

C Roos

List of Publications by Year in descending order

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114
papers

3,715
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136885

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116
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docs citations

116
times ranked

1325
citing authors

#	ARTICLE	IF	CITATIONS
1	A Universal and Structured Way to Derive Dual Optimization Problem Formulations. <i>INFORMS Journal on Optimization</i> , 2020, 2, 229-255.	0.9	4
2	An improved version of Chubanov's method for solving a homogeneous feasibility problem. <i>Optimization Methods and Software</i> , 2018, 33, 26-44.	1.6	10
3	Optimal Strategies for Flood Prevention. <i>Management Science</i> , 2017, 63, 1644-1656.	2.4	33
4	Infeasible Interior-Point Methods for Linear Optimization Based on Large Neighborhood. <i>Journal of Optimization Theory and Applications</i> , 2016, 170, 562-590.	0.8	4
5	An Improved and Simplified Full-Newton Step $O(n)$ Infeasible Interior-Point Method for Linear Optimization. <i>SIAM Journal on Optimization</i> , 2015, 25, 102-114.	1.2	21
6	Economically Efficient Standards to Protect the Netherlands Against Flooding. <i>Interfaces</i> , 2014, 44, 7-21.	1.6	44
7	On the chaotic behavior of the primal-dual affine-scaling algorithm for linear optimization. <i>Chaos</i> , 2014, 24, 043132.	1.0	1
8	A Full Nesterov-Todd Step Infeasible Interior-Point Method for Second-Order Cone Optimization. <i>Journal of Optimization Theory and Applications</i> , 2013, 158, 816-858.	0.8	24
9	Safe Dike Heights at Minimal Costs: The Nonhomogeneous Case. <i>Operations Research</i> , 2012, 60, 1342-1355.	1.2	42
10	Kernel-Based Interior-Point Methods for Monotone Linear Complementarity Problems over Symmetric Cones. <i>Journal of Optimization Theory and Applications</i> , 2011, 150, 444-474.	0.8	21
11	The non-existence of some perfect codes over non-prime power alphabets. <i>Discrete Mathematics</i> , 2011, 311, 1344-1348.	0.4	3
12	Full Nesterov-Todd step infeasible interior-point method for symmetric optimization. <i>European Journal of Operational Research</i> , 2011, 214, 473-484.	3.5	80
13	Improved Full-Newton Step $O(nL)$ Infeasible Interior-Point Method for Linear Optimization. <i>Journal of Optimization Theory and Applications</i> , 2010, 145, 271-288.	0.8	17
14	Convergence of the homotopy path for a full-Newton step infeasible interior-point method. <i>Operations Research Letters</i> , 2010, 38, 147-151.	0.5	2
15	A generic primal-dual interior-point method for semidefinite optimization based on a new class of kernel functions. <i>Optimization Methods and Software</i> , 2010, 25, 387-403.	1.6	10
16	Unified Analysis of Kernel-Based Interior-Point Methods for $\mathcal{P}_*(\kappa)$ -Linear Complementarity Problems. <i>SIAM Journal on Optimization</i> , 2010, 20, 3014-3039.	1.2	36
17	Counterexample to a Conjecture on an Infeasible Interior-Point Method. <i>SIAM Journal on Optimization</i> , 2010, 20, 1862-1867.	1.2	1
18	Kernel-function Based Algorithms for Semidefinite Optimization. <i>RAIRO - Operations Research</i> , 2009, 43, 189-199.	1.0	10

