Emilio Carrizosa

List of Publications by Year
in descending order

146 papers	2,132 citations	236612 25 h-index	360668 35 g-index
147 all docs	147 docs citations	147 times ranked	1267 citing authors

#	Article	IF	Citations
1	On mathematical optimization for clustering categories in contingency tables. Advances in Data Analysis and Classification, 2023, 17, 407-429.	0.9	1
2	Interpreting clusters via prototype optimization. Omega, 2022, 107, 102543.	3.6	6
3	Constrained Naïve Bayes with application to unbalanced data classification. Central European Journal of Operations Research, 2022, 30, 1403-1425.	1.1	2
4	On sparse optimal regression trees. European Journal of Operational Research, 2022, 299, 1045-1054.	3.5	4
5	The tree based linear regression model for hierarchical categorical variables. Expert Systems With Applications, 2022, 203, 117423.	4.4	9
6	A cost-sensitive constrained Lasso. Advances in Data Analysis and Classification, 2021, 15, 121-158.	0.9	7
7	Mathematical optimization in classification and regression trees. Top, 2021, 29, 5-33.	1.1	55
8	An interval branch and bound method for global Robust optimization. Journal of Global Optimization, 2021, 80, 507.	1.1	2
9	On sparse ensemble methods: An application to short-term predictions of the evolution of COVID-19. European Journal of Operational Research, 2021, 295, 648-663.	3.5	15
10	Analysis of an aggregate loss model in a Markov renewal regime. Applied Mathematics and Computation, 2021, 396, 125869.	1.4	0
11	Optimal randomized classification trees. Computers and Operations Research, 2021, 132, 105281.	2.4	23
12	Variable selection for Naïve Bayes classification. Computers and Operations Research, 2021, 135, 105456.	2.4	21
13	On clustering categories of categorical predictors in generalized linear models. Expert Systems With Applications, 2021, 182, 115245.	4.4	7
14	Enhancing Interpretability in Factor Analysis by Means of Mathematical Optimization. Multivariate Behavioral Research, 2020, 55, 748-762.	1.8	9
15	Sparsity in optimal randomized classification trees. European Journal of Operational Research, 2020, 284, 255-272.	3.5	26
16	Embedding the production policy in location-allocation decisions. 4or, 2020, 18, 357-380.	1.0	1
17	Selection of time instants and intervals with Support Vector Regression for multivariate functional data. Computers and Operations Research, 2020, 123, 105050.	2.4	6
18	Spotting Key Members in Networks: Clustering-Embedded Eigenvector Centrality. IEEE Systems Journal, 2020, 14, 3916-3925.	2.9	6

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19	Comments on: Distance geometry and data science. Top, 2020, 28, 346-347.	1.1	0
20	On support vector machines under a multiple-cost scenario. Advances in Data Analysis and Classification, 2019, 13, 663-682.	0.9	9
21	Continuous optimisation techniques for optimal aiming strategies in solar power tower plants. Solar Energy, 2019, 190, 525-530.	2.9	8
22	Variable selection in classification for multivariate functional data. Information Sciences, 2019, 481, 445-462.	4.0	14
23	Visualization of complex dynamic datasets by means of mathematical optimization. Omega, 2019, 86, 125-136.	3.6	5
24	Functional-bandwidth kernel for Support Vector Machine with Functional Data: An alternating optimization algorithm. European Journal of Operational Research, 2019, 275, 195-207.	3.5	16
25	Heliostat field cleaning scheduling for Solar Power Tower plants: A heuristic approach. Applied Energy, 2019, 235, 653-660.	5.1	19
26	Cost-sensitive Feature Selection for Support Vector Machines. Computers and Operations Research, 2019, 106, 169-178.	2.4	36
27	Anti-covering Problems. , 2019, , 123-141.		1
28	Visualizing data as objects by DC (difference of convex) optimization. Mathematical Programming, 2018, 169, 119-140.	1.6	16
29	On Mathematical Optimization for the visualization of frequencies and adjacencies as rectangular maps. European Journal of Operational Research, 2018, 265, 290-302.	3.5	7
30	Optimisation of aiming strategies in solar tower power plants. AIP Conference Proceedings, 2018, , .	0.3	3
31	On Building Online Visualization Maps for News Data Streams by Means of Mathematical Optimization. Big Data, 2018, 6, 139-158.	2.1	5
32	A sparsity-controlled vector autoregressive model. Biostatistics, 2017, 18, kxw042.	0.9	4
33	Clustering categories in support vector machines. Omega, 2017, 66, 28-37.	3.6	21
34	Solving multifacility Huff location models on networks using metaheuristic and exact approaches. Computers and Operations Research, 2017, 78, 537-546.	2.4	11
35	An optimization tool to design the field of a solar power tower plant allowing heliostats of different sizes. International Journal of Energy Research, 2017, 41, 1096-1107.	2.2	13
36	A biobjective approach to recoverable robustness based on location planning. European Journal of Operational Research, 2017, 261, 421-435.	3.5	10

