Rafael Marti

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1084351/publications.pdf

Version: 2024-02-01

149 papers	5,660 citations	94269 37 h-index	98622 67 g-index
153 all docs	153 docs citations	153 times ranked	3765 citing authors

#	Article	IF	Citations
1	Scatter Search and Local NLP Solvers: A Multistart Framework for Global Optimization. INFORMS Journal on Computing, 2007, 19, 328-340.	1.0	537
2	Principles of scatter search. European Journal of Operational Research, 2006, 169, 359-372.	3.5	351
3	GRASP and Path Relinking for 2-Layer Straight Line Crossing Minimization. INFORMS Journal on Computing, 1999, 11, 44-52.	1.0	264
4	GRASP and path relinking for the maxâ€“min diversity problem. Computers and Operations Research, 2010, 37, 498-508.	2.4	160
5	Experimental Testing of Advanced Scatter Search Designs for Global Optimization of Multimodal Functions. Journal of Global Optimization, 2005, 33, 235-255.	1.1	149
6	Scatter search for chemical and bio-process optimization. Journal of Global Optimization, 2007, 37, 481-503.	1.1	147
7	Multi-start methods for combinatorial optimization. European Journal of Operational Research, 2013, 226, 1-8.	3.5	133
8	Heuristic solutions to the problem of routing school buses with multiple objectives. Journal of the Operational Research Society, 2002, 53, 427-435.	2.1	132
9	Intensification and diversification with elite tabu search solutions for the linear ordering problem. Computers and Operations Research, 1999, 26, 1217-1230.	2.4	117
10	An Experimental Evaluation of a Scatter Search for the Linear Ordering Problem. Journal of Global Optimization, 2001, 21, 397-414.	1.1	111
11	An evolutionary method for complex-process optimization. Computers and Operations Research, 2010, 37, 315-324.	2.4	111
12	Multi-Start Methods. , 2003, , 355-368.		105
13	Tabu search and GRASP for the maximum diversity problem. European Journal of Operational Research, 2007, 178, 71-84.	3.5	105
14	Advanced Scatter Search for the Max-Cut Problem. INFORMS Journal on Computing, 2009, 21, 26-38.	1.0	90
15	The Linear Ordering Problem. Applied Mathematical Sciences (Switzerland), 2011, , .	0.4	88
16	GRASP and path relinking for the matrix bandwidth minimization. European Journal of Operational Research, 2004, 153, 200-210.	3.5	85
17	Reducing the bandwidth of a sparse matrix with tabu search. European Journal of Operational Research, 2001, 135, 450-459.	3.5	84
18	SSPMO: A Scatter Tabu Search Procedure for Non-Linear Multiobjective Optimization. INFORMS Journal on Computing, 2007, 19, 91-100.	1.0	74

#	ARTICLE	IF	CITATIONS
19	Tabu search for a multi-objective routing problem. Journal of the Operational Research Society, 2006, 57, 29-37.	2.1	72
20	A branch and bound algorithm for the maximum diversity problem. European Journal of Operational Research, 2010, 200, 36-44.	3.5	71
21	Scatter Search and Path Relinking: Advances and Applications. , 2003, , 1-35.		70
22	Context-Independent Scatter and Tabu Search for Permutation Problems. INFORMS Journal on Computing, 2005, 17, 111-122.	1.0	63
23	Scatter Search and Path-Relinking: Fundamentals, Advances, and Applications. Profiles in Operations Research, 2010, , 87-107.	0.3	63
24	Heuristics and metaheuristics for the maximum diversity problem. Journal of Heuristics, 2013, 19, 591-615.	1.1	62
25	Tabu search with strategic oscillation for the maximally diverse grouping problem. Journal of the Operational Research Society, 2013, 64, 724-734.	2.1	61
26	GRASP with path relinking for the orienteering problem. Journal of the Operational Research Society, 2014, 65, 1800-1813.	2.1	56
27	Multiobjective GRASP with Path Relinking. European Journal of Operational Research, 2015, 240, 54-71.	3.5	54
28	A GRASP for Coloring Sparse Graphs. Computational Optimization and Applications, 2001, 19, 165-178.	0.9	52
29	Variable neighborhood search for the Vertex Separation Problem. Computers and Operations Research, 2012, 39, 3247-3255.	2.4	48
30	Greedy randomized adaptive search procedure with exterior path relinking for differential dispersion minimization. Information Sciences, 2015, 296, 46-60.	4.0	48
31	Variable neighborhood search for the linear ordering problem. Computers and Operations Research, 2006, 33, 3549-3565.	2.4	45
32	Scatter search for the cutwidth minimization problem. Annals of Operations Research, 2012, 199, 285-304.	2.6	45
33	Hybrid scatter tabu search for unconstrained global optimization. Annals of Operations Research, 2011, 183, 95-123.	2.6	44
34	Improved scatter search for the global optimization of computationally expensive dynamic models. Journal of Global Optimization, 2009, 43, 175-190.	1.1	43
35	Heuristics for the bi-objective path dissimilarity problem. Computers and Operations Research, 2009, 36, 2905-2912.	2.4	42
36	GRASP for the uncapacitated r-allocation p-hub median problem. Computers and Operations Research, 2014, 43, 50-60.	2.4	41

