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	Supervised classification and mathematical optimization. Computers and Operations Research, 2013, 40, 150-165.	2.4	116
2	Multi-criteria analysis with partial information about the weighting coefficients. European Journal of Operational Research, 1995, 81, 291-301.	3.5	66
3	Mathematical optimization in classification and regression trees. Top, 2021, 29, 5-33.	1.1	55
4	Optimal location and design of a competitive facility. Mathematical Programming, 2004, 100, 247-265.	1.6	54
5	Inferring Efficient Weights from Pairwise Comparison Matrices. Mathematical Methods of Operations Research, 2006, 64, 271-284.	0.4	44
6	The generalized Weber problem with expected distances. RAIRO - Operations Research, 1995, 29, 35-57.	1.0	43
7	Undesirable facility location with minimal covering objectives. European Journal of Operational Research, 1999, 119, 158-180.	3.5	42
8	The Weber problem with regional demand. European Journal of Operational Research, 1998, 104, 358-365.	3.5	39
9	Gauge Distances and Median Hyperplanes. Journal of Optimization Theory and Applications, 2001, 110, 173-182.	0.8	39
10	Optimisation of aiming strategies in Solar Power Tower plants. Energy, 2017, 137, 285-291.	4.5	36
11	Cost-sensitive Feature Selection for Support Vector Machines. Computers and Operations Research, 2019, 106, 169-178.	2.4	36
12	Robust facility location. Mathematical Methods of Operations Research, 2003, 58, 331-349.	0.4	35
13	Robust newsvendor problem with autoregressive demand. Computers and Operations Research, 2016, 68, 123-133.	2.4	35
14	Semi-obnoxious location models: A global optimization approach. European Journal of Operational Research, 1997, 102, 295-301.	3.5	33
15	Continuous location problems and Big Triangle Small Triangle: constructing better bounds. Journal of Global Optimization, 2009, 45, 389-402.	1.1	33
16	Dominating Sets for Convex Functions with Some Applications. Journal of Optimization Theory and Applications, 1998, 96, 281-295.	0.8	32
17	Admission Policies in Loss Queueing Models with Heterogeneous Arrivals. Management Science, 1998, 44, 311-320.	2.4	31
18	Detecting relevant variables and interactions in supervised classification. European Journal of Operational Research, 2011, 213, 260-269.	3.5	31

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19	Kernel Penalized K-means: A feature selection method based on Kernel K-means. Information Sciences, 2015, 322, 150-160.	4.0	31
20	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
21	A D.C. biobjective location model. Journal of Global Optimization, 2002, 23, 139-154.	1.1	29
22	Gaussian variable neighborhood search for continuous optimization. Computers and Operations Research, 2012, 39, 2206-2213.	2.4	28
23	Binarized Support Vector Machines. INFORMS Journal on Computing, 2010, 22, 154-167.	1.0	27
24	A nested heuristic for parameter tuning in Support Vector Machines. Computers and Operations Research, 2014, 43, 328-334.	2.4	27
25	Optimization of multiple receivers solar power tower systems. Energy, 2015, 90, 2085-2093.	4.5	26
26	Sparsity in optimal randomized classification trees. European Journal of Operational Research, 2020, 284, 255-272.	3.5	26
27	Efficiency in Euclidean constrained location problems. Operations Research Letters, 1993, 14, 291-295.	0.5	24
28	A local search heuristic for the (r|p)-centroid problem in the plane. Computers and Operations Research, 2014, 52, 334-340.	2.4	24
29	Weber problems with alternative transportation systems. European Journal of Operational Research, 1997, 97, 87-93.	3.5	23
30	Generalized Goal Programming: polynomial methods and applications. Mathematical Programming, 2002, 93, 281-303.	1.6	23
31	Optimal randomized classification trees. Computers and Operations Research, 2021, 132, 105281.	2.4	23
32	Variable neighborhood search for minimum sum-of-squares clustering on networks. European Journal of Operational Research, 2013, 230, 356-363.	3.5	22
33	Dimensionality Reduction for Classification. Lecture Notes in Computer Science, 2008, , 411-418.	1.0	22
34	Clustering categories in support vector machines. Omega, 2017, 66, 28-37.	3.6	21
35	Variable selection for NaÃ¯ve Bayes classification. Computers and Operations Research, 2021, 135, 105456.	2.4	21
36	Planar point-objective location problems with nonconvex constraints: A geometrical construction. Journal of Global Optimization, 1995, 6, 77-86.	1.1	20