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37	Optimisation of aiming strategies in Solar Power Tower plants. Energy, 2017, 137, 285-291.	4.5	36
38	Visualizing proportions and dissimilarities by Space-filling maps: A Large Neighborhood Search approach. Computers and Operations Research, 2017, 78, 369-380.	2.4	12
39	A Two-Step Model Identification for Stirred Tank Reactors: Incremental and Integral Methods. SEMA SIMAI Springer Series, 2017, , 213-220.	0.4	0
40	Field-design optimization with triangular heliostat pods. AIP Conference Proceedings, 2016, , .	0.3	4
41	Minimizing the passengers' traveling time in the stop location problem. Journal of the Operational Research Society, 2016, 67, 1325-1337.	2.1	10
42	p-facility Huff location problem on networks. European Journal of Operational Research, 2016, 255, 34-42.	3.5	5
43	On Extreme Concentrations in Chemical Reaction Networks with Incomplete Measurements. Industrial & Engineering Chemistry Research, 2016, 55, 11417-11430.	1.8	6
44	A global optimization method for model selection in chemical reactions networks. Computers and Chemical Engineering, 2016, 93, 52-62.	2.0	9
45	Maximal Covering Location Problems on networks with regional demand. Omega, 2016, 64, 77-85.	3.6	20
46	Robust newsvendor problem with autoregressive demand. Computers and Operations Research, 2016, 68, 123-133.	2.4	35
47	Strongly agree or strongly disagree?: Rating features in Support Vector Machines. Information Sciences, 2016, 329, 256-273.	4.0	17
48	Comments on: Static and dynamic source locations in undirected networks. Top, 2015, 23, 647-649.	1.1	0
49	Anti-covering Problems. , 2015, , 115-132.		4
50	Threshold robustness in discrete facility location problems: a bi-objective approach. Optimization Letters, 2015, 9, 1297-1314.	0.9	12
51	Kernel Penalized K-means: A feature selection method based on Kernel K-means. Information Sciences, 2015, 322, 150-160.	4.0	31
52	Optimization of multiple receivers solar power tower systems. Energy, 2015, 90, 2085-2093.	4.5	26
53	A heuristic method for simultaneous tower and pattern-free field optimization on solar power systems. Computers and Operations Research, 2015, 57, 109-122.	2.4	31
54	New heuristic for harmonic means clustering. Journal of Global Optimization, 2015, 63, 427-443.	1.1	11