#	Article	IF	Citations
37	Scatter Searchâ€"Wellsprings and Challenges. European Journal of Operational Research, 2006, 169, 351-358.	3.5	39
38	A benchmark library and a comparison of heuristic methods for the linear ordering problem. Computational Optimization and Applications, 2012, 51, 1297-1317.	0.9	39
39	A branch and bound algorithm for the matrix bandwidth minimization. European Journal of Operational Research, 2008, 186, 513-528.	3.5	38
40	Hybrid heuristics for the maximum diversity problem. Computational Optimization and Applications, 2009, 44, 411-426.	0.9	37
41	Adaptive memory programming for constrained global optimization. Computers and Operations Research, 2010, 37, 1500-1509.	2.4	36
42	GRASP with path relinking heuristics for the antibandwidth problem. Networks, 2011, 58, 171-189.	1.6	36
43	GRASP and path relinking for the equitable dispersion problem. Computers and Operations Research, 2013, 40, 3091-3099.	2.4	36
44	Neural network prediction in a system for optimizing simulations. IIE Transactions, 2002, 34, 273-282.	2.1	34
45	Tabu Search. , 2006, , 53-69.		34
46	Heuristics for the capacitated modular hub location problem. Computers and Operations Research, 2017, 86, 94-109.	2.4	33
47	A branch and bound algorithm for minimizing the number of crossing arcs in bipartite graphs. European Journal of Operational Research, 1996, 90, 303-319.	3.5	32
48	GRASP for Seam Drawing in Mosaicking of Aerial Photographic Maps. Journal of Heuristics, 1999, 5, 181-197.	1.1	32
49	Scatter search for an uncapacitated p-hub median problem. Computers and Operations Research, 2015, 58, 53-66.	2.4	32
50	Scatter Search and Path Relinking: Foundations and Advanced Designs. Studies in Fuzziness and Soft Computing, 2004, , 87-99.	0.6	32
51	Arc crossing minimization in hierarchical digraphs with tabu search. Computers and Operations Research, 1997, 24, 1175-1186.	2.4	31
52	A review of the role of heuristics in stochastic optimisation: from metaheuristics to learnheuristics. Annals of Operations Research, 2023, 320, 831-861.	2.6	31
53	A GRASP heuristic for the mixed Chinese postman problem. European Journal of Operational Research, 2002, 142, 70-80.	3.5	30
54	Advanced Greedy Randomized Adaptive Search Procedure for the Obnoxious p-Median problem. European Journal of Operational Research, 2016, 252, 432-442.	3.5	30

#	Article	IF	Citations
55	Advanced Multi-start Methods. Profiles in Operations Research, 2010, , 265-281.	0.3	30
56	Scatter Search and Path Relinking. , 2013, , 1-21.		30
57	Black box scatter search for general classes of binary optimization problems. Computers and Operations Research, 2010, 37, 1977-1986.	2.4	29
58	Iterated greedy with variable neighborhood search for a multiobjective waste collection problem. Expert Systems With Applications, 2020, 145, 113101.	4.4	29
59	Scatter Search for the Point-Matching Problem in 3D Image Registration. INFORMS Journal on Computing, 2008, 20, 55-68.	1.0	28
60	A black-box scatter search for optimization problems with integer variables. Journal of Global Optimization, 2014, 58, 497-516.	1.1	28
61	Heuristics for the Mixed Rural Postman Problem. Computers and Operations Research, 2000, 27, 183-203.	2.4	27
62	Variable neighborhood search with ejection chains for the antibandwidth problem. Journal of Heuristics, 2012, 18, 919-938.	1.1	27
63	The Rural Postman Problem on mixed graphs with turn penalties. Computers and Operations Research, 2002, 29, 887-903.	2.4	25
64	Hybridizing the cross-entropy method: An application to the max-cut problem. Computers and Operations Research, 2009, 36, 487-498.	2.4	25
65	A hybrid metaheuristic for the cyclic antibandwidth problem. Knowledge-Based Systems, 2013, 54, 103-113.	4.0	25
66	Tabu search for the Maxâ€“Mean Dispersion Problem. Knowledge-Based Systems, 2015, 85, 256-264.	4.0	25
67	Improved heuristics for the regenerator location problem. International Transactions in Operational Research, 2014, 21, 541-558.	1.8	24
68	Scatter Search vs. Genetic Algorithms. , 2005, , 263-282.		23
69	Strategic oscillation for the quadratic multiple knapsack problem. Computational Optimization and Applications, 2014, 58, 161-185.	0.9	23
70	Heuristics and meta-heuristics for 2-layer straight line crossing minimization. Discrete Applied Mathematics, 2003, 127, 665-678.	0.5	22
71	Path relinking for large-scale global optimization. Soft Computing, 2011, 15, 2257-2273.	2.1	22
72	Tabu search with strategic oscillation for the quadratic minimum spanning tree. IIE Transactions, 2014, 46, 414-428.	2.1	22