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19	A new kernel function yielding the best known iteration bounds for primal-dual interior-point algorithms. <i>Acta Mathematica Sinica, English Series</i> , 2009, 25, 2169-2178.	0.2	16
20	Primal-dual interior-point algorithms for second-order cone optimization based on kernel functions. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2009, 70, 3584-3602.	0.6	37
21	A new full-Newton step $O(n)$ infeasible interior-point algorithm for semidefinite optimization. <i>Numerical Algorithms</i> , 2009, 52, 225-255.	1.1	35
22	A polynomial-time algorithm for linear optimization based on a new class of kernel functions. <i>Journal of Computational and Applied Mathematics</i> , 2009, 224, 500-513.	1.1	23
23	A Class of Large-Update and Small-Update Primal-Dual Interior-Point Algorithms for Linear Optimization. <i>Journal of Optimization Theory and Applications</i> , 2008, 138, 341-359.	0.8	38
24	Generic Primal-dual Interior Point Methods Based on a New Kernel Function. <i>RAIRO - Operations Research</i> , 2008, 42, 199-213.	1.0	13
25	Simplified $O(nL)$ infeasible interior-point algorithm for linear optimization using full-Newton steps. <i>Optimization Methods and Software</i> , 2007, 22, 519-530.	1.6	32
26	A Full-Newton Step $O(n)$ Infeasible Interior-Point Algorithm for Linear Optimization. <i>SIAM Journal on Optimization</i> , 2006, 16, 1110-1136.	1.2	102
27	On Central-Path Proximity Measures in Interior-Point Methods. <i>Journal of Optimization Theory and Applications</i> , 2005, 127, 303-328.	0.8	3
28	Primal-Dual Interior-Point Algorithms for Semidefinite Optimization Based on a Simple Kernel Function. <i>Mathematical Modelling and Algorithms</i> , 2005, 4, 409-433.	0.5	43
29	Limiting behavior of the central path in semidefinite optimization. <i>Optimization Methods and Software</i> , 2005, 20, 99-113.	1.6	15
30	A Comparative Study of Kernel Functions for Primal-Dual Interior-Point Algorithms in Linear Optimization. <i>SIAM Journal on Optimization</i> , 2004, 15, 101-128.	1.2	200
31	On implementing a primal-dual interior-point method for conic quadratic optimization. <i>Mathematical Programming</i> , 2003, 95, 249-277.	1.6	483
32	A polynomial-time algorithm for linear optimization based on a new simple kernel function. <i>Optimization Methods and Software</i> , 2003, 18, 631-646.	1.6	25
33	Extended Matrix Cube Theorems with Applications to H_2 -Theory in Control. <i>Mathematics of Operations Research</i> , 2003, 28, 497-523.	0.8	31
34	Linear Optimization. , 2003, , 597-616.		1
35	A primal-dual interior-point method for linear optimization based on a new proximity function. <i>Optimization Methods and Software</i> , 2002, 17, 985-1008.	1.6	23
36	Notes on Duality in Second Order and p -Order Cone Optimization. <i>Optimization</i> , 2002, 51, 627-643.	1.0	30

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37	A New Efficient Large-Update Primal-Dual Interior-Point Method Based on a Finite Barrier. SIAM Journal on Optimization, 2002, 13, 766-782.	1.2	87
38	Primal-Dual Interior-Point Methods for Second-Order Conic Optimization Based on Self-Regular Proximities. SIAM Journal on Optimization, 2002, 13, 179-203.	1.2	48
39	Robust Solutions of Uncertain Quadratic and Conic-Quadratic Problems. SIAM Journal on Optimization, 2002, 13, 535-560.	1.2	129
40	On the Convergence of the Central Path in Semidefinite Optimization. SIAM Journal on Optimization, 2002, 12, 1090-1099.	1.2	57
41	Self-regular functions and new search directions for linear and semidefinite optimization. Mathematical Programming, 2002, 93, 129-171.	1.6	158
42	A new class of polynomial primal-dual methods for linear and semidefinite optimization. European Journal of Operational Research, 2002, 143, 234-256.	3.5	33
43	A Scaled Gauss-Newton Primal-Dual Search Direction for Semidefinite Optimization. SIAM Journal on Optimization, 2001, 11, 870-888.	1.2	4
44	New Complexity Analysis of the Primal-Dual Method for Semidefinite Optimization Based on the Nesterov-Todd Direction. Journal of Optimization Theory and Applications, 2001, 109, 327-343.	0.8	6
45	A Homogenized Cutting Plane Method to Solve the Convex Feasibility Problem. Applied Optimization, 2001, , 167-190.	0.4	1
46	New Complexity Analysis of the Primal-Dual Newton Method for Linear Optimization. Annals of Operations Research, 2000, 99, 23-39.	2.6	30
47	On Copositive Programming and Standard Quadratic Optimization Problems. Journal of Global Optimization, 2000, 18, 301-320.	1.1	145
48	A Strongly Polynomial Rounding Procedure Yielding a Maximally Complementary Solution for $\mathcal{P}_*(\kappa)$ Linear Complementarity Problems. SIAM Journal on Optimization, 2000, 11, 320-340.	1.2	30
49	An efficient algorithm for critical circuits and finite eigenvectors in the max-plus algebra. Linear Algebra and Its Applications, 1999, 295, 231-240.	0.4	9
50	Application of Nonlinear Optimization to Reactor Core Fuel Reloading. Annals of Nuclear Energy, 1999, 26, 423-448.	0.9	10
51	Note on a paper of Broyden. Operations Research Letters, 1999, 25, 183-186.	0.5	7
52	Primal-dual potential reduction methods for semidefinite programming using affine-scaling directions. Applied Numerical Mathematics, 1999, 29, 335-360.	1.2	1
53	Complexity analysis of logarithmic barrier decomposition methods for semi-infinite linear programming. Applied Numerical Mathematics, 1999, 29, 379-394.	1.2	20
54	Basis- and partition identification for quadratic programming and linear complementarity problems. Mathematical Programming, 1999, 86, 261-282.	1.6	6