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55	The Markovian arrival process: A statistical model for daily precipitation amounts. Journal of Hydrology, 2014, 510, 459-471.	2.3	15
56	Multi-instance classification through spherical separation and VNS. Computers and Operations Research, 2014, 52, 326-333.	2.4	11
57	Heuristic approaches for support vector machines with the ramp loss. Optimization Letters, 2014, 8, 1125-1135.	0.9	6
58	Biobjective sparse principal component analysis. Journal of Multivariate Analysis, 2014, 132, 151-159.	0.5	5
59	Linear separation and approximation by minimizing the sum of concave functions of distances. 4or, 2014, 12, 77-85.	1.0	2
60	Single-facility huff location problems on networks. Annals of Operations Research, 2014, 222, 175-195.	2.6	6
61	A global optimisation approach for parameter estimation of a mixture of double Pareto lognormal and lognormal distributions. Computers and Operations Research, 2014, 52, 231-240.	2.4	1
62	A nested heuristic for parameter tuning in Support Vector Machines. Computers and Operations Research, 2014, 43, 328-334.	2.4	27
63	A local search heuristic for the (r|p)-centroid problem in the plane. Computers and Operations Research, 2014, 52, 334-340.	2.4	24
64	rs-Sparse principal component analysis: A mixed integer nonlinear programming approach with VNS. Computers and Operations Research, 2014, 52, 349-354.	2.4	8
65	Vulnerability Assessment of Spatial Networks: Models and Solutions. Lecture Notes in Computer Science, 2014, , 433-444.	1.0	0
66	Solving the median problem with continuous demand on a network. Computational Optimization and Applications, 2013, 56, 723-734.	0.9	10
67	Variable neighborhood search for minimum sum-of-squares clustering on networks. European Journal of Operational Research, 2013, 230, 356-363.	3.5	22
68	Locating a semi-obnoxious covering facility with repelling polygonal regions. Discrete Applied Mathematics, 2013, 161, 2604-2623.	0.5	16
69	Time series interpolation via global optimization of moments fitting. European Journal of Operational Research, 2013, 230, 97-112.	3.5	14
70	Supervised classification and mathematical optimization. Computers and Operations Research, 2013, 40, 150-165.	2.4	116
71	A Note on the Dependence Structure of the Two-State Markovian Arrival Process. Journal of Applied Probability, 2012, 49, 295-302.	0.4	5
72	A Note on the Dependence Structure of the Two-State Markovian Arrival Process. Journal of Applied Probability, 2012, 49, 295-302.	0.4	6

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73	VNS heuristic for the â€"centroid problem on the plane. Electronic Notes in Discrete Mathematics, 2012, 39, 5-12.	0.4	11
74	Solving Multifacility Huff Location Models on Networks Using Variable Neighborhood Search and Multi-Start Local Search Metaheuristics. Electronic Notes in Discrete Mathematics, 2012, 39, 121-128.	0.4	7
75	Minmax-distance approximation and separation problems: geometrical properties. Mathematical Programming, 2012, 132, 153-177.	1.6	6
76	Gaussian variable neighborhood search for continuous optimization. Computers and Operations Research, 2012, 39, 2206-2213.	2.4	28
77	A computational study of a nonlinear minsum facility location problem. Computers and Operations Research, 2012, 39, 2625-2633.	2.4	11
78	On approximate Monetary Unit Sampling. European Journal of Operational Research, 2012, 217, 479-482.	3.5	2
79	A new alternating heuristic for the (r | p)â€"centroid problem on the plane. Operations Research Proceedings: Papers of the Annual Meeting = Vortrᐰ Der Jahrestagung / DGOR, 2012, , 275-280.	0.1	7
80	A global optimization procedure for the location of a median line in the three-dimensional space. European Journal of Operational Research, 2011, 215, 14-20.	3.5	8
81	Locating a competitive facility in the plane with a robustness criterion. European Journal of Operational Research, 2011, 215, 21-24.	3.5	15
82	Maximizing upgrading and downgrading margins for ordinal regression. Mathematical Methods of Operations Research, 2011, 74, 381-407.	0.4	1
83	On minimax-regret Huff location models. Computers and Operations Research, 2011, 38, 90-97.	2.4	9
84	Detecting relevant variables and interactions in supervised classification. European Journal of Operational Research, 2011, 213, 260-269.	3.5	31
85	Sum-of-squares clustering on networks. Yugoslav Journal of Operations Research, 2011, 21, 157-161.	0.5	13
86	Alternating local search based VNS for linear classification. Annals of Operations Research, 2010, 174, 121-134.	2.6	7
87	On the norm of a dc function. Journal of Global Optimization, 2010, 48, 209-213.	1.1	3
88	Unequal probability sampling from a finite population: A multicriteria approach. European Journal of Operational Research, 2010, 201, 500-504.	3.5	3
89	Binarized Support Vector Machines. INFORMS Journal on Computing, 2010, 22, 154-167.	1.0	27
90	Locating Objects in the Plane Using Global Optimization Techniques. Mathematics of Operations Research, 2009, 34, 837-858.	0.8	16