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37	Maximal Covering Location Problems on networks with regional demand. Omega, 2016, 64, 77-85.	3.6	20
38	Heliostat field cleaning scheduling for Solar Power Tower plants: A heuristic approach. Applied Energy, 2019, 235, 653-660.	5.1	19
39	Multi-group support vector machines with measurement costs: A biobjective approach. Discrete Applied Mathematics, 2008, 156, 950-966.	0.5	18
40	Strongly agree or strongly disagree?: Rating features in Support Vector Machines. Information Sciences, 2016, 329, 256-273.	4.0	17
41	Geometrical characterization of weakly efficient points. Journal of Optimization Theory and Applications, 1996, 90, 217-223.	0.8	16
42	A Note on the Optimal Positioning of Service Units. Operations Research, 1998, 46, 155-156.	1.2	16
43	On Covering Methods for D.C. Optimization. Journal of Global Optimization, 2000, 18, 265-274.	1.1	16
44	Locating Objects in the Plane Using Global Optimization Techniques. Mathematics of Operations Research, 2009, 34, 837-858.	0.8	16
45	Locating a semi-obnoxious covering facility with repelling polygonal regions. Discrete Applied Mathematics, 2013, 161, 2604-2623.	0.5	16
46	Visualizing data as objects by DC (difference of convex) optimization. Mathematical Programming, 2018, 169, 119-140.	1.6	16
47	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
48	Combining Minsum And Minmax: A Goal Programming Approach. Operations Research, 2001, 49, 169-174.	1.2	15
49	Locating a competitive facility in the plane with a robustness criterion. European Journal of Operational Research, 2011, 215, 21-24.	3.5	15
50	The Markovian arrival process: A statistical model for daily precipitation amounts. Journal of Hydrology, 2014, 510, 459-471.	2.3	15
51	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
52	Time series interpolation via global optimization of moments fitting. European Journal of Operational Research, 2013, 230, 97-112.	3.5	14
53	Variable selection in classification for multivariate functional data. Information Sciences, 2019, 481, 445-462.	4.0	14
54	Simpson Points in Planar Problems with Locational Constraints. The Polyhedral-Gauge Case. Mathematics of Operations Research, 1997, 22, 291-300.	0.8	13

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55	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
56	Sum-of-squares clustering on networks. Yugoslav Journal of Operations Research, 2011, 21, 157-161.	0.5	13
57	Locating an Undesirable Facility by Generalized Cutting Planes. Mathematics of Operations Research, 1998, 23, 680-694.	0.8	12
58	An optimal bound for d.c. programs with convex constraints. Mathematical Methods of Operations Research, 2001, 54, 47-51.	0.4	12
59	Threshold robustness in discrete facility location problems: a bi-objective approach. Optimization Letters, 2015, 9, 1297-1314.	0.9	12
60	Visualizing proportions and dissimilarities by Space-filling maps: A Large Neighborhood Search approach. Computers and Operations Research, 2017, 78, 369-380.	2.4	12
61	A Characterization of Halfspace Depth. Journal of Multivariate Analysis, 1996, 58, 21-26.	0.5	11
62	Location and shape of a rectangular facility in â„n. Convexity properties. Convexity properties. Mathematical Programming, 1998, 83, 277-290.	1.6	11
63	A fractional model for locating semi-desirable facilities on networks. European Journal of Operational Research, 2002, 136, 67-80.	3.5	11
64	An exact global optimization method for deriving weights from pairwise comparison matrices. Journal of Global Optimization, 2007, 38, 237-247.	1.1	11
65	VNS heuristic for the â€“centroid problem on the plane. Electronic Notes in Discrete Mathematics, 2012, 39, 5-12.	0.4	11
66	A computational study of a nonlinear minsum facility location problem. Computers and Operations Research, 2012, 39, 2625-2633.	2.4	11
67	Multi-instance classification through spherical separation and VNS. Computers and Operations Research, 2014, 52, 326-333.	2.4	11
68	New heuristic for harmonic means clustering. Journal of Global Optimization, 2015, 63, 427-443.	1.1	11
69	Solving multifacility Huff location models on networks using metaheuristic and exact approaches. Computers and Operations Research, 2017, 78, 537-546.	2.4	11
70	A characterization of efficient points in constrained location problems with regional demand. Operations Research Letters, 1996, 19, 129-134.	0.5	10
71	Solving Nonconvex Planar Location Problems by Finite Dominating Sets. Journal of Global Optimization, 2000, 18, 195-210.	1.1	10
72	Improving Interval Analysis Bounds by Translations. Journal of Global Optimization, 2004, 29, 157-172.	1.1	10

