	39
39	Bilevel Programming and Applications. Mathematical Problems in Engineering, 2015, 2015, 1-16.	0.6	52
40	The bilevel road pricing problem. International Journal of Computing and Optimization, 2015, 2, 71-92.	0.1	8
41	Bilevel Programming Problems. Energy Systems, 2015, , .	0.5	162
42	On the effects of combining objectives in multi-objective optimization. Mathematical Methods of Operations Research, 2015, 82, 1-18.	0.4	3
43	Optimality conditions in nondifferentiable fuzzy optimization. Optimization, 2015, 64, 349-363.	1.0	6
44	Lipschitz continuity of the optimal value function in parametric optimization. Journal of Global Optimization, 2015, 61, 363-377.	1.1	7
45	Necessary optimality conditions for optimistic bilevel programming problems using set-valued programming. Journal of Global Optimization, 2015, 61, 769-788.	1.1	11
46	Necessary optimality conditions in pessimistic bilevel programming. Optimization, 2014, 63, 505-533.	1.0	72
47	A new equivalent single-level problem for bilevel problems. Optimization, 2014, 63, 789-798.	1.0	7
48	KKT Reformulation and Necessary Conditions for Optimality in Nonsmooth Bilevel Optimization. SIAM Journal on Optimization, 2014, 24, 1639-1669.	1.2	30
49	Solution algorithm for an optimistic linear Stackelberg problem. Computers and Operations Research, 2014, 41, 277-281.	2.4	19
50	New Optimality Conditions for the Semivectorial Bilevel Optimization Problem. Journal of Optimization Theory and Applications, 2013, 157, 54-74.	0.8	52
51	The bilevel programming problem: reformulations, constraint qualifications and optimality conditions. Mathematical Programming, 2013, 138, 447-473.	1.6	86
52	Sensitivity Analysis for Two-Level Value Functions with Applications to Bilevel Programming. SIAM Journal on Optimization, 2012, 22, 1309-1343.	1.2	46
53	On the calculation of a membership function for the solution of a fuzzy linear optimization problem. Fuzzy Sets and Systems, 2012, 188, 58-67.	1.6	37
54	Feasible direction method for bilevel programming problem. Optimization, 2012, 61, 597-616.	1.0	18

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55	Computing the Pareto frontier of a bi-objective bi-level linear problem using a multiobjective mixed-integer programming algorithm. Optimization, 2012, 61, 335-358.	1.0	26
56	Yager ranking index in fuzzy bilevel optimization. Artificial Intelligence Research, 2012, 2, .	0.3	7
57	Bilevel problems over polyhedra with extreme point optimal solutions. Journal of Global Optimization, 2012, 53, 573-586.	1.1	15
58	Necessary Optimality Conditions and a New Approach to Multiobjective Bilevel Optimization Problems. Journal of Optimization Theory and Applications, 2012, 155, 100-114.	0.8	19
59	Bilevel road pricing: theoretical analysis and optimality conditions. Annals of Operations Research, 2012, 196, 223-240.	2.6	27
60	Comments on: Algorithms for linear programming with linear complementarity constraints. Top, 2012, 20, 28-29.	1.1	0
61	On the Karush–Kuhn–Tucker reformulation of the bilevel optimization problem. Nonlinear Analysis: Theory, Methods & Applications, 2012, 75, 1202-1218.	0.6	60
62	Is bilevel programming a special case of a mathematical program with complementarity constraints?. Mathematical Programming, 2012, 131, 37-48.	1.6	158
63	Optimale Mautgebühren â€" Ein Modell und ein Optimalitätstest. Automatisierungstechnik, 2012, 60, 225-232.	0.4	2
64	Natural gas bilevel cash-out problem: Convergence of a penalty function method. European Journal of Operational Research, 2011, 215, 532-538.	3.5	22
65	The Generalized Mangasarian-Fromowitz Constraint Qualification and Optimality Conditions for Bilevel Programs. Journal of Optimization Theory and Applications, 2011, 148, 46-68.	0.8	54
66	Direct search algorithm for bilevel programming problems. Computational Optimization and Applications, 2011, 49, 1-15.	0.9	24
67	Comment to â€œinteractive fuzzy goal programming approach for bilevel programming problemâ€•by S.R. Arora and R. Gupta. European Journal of Operational Research, 2011, 212, 429-431.	3.5	12
68	Optimality results for a specific bilevel optimization problem. Optimization, 2011, 60, 813-822.	1.0	3
69	Reduction of Dimension of the Upper Level Problem in a Bilevel Programming Model Part 1. Smart Innovation, Systems and Technologies, 2011, , 255-264.	0.5	2
70	Second order optimality conditions for bilevel set optimization problems. Journal of Global Optimization, 2010, 47, 233-245.	1.1	13
71	Fuzzy and Exact Optimality Conditions for a Bilevel Set-Valued Problem via Extremal Principles. Numerical Functional Analysis and Optimization, 2010, 31, 907-920.	0.6	5
72	Spatial optimization for dispersion of remnant trees in seed-tree cuttings and retention-tree stands of Scots pine. Scandinavian Journal of Forest Research, 2010, 25, 432-445.	0.5	3