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91	Continuous location problems and Big Triangle Small Triangle: constructing better bounds. Journal of Global Optimization, 2009, 45, 389-402.	1.1	33
92	Different numerical methods in the study of passive scalar transport in a pipeline x-junction. Applied Mathematical Modelling, 2009, 33, 1248-1258.	2.2	9
93	Multi-group support vector machines with measurement costs: A biobjective approach. Discrete Applied Mathematics, 2008, 156, 950-966.	0.5	18
94	Optimal Expected-Distance Separating Halfspace. Mathematics of Operations Research, 2008, 33, 662-677.	0.8	10
95	Dimensionality Reduction for Classification. Lecture Notes in Computer Science, 2008, , 411-418.	1.0	22
96	Support vector machines and distance minimization. CRM Proceedings & Lecture Notes, 2008, , 1-13.	0.1	1
97	On the Selection of the Globally Optimal Prototype Subset for Nearest-Neighbor Classification. INFORMS Journal on Computing, 2007, 19, 470-479.	1.0	9
98	An exact global optimization method for deriving weights from pairwise comparison matrices. Journal of Global Optimization, 2007, 38, 237-247.	1.1	11
99	A biobjective method for sample allocation in stratified sampling. European Journal of Operational Research, 2007, 177, 1074-1089.	3.5	5
100	Two-group classification via a biobjective margin maximization model. European Journal of Operational Research, 2006, 173, 746-761.	3.5	10
101	Inferring Efficient Weights from Pairwise Comparison Matrices. Mathematical Methods of Operations Research, 2006, 64, 271-284.	0.4	44
102	Deriving weights in multiple-criteria decision making with support vector machines. Top, 2006, 14, 399-424.	1.1	4
103	An Exact Method for Fractional Goal Programming. Journal of Global Optimization, 2004, 29, 113-120.	1.1	3
104	Improving Interval Analysis Bounds by Translations. Journal of Global Optimization, 2004, 29, 157-172.	1.1	10
105	Optimal location and design of a competitive facility. Mathematical Programming, 2004, 100, 247-265.	1.6	54
106	Robust facility location. Mathematical Methods of Operations Research, 2003, 58, 331-349.	0.4	35
107	Generalized Goal Programming: polynomial methods and applications. Mathematical Programming, 2002, 93, 281-303.	1.6	23
108	A fractional model for locating semi-desirable facilities on networks. European Journal of Operational Research, 2002, 136, 67-80.	3.5	11