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73	Two-group classification via a biobjective margin maximization model. European Journal of Operational Research, 2006, 173, 746-761.	3.5	10
74	Optimal Expected-Distance Separating Halfspace. Mathematics of Operations Research, 2008, 33, 662-677.	0.8	10
75	Solving the median problem with continuous demand on a network. Computational Optimization and Applications, 2013, 56, 723-734.	0.9	10
76	Minimizing the passengersâ€™ traveling time in the stop location problem. Journal of the Operational Research Society, 2016, 67, 1325-1337.	2.1	10
77	A biobjective approach to recoverable robustness based on location planning. European Journal of Operational Research, 2017, 261, 421-435.	3.5	10
78	On minquantile and maxcovering optimisation. Mathematical Programming, 1995, 71, 101-112.	1.6	9
79	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
80	Dominators for Multiple-objective Quasiconvex Maximization Problems. Journal of Global Optimization, 2000, 18, 35-58.	1.1	9
81	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
82	On the Selection of the Globally Optimal Prototype Subset for Nearest-Neighbor Classification. INFORMS Journal on Computing, 2007, 19, 470-479.	1.0	9
83	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
84	On minimax-regret Huff location models. Computers and Operations Research, 2011, 38, 90-97.	2.4	9
85	A global optimization method for model selection in chemical reactions networks. Computers and Chemical Engineering, 2016, 93, 52-62.	2.0	9
86	On support vector machines under a multiple-cost scenario. Advances in Data Analysis and Classification, 2019, 13, 663-682.	0.9	9
87	Enhancing Interpretability in Factor Analysis by Means of Mathematical Optimization. Multivariate Behavioral Research, 2020, 55, 748-762.	1.8	9
88	The tree based linear regression model for hierarchical categorical variables. Expert Systems With Applications, 2022, 203, 117423.	4.4	9
89	A discretizing algorithm for location problems. European Journal of Operational Research, 1995, 80, 166-174.	3.5	8
90	Simpson Points in Planar Problems with Locational Constraints. The Round-Norm Case. Mathematics of Operations Research, 1997, 22, 276-290.	0.8	8

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91	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
92	rs-Sparse principal component analysis: A mixed integer nonlinear programming approach with VNS. Computers and Operations Research, 2014, 52, 349-354.	2.4	8
93	Continuous optimisation techniques for optimal aiming strategies in solar power tower plants. Solar Energy, 2019, 190, 525-530.	2.9	8
94	Pareto-Optimality in Linear Regression. Journal of Mathematical Analysis and Applications, 1995, 190, 129-141.	0.5	7
95	Alternating local search based VNS for linear classification. Annals of Operations Research, 2010, 174, 121-134.	2.6	7
96	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
97	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
98	A cost-sensitive constrained Lasso. Advances in Data Analysis and Classification, 2021, 15, 121-158.	0.9	7
99	On clustering categories of categorical predictors in generalized linear models. Expert Systems With Applications, 2021, 182, 115245.	4.4	7
100	A new alternating heuristic for the (r | p)â€“centroid problem on the plane. Operations Research Proceedings: Papers of the Annual Meeting = VortrÃge Der Jahrestagung / DGOR, 2012, , 275-280.	0.1	7
101	A Note on the Dependence Structure of the Two-State Markovian Arrival Process. Journal of Applied Probability, 2012, 49, 295-302.	0.4	6
102	Minmax-distance approximation and separation problems: geometrical properties. Mathematical Programming, 2012, 132, 153-177.	1.6	6
103	Heuristic approaches for support vector machines with the ramp loss. Optimization Letters, 2014, 8, 1125-1135.	0.9	6
104	Single-facility huff location problems on networks. Annals of Operations Research, 2014, 222, 175-195.	2.6	6
105	On Extreme Concentrations in Chemical Reaction Networks with Incomplete Measurements. Industrial & Engineering Chemistry Research, 2016, 55, 11417-11430.	1.8	6
106	Selection of time instants and intervals with Support Vector Regression for multivariate functional data. Computers and Operations Research, 2020, 123, 105050.	2.4	6
107	Spotting Key Members in Networks: Clustering-Embedded Eigenvector Centrality. IEEE Systems Journal, 2020, 14, 3916-3925.	2.9	6
108	Interpreting clusters via prototype optimization. Omega, 2022, 107, 102543.	3.6	6