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73	Optimality Conditions for a Simple Convex Bilevel Programming Problem. Springer Optimization and Its Applications, 2010, , 149-161.	0.6	17
74	Modeling the Behavior of Flow Regulating Devices in Water Distribution Systems Using Constrained Nonlinear Programming. Journal of Hydraulic Engineering, 2009, 135, 970-982.	0.7	25
75	Bilevel programming with discrete lower level problems. Optimization, 2009, 58, 1029-1047.	1.0	22
76	On Reducibility in Bilevel Problems. SIAM Journal on Optimization, 2009, 20, 718-727.	1.2	5
77	Large gaps in one-dimensional cutting stock problems. Discrete Applied Mathematics, 2008, 156, 1929-1935.	0.5	19
78	Necessary optimality conditions of a D.C. set-valued bilevel optimization problem. Optimization, 2008, 57, 777-793.	1.0	6
79	Variational Analysis in Bilevel Programming. Statistical Science and Interdisciplinary Research, 2008, , 257-277.	0.0	4
80	New necessary optimality conditions in optimistic bilevel programming. Optimization, 2007, 56, 577-604.	1.0	110
81	Necessary optimality conditions for bilevel set optimization problems. Journal of Global Optimization, 2007, 39, 529-542.	1.1	30
82	Bilevel programming with convex lower level problems. , 2006, , 51-71.		8
83	Optimality conditions for bilevel programming problems. Optimization, 2006, 55, 505-524.	1.0	42
84	Optimality conditions for bilevel programming problems. , 2006, , 3-28.		19
85	Linear bilevel programming with upper level constraints depending on the lower level solution. Applied Mathematics and Computation, 2006, 180, 247-254.	1.4	39
86	Inverse Linear Programming. , 2006, , 19-28.		9
87	Optimal Toll Charges in a Fuzzy Flow Problem. , 2006, , 405-413.		9
88	Hydraulic Simulation of Water Supply Networks Under Control. , 2005, , 1.		14
89	Discrete bilevel programming: Application to a natural gas cash-out problem. European Journal of Operational Research, 2005, 166, 469-488.	3.5	59
90	Bilevel Programming. , 2005, , 165-193.		11

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91	Annotated Bibliography on Bilevel Programming and Mathematical Programs with Equilibrium Constraints. Optimization, 2003, 52, 333-359.	1.0	380
92	A minimax resource allocation problem with variable resources. European Journal of Operational Research, 2002, 136, 46-56.	3.5	7
93	Bundle Trust-Region Algorithm for Bilinear Bilevel Programming. Journal of Optimization Theory and Applications, 2001, 110, 265-288.	0.8	36
94	The generalized jacobian of the optimal solution in parametric optimization. Optimization, 2001, 50, 387-405.	1.0	14
95	A Bundle Algorithm Applied to Bilevel Programming Problems with Non-Unique Lower Level Solutions. Computational Optimization and Applications, 2000, 15, 145-166.	0.9	29
96	A Bundle Trust Region Algorithm for Bilinear Bilevel Programming. , 2000, , 7-12.		0
97	GeneralizedPC1-functions. Optimization, 1999, 46, 311-326.	1.0	2
98	An Implicit Function Approach to Bilevel Programming Problems. Nonconvex Optimization and Its Applications, 1998, , 273-294.	0.1	7
99	Quasidifferntiability of optimal solutions in parametric optimal solutions in parametric nonlinear optimization. Optimization, 1997, 40, 1-24.	1.0	22
100	First-Order Necessary Optimality Conditions for General Bilevel Programming Problems. Journal of Optimization Theory and Applications, 1997, 95, 735-739.	0.8	28
101	On an algorithm solving two-level programming problems with nonunique lower level solutions. Computational Optimization and Applications, 1996, 6, 227-249.	0.9	56
102	Directional derivatives of the solution of a parametric nonlinear program. Mathematical Programming, 1995, 70, 159-172.	1.6	66
103	Stability analysis for a special interval cutting problem. European Journal of Operational Research, 1995, 87, 188-199.	3.5	0
104	Computing optimal incentives via bilevel programming. Optimization, 1995, 33, 29-42.	1.0	9
105	On Generalized Differentiability of Optimal Solutions and its Application to an Algorithm for Solving Bilevel Optimization Problems. , 1995, , 36-56.		11
106	Directional differentiability of optimal solutions under Slater's condition. Mathematical Programming, 1993, 59, 49-69.	1.6	33
107	On an Algorithm Solving Bilevel Programming Problems. , 1993, , 177-178.		0
108	Optimality conditions for bilevel programming problems. , 1992, , 17-24.		4

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109	A necessary and a sufficient optimality condition for bilevel programming problems. Optimization, 1992, 25, 341-354.	1.0	96
110	On the directional derivative of the optimal solution mapping without linear independence constraint qualification. Optimization, 1989, 20, 401-414.	1.0	6
111	A simple algorithm for the-linear bilevel programming problem. Optimization, 1987, 18, 373-385.	1.0	66
112	A simple but NP-hard problem of mixed-discrete programming and its solution by approximate algorithms. Optimization, 1985, 16, 705-714.	1.0	0
113	Application of discrete bilevel programming to some applied problems. , 0, , .		0