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109	A D.C. biobjective location model. Journal of Global Optimization, 2002, 23, 139-154.	1.1	29
110	Optimal Positioning of a Mobile Service Unit on a Line. Annals of Operations Research, 2002, 111, 75-88.	2.6	4
111	An optimal bound for d.c. programs with convex constraints. Mathematical Methods of Operations Research, 2001, 54, 47-51.	0.4	12
112	Gauge Distances and Median Hyperplanes. Journal of Optimization Theory and Applications, 2001, 110, 173-182.	0.8	39
113	Finding GM-estimators with global optimization techniques. Journal of Global Optimization, 2001, 21, 223-237.	1.1	2
114	Combining Minsum And Minmax: A Goal Programming Approach. Operations Research, 2001, 49, 169-174.	1.2	15
115	Finding the principal points of a random variable. RAIRO - Operations Research, 2001, 35, 315-328.	1.0	0
116	Dominators for Multiple-objective Quasiconvex Maximization Problems. Journal of Global Optimization, 2000, 18, 35-58.	1.1	9
117	On Covering Methods for D.C. Optimization. Journal of Global Optimization, 2000, 18, 265-274.	1.1	16
118	Solving Nonconvex Planar Location Problems by Finite Dominating Sets. Journal of Global Optimization, 2000, 18, 195-210.	1.1	10
119	Optimization of the Norm of a Vector-Valued DC Function and Applications. Journal of Optimization Theory and Applications, 2000, 107, 245-260.	0.8	9
120	Undesirable facility location with minimal covering objectives. European Journal of Operational Research, 1999, 119, 158-180.	3.5	42
121	Dominating Sets for Convex Functions with Some Applications. Journal of Optimization Theory and Applications, 1998, 96, 281-295.	0.8	32
122	Location and shape of a rectangular facility in $\mathbb{R}^n$. Convexity properties. Convexity properties. Mathematical Programming, 1998, 83, 277-290.	1.6	11
123	Maximin location: Discretization not always works. Top, 1998, 6, 313-319.	1.1	3
124	The Weber problem with regional demand. European Journal of Operational Research, 1998, 104, 358-365.	3.5	39
125	Locating an Undesirable Facility by Generalized Cutting Planes. Mathematics of Operations Research, 1998, 23, 680-694.	0.8	12
126	Admission Policies in Loss Queueing Models with Heterogeneous Arrivals. Management Science, 1998, 44, 311-320.	2.4	31

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127	A Note on the Optimal Positioning of Service Units. Operations Research, 1998, 46, 155-156.	1.2	16
128	Simpson Points in Planar Problems with Locational Constraints. The Polyhedral-Gauge Case. Mathematics of Operations Research, 1997, 22, 291-300.	0.8	13
129	Simpson Points in Planar Problems with Locational Constraints. The Round-Norm Case. Mathematics of Operations Research, 1997, 22, 276-290.	0.8	8
130	Semi-obnoxious location models: A global optimization approach. European Journal of Operational Research, 1997, 102, 295-301.	3.5	33
131	Weber problems with alternative transportation systems. European Journal of Operational Research, 1997, 97, 87-93.	3.5	23
132	Geometrical characterization of weakly efficient points. Journal of Optimization Theory and Applications, 1996, 90, 217-223.	0.8	16
133	A Characterization of Halfspace Depth. Journal of Multivariate Analysis, 1996, 58, 21-26.	0.5	11
134	A characterization of efficient points in constrained location problems with regional demand. Operations Research Letters, 1996, 19, 129-134.	0.5	10
135	Pareto-Optimality in Linear Regression. Journal of Mathematical Analysis and Applications, 1995, 190, 129-141.	0.5	7
136	On minquantile and maxcovering optimisation. Mathematical Programming, 1995, 71, 101-112.	1.6	9
137	Planar point-objective location problems with nonconvex constraints: A geometrical construction. Journal of Global Optimization, 1995, 6, 77-86.	1.1	20
138	A discretizing algorithm for location problems. European Journal of Operational Research, 1995, 80, 166-174.	3.5	8
139	Multi-criteria analysis with partial information about the weighting coefficients. European Journal of Operational Research, 1995, 81, 291-301.	3.5	66
140	The determination of a â€œleast quantile of squares regression lineâ€•for all quantiles. Computational Statistics and Data Analysis, 1995, 20, 467-479.	0.7	9
141	The generalized Weber problem with expected distances. RAIRO - Operations Research, 1995, 29, 35-57.	1.0	43
142	A polygonal upper bound for the efficient set for single-facility location problems with mixed norms. Top, 1993, 1, 107-116.	1.1	2
143	Efficiency in Euclidean constrained location problems. Operations Research Letters, 1993, 14, 291-295.	0.5	24
144	A management tool for indicator-supported systems: A public health service application. European Journal of Operational Research, 1992, 61, 204-214.	3.5	4

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145	A Biobjective Model to Select Features with Good Classification Quality and Low Cost. , 0, , .		0
146	An Extremal Problem with Applications to Renewable Energy Production. Mathematical Modelling of Natural Phenomena, 0, , .	0.9	1