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55	On maximization of quadratic form over intersection of ellipsoids with common center. <i>Mathematical Programming</i> , 1999, 86, 463-473.	1.6	123
56	FINDING OPTIMAL NUCLEAR REACTOR CORE RELOAD PATTERNS USING NONLINEAR OPTIMIZATION AND SEARCH HEURISTICS. <i>Engineering Optimization</i> , 1999, 32, 143-176.	1.5	5
57	Polynomial Primal-Dual Affine Scaling Algorithms in Semidefinite Programming. <i>Journal of Combinatorial Optimization</i> , 1998, 2, 51-69.	0.8	6
58	A nonconvex weighted potential function for polynomial target following methods. <i>Annals of Operations Research</i> , 1998, 81, 3-14.	2.6	1
59	On the Dimension of the Set of Rim Perturbations for Optimal Partition Invariance. <i>SIAM Journal on Optimization</i> , 1998, 9, 207-216.	1.2	15
60	Copositive relaxation for general quadratic programming. <i>Optimization Methods and Software</i> , 1998, 9, 185-208.	1.6	48
61	On Primal-Dual Path-Following Algorithms for Semidefinite Programming. <i>Applied Optimization</i> , 1998, , 137-157.	0.4	3
62	Method of approximate centers for semi-definite programming. <i>Optimization Methods and Software</i> , 1997, 7, 291-309.	1.6	1
63	A Family of Polynomial Affine Scaling Algorithms for Positive SemiDefinite Linear Complementarity Problems. <i>SIAM Journal on Optimization</i> , 1997, 7, 126-140.	1.2	15
64	Logarithmic Barrier Decomposition Methods for Semi-infinite Programming. <i>International Transactions in Operational Research</i> , 1997, 4, 285-303.	1.8	15
65	Potential reduction algorithms for structured combinatorial optimization problems. <i>Operations Research Letters</i> , 1997, 21, 55-64.	0.5	8
66	Optimization of nuclear reactor reloading patterns. <i>Annals of Operations Research</i> , 1997, 69, 65-84.	2.6	8
67	Convergence of the Dual Variables for the Primal Affine Scaling Method with Unit Steps in the Homogeneous Case. <i>Journal of Optimization Theory and Applications</i> , 1997, 95, 305-321.	0.8	4
68	Improved complexity using higher-order correctors for primal-dual Dikin affine scaling. <i>Mathematical Programming</i> , 1997, 76, 117-130.	1.6	9
69	Sensitivity analysis in linear programming: just be careful!. <i>European Journal of Operational Research</i> , 1997, 101, 15-28.	3.5	96
70	A potential reduction approach to the frequency assignment problem. <i>Discrete Applied Mathematics</i> , 1997, 78, 251-282.	0.5	14
71	Initialization in semidefinite programming via a self-dual skew-symmetric embedding. <i>Operations Research Letters</i> , 1997, 20, 213-221.	0.5	63
72	Primal-dual target-following algorithms for linear programming. <i>Annals of Operations Research</i> , 1996, 62, 197-231.	2.6	30

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73	Long-step primal-dual target-following algorithms for linear programming. <i>Mathematical Methods of Operations Research</i> , 1996, 44, 11-30.	0.4	6
74	Interior point methods, a decade after Karmarkar's survey, with application to the smallest eigenvalue problem. <i>Statistica Neerlandica</i> , 1996, 50, 146-170.	0.9	6
75	A Polynomial Primal-Dual Dikin-Type Algorithm for Linear Programming. <i>Mathematics of Operations Research</i> , 1996, 21, 341-353.	0.8	21
76	A Survey of the Implications of the Behavior of the Central Path for the Duality Theory of Linear Programming. <i>Management Science</i> , 1995, 41, 1922-1934.	2.4	5
77	A sufficient condition for self-concordance, with application to some classes of structured convex programming problems. <i>Mathematical Programming</i> , 1995, 69, 75-88.	1.6	22
78	A logarithmic barrier cutting plane method for convex programming. <i>Annals of Operations Research</i> , 1995, 58, 67-98.	2.6	21
79	The theory of linear programming: skew symmetric self-dual problems and the central path. <i>Optimization</i> , 1994, 29, 225-233.	1.0	54
80	Primal-dual algorithms for linear programming based on the logarithmic barrier method. <i>Journal of Optimization Theory and Applications</i> , 1994, 83, 1-26.	0.8	30
81	Adding and Deleting Constraints in the Logarithmic Barrier Method for LP. <i>Nonconvex Optimization and Its Applications</i> , 1994, , 166-185.	0.1	14
82	Inverse barrier methods for linear programming. <i>RAIRO - Operations Research</i> , 1994, 28, 135-163.	1.0	6
83	The linear complementarity problem, sufficient matrices, and the criss-cross method. <i>Linear Algebra and Its Applications</i> , 1993, 187, 1-14.	0.4	36
84	Degeneracy in interior point methods for linear programming: a survey. <i>Annals of Operations Research</i> , 1993, 46-47, 107-138.	2.6	35
85	A Long-step barrier method for convex quadratic programming. <i>Algorithmica</i> , 1993, 10, 365-382.	1.0	24
86	A Large-Step Analytic Center Method for a Class of Smooth Convex Programming Problems. <i>SIAM Journal on Optimization</i> , 1992, 2, 55-70.	1.2	21
87	A Complexity Reduction for the Long-Step Path-Following Algorithm for Linear Programming. <i>SIAM Journal on Optimization</i> , 1992, 2, 71-87.	1.2	20
88	Object delineation in noisy images by a modified policy-iteration method. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 1992, 14, 952-958.	9.7	6
89	On the classical logarithmic barrier function method for a class of smooth convex programming problems. <i>Journal of Optimization Theory and Applications</i> , 1992, 73, 1-25.	0.8	42
90	A build-up variant of the logarithmic barrier method for LP. <i>Operations Research Letters</i> , 1992, 12, 181-186.	0.5	15