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109	A biobjective method for sample allocation in stratified sampling. European Journal of Operational Research, 2007, 177, 1074-1089.	3.5	5
110	A Note on the Dependence Structure of the Two-State Markovian Arrival Process. Journal of Applied Probability, 2012, 49, 295-302.	0.4	5
111	Biobjective sparse principal component analysis. Journal of Multivariate Analysis, 2014, 132, 151-159.	0.5	5
112	p-facility Huff location problem on networks. European Journal of Operational Research, 2016, 255, 34-42.	3.5	5
113	On Building Online Visualization Maps for News Data Streams by Means of Mathematical Optimization. Big Data, 2018, 6, 139-158.	2.1	5
114	Visualization of complex dynamic datasets by means of mathematical optimization. Omega, 2019, 86, 125-136.	3.6	5
115	A management tool for indicator-supported systems: A public health service application. European Journal of Operational Research, 1992, 61, 204-214.	3.5	4
116	Optimal Positioning of a Mobile Service Unit on a Line. Annals of Operations Research, 2002, 111, 75-88.	2.6	4
117	Deriving weights in multiple-criteria decision making with support vector machines. Top, 2006, 14, 399-424.	1.1	4
118	Anti-covering Problems. , 2015, , 115-132.		4
119	Field-design optimization with triangular heliostat pods. AIP Conference Proceedings, 2016, , .	0.3	4
120	A sparsity-controlled vector autoregressive model. Biostatistics, 2017, 18, kxw042.	0.9	4
121	On sparse optimal regression trees. European Journal of Operational Research, 2022, 299, 1045-1054.	3.5	4
122	Maximin location: Discretization not always works. Top, 1998, 6, 313-319.	1.1	3
123	An Exact Method for Fractional Goal Programming. Journal of Global Optimization, 2004, 29, 113-120.	1.1	3
124	On the norm of a dc function. Journal of Global Optimization, 2010, 48, 209-213.	1.1	3
125	Unequal probability sampling from a finite population: A multicriteria approach. European Journal of Operational Research, 2010, 201, 500-504.	3.5	3
126	Optimisation of aiming strategies in solar tower power plants. AIP Conference Proceedings, 2018, , .	0.3	3

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127	A polygonal upper bound for the efficient set for single-facility location problems with mixed norms. Top, 1993, 1, 107-116.	1.1	2
128	Finding GM-estimators with global optimization techniques. Journal of Global Optimization, 2001, 21, 223-237.	1.1	2
129	On approximate Monetary Unit Sampling. European Journal of Operational Research, 2012, 217, 479-482.	3.5	2
130	Linear separation and approximation by minimizing the sum of concave functions of distances. 4or, 2014, 12, 77-85.	1.0	2
131	An interval branch and bound method for global Robust optimization. Journal of Global Optimization, 2021, 80, 507.	1.1	2
132	Constrained NaÃ¯ve Bayes with application to unbalanced data classification. Central European Journal of Operations Research, 2022, 30, 1403-1425.	1.1	2
133	Maximizing upgrading and downgrading margins for ordinal regression. Mathematical Methods of Operations Research, 2011, 74, 381-407.	0.4	1
134	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
135	Embedding the production policy in location-allocation decisions. 4or, 2020, 18, 357-380.	1.0	1
136	An Extremal Problem with Applications to Renewable Energy Production. Mathematical Modelling of Natural Phenomena, 0, , .	0.9	1
137	Anti-covering Problems. , 2019, , 123-141.		1
138	Support vector machines and distance minimization. CRM Proceedings & Lecture Notes, 2008, , 1-13.	0.1	1
139	On mathematical optimization for clustering categories in contingency tables. Advances in Data Analysis and Classification, 2023, 17, 407-429.	0.9	1
140	A Biobjective Model to Select Features with Good Classification Quality and Low Cost. , 0, , .		0
141	Comments on: Static and dynamic source locations in undirected networks. Top, 2015, 23, 647-649.	1.1	0
142	Comments on: Distance geometry and data science. Top, 2020, 28, 346-347.	1.1	0
143	Analysis of an aggregate loss model in a Markov renewal regime. Applied Mathematics and Computation, 2021, 396, 125869.	1.4	0
144	Finding the principal points of a random variable. RAIRO - Operations Research, 2001, 35, 315-328.	1.0	0

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145	Vulnerability Assessment of Spatial Networks: Models and Solutions. Lecture Notes in Computer Science, 2014, , 433-444.	1.0	0
146	A Two-Step Model Identification for Stirred Tank Reactors: Incremental and Integral Methods. SEMA SIMAI Springer Series, 2017, , 213-220.	0.4	0