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91	A polynomial method of approximate centers for linear programming. <i>Mathematical Programming</i> , 1992, 54, 295-305.	1.6	81
92	Interior point approach to linear programming: theory, algorithms & parametric analysis. , 1992, , 181-216.		1
93	A potential-reduction variant of Renegar's short-step path-following method for linear programming. <i>Linear Algebra and Its Applications</i> , 1991, 152, 43-68.	0.4	11
94	A survey of search directions in interior point methods for linear programming. <i>Mathematical Programming</i> , 1991, 52, 481-509.	1.6	60
95	Developments towards the slice-wise three-dimensional reconstruction of the distribution of the contrast perfusion in the myocardial muscle from biplane angiographic views. <i>International Journal of Cardiovascular Imaging</i> , 1990, 5, 213-224.	0.2	3
96	An exponential example for Terlaky's pivoting rule for the criss-cross simplex method. <i>Mathematical Programming</i> , 1990, 46, 79-84.	1.6	48
97	On the existence of certain generalized Moore geometries, V. <i>Discrete Mathematics</i> , 1989, 76, 183-189.	0.4	1
98	New trajectory-following polynomial-time algorithm for linear programming problems. <i>Journal of Optimization Theory and Applications</i> , 1989, 63, 433-458.	0.8	10
99	Cramer and Cayley-Hamilton in the max algebra. <i>Linear Algebra and Its Applications</i> , 1988, 101, 87-108.	0.4	82
100	Fair prices exist always in production networks. <i>Economics Letters</i> , 1986, 21, 209-213.	0.9	0
101	On the existence of certain generalized moore geometries (Part IV). <i>Discrete Mathematics</i> , 1986, 62, 139-144.	0.4	5
102	On the existence of certain generalized Moore geometries, part III. <i>Discrete Mathematics</i> , 1986, 58, 275-283.	0.4	5
103	On the existence of certain generalized Moore geometries, part II. <i>Discrete Mathematics</i> , 1984, 51, 277-282.	0.4	6
104	On the existence of certain generalized Moore geometries, part I. <i>Discrete Mathematics</i> , 1984, 51, 179-190.	0.4	8
105	A new lower bound for the minimum distance of a cyclic code. <i>IEEE Transactions on Information Theory</i> , 1983, 29, 330-332.	1.5	67
106	A note on the existence of perfect constant weight codes. <i>Discrete Mathematics</i> , 1983, 47, 121-123.	0.4	21
107	On the existence of certain distance-regular graphs. <i>Journal of Combinatorial Theory Series B</i> , 1982, 33, 197-212.	0.6	13
108	Upper bounds for $A(n,4)$ and $A(n,6)$ derived from Delsarte's linear programming bound. <i>Discrete Mathematics</i> , 1982, 40, 261-276.	0.4	3

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109	A generalization of the BCH bound for cyclic codes, including the Hartmann-Tzeng bound. Journal of Combinatorial Theory - Series A, 1982, 33, 229-232.	0.5	33
110	On t-constant codes and designs (Corresp.). IEEE Transactions on Information Theory, 1981, 27, 640-643.	1.5	0
111	An inequality for generalized hexagons. Geometriae Dedicata, 1981, 10, 219-222.	0.1	41
112	On the structure of convolutional and cyclic convolutional codes. IEEE Transactions on Information Theory, 1979, 25, 676-683.	1.5	40
113	Essential extensions in radical theory for rings. Journal of the Australian Mathematical Society, 1977, 23, 340-347.	0.3	32
114	Ideals of matrixrings over nonassociative rings. Acta Mathematica Hungarica, 1976, 27, 7-20.	0.3	2