#	Article	IF	Citations
73	Multilayer neural networks: an experimental evaluation of on-line training methods. Computers and Operations Research, 2004, 31, 1491-1513.	2.4	21
74	Strategic oscillation for the capacitated hub location problem with modular links. Journal of Heuristics, 2016, 22, 221-244.	1.1	21
75	Measuring diversity. A review and an empirical analysis. European Journal of Operational Research, 2021, 289, 515-532.	3.5	21
76	A tabu search algorithm for the bipartite drawing problem. European Journal of Operational Research, 1998, 106, 558-569.	3.5	20
77	Tabu search for the linear ordering problem withÂcumulative costs. Computational Optimization and Applications, 2011, 48, 697-715.	0.9	20
78	Metaheuristics for the linear ordering problem with cumulative costs. European Journal of Operational Research, 2012, 216, 270-277.	3.5	20
79	Branch and bound for the cutwidth minimization problem. Computers and Operations Research, 2013, 40, 137-149.	2.4	20
80	Multi-objective memetic optimization for the bi-objective obnoxious p -median problem. Knowledge-Based Systems, 2018, 144, 88-101.	4.0	20
81	A Multistart Scatter Search Heuristic for Smooth NLP and MINLP Problems. , 2005, , 25-57.		19
82	GRASP and Path Relinking for the Two-Dimensional Two-Stage Cutting-Stock Problem. INFORMS Journal on Computing, 2007, 19, 261-272.	1.0	18
83	Elbow septic arthritis in children: clinical presentation and management. Journal of Pediatric Orthopaedics Part B, 2010, 19, 281-284.	0.3	18
84	Tabu search for the dynamic Bipartite Drawing Problem. Computers and Operations Research, 2018, 91, 1-12.	2.4	18
85	A review on discrete diversity and dispersion maximization from an OR perspective. European Journal of Operational Research, 2022, 299, 795-813.	3.5	18
86	Scatter tabu search for multiobjective clustering problems. Journal of the Operational Research Society, 2011, 62, 2034-2046.	2.1	17
87	Tabu search and GRASP for the capacitated clustering problem. Computational Optimization and Applications, 2015, 62, 589-607.	0.9	17
88	Optimization procedures for the bipartite unconstrained 0-1 quadratic programming problem. Computers and Operations Research, 2014, 51, 123-129.	2.4	16
89	A parallel variable neighborhood search approach for the obnoxious pâ€median problem. International Transactions in Operational Research, 2020, 27, 336-360.	1.8	16
90	A tabu thresholding algorithm for arc crossing minimization in bipartite graphs. Annals of Operations Research, 1996, 63, 233-251.	2.6	15

#	Article	IF	Citations
91	Path relinking and GRG for artificial neural networks. European Journal of Operational Research, 2006, 169, 508-519.	3.5	15
92	Scatter search for the profile minimization problem. Networks, 2015, 65, 10-21.	1.6	15
93	Heuristic solution approaches for the maximum minsum dispersion problem. Journal of Global Optimization, 2017, 67, 671-686.	1.1	15
94	Heuristic Solutions for a Class of Stochastic Uncapacitated p-Hub Median Problems. Transportation Science, 2019, 53, 1126-1149.	2.6	15
95	Heuristics for the capacitated dispersion problem. International Transactions in Operational Research, 2021, 28, 119-141.	1.8	15
96	The capacitated dispersion problem: an optimization model and a memetic algorithm. Memetic Computing, 2021, 13, 131-146.	2.7	14
97	Adaptive memory programming for matrix bandwidth minimization. Annals of Operations Research, 2011, 183, 7-23.	2.6	13
98	Incremental bipartite drawing problem. Computers and Operations Research, 2001, 28, 1287-1298.	2.4	12
99	Heuristics for the bandwidth colouring problem. International Journal of Metaheuristics, 2010, 1, 11.	0.1	12
100	GRASP and path relinking hybridizations for the point matching-based image registration problem. Journal of Heuristics, 2012, 18, 169-192.	1.1	12
101	Designing effective improvement methods for scatter search: an experimental study on global optimization. Soft Computing, 2013, 17, 49-62.	2.1	12
102	A genetic algorithm for the minimum generating set problem. Applied Soft Computing Journal, 2016, 48, 254-264.	4.1	12
103	Variable neighborhood scatter search for the incremental graph drawing problem. Computational Optimization and Applications, 2017, 68, 775-797.	0.9	12
104	A strategic oscillation simheuristic for the Time Capacitated Arc Routing Problem with stochastic demands. Computers and Operations Research, 2021, 133, 105377.	2.4	12
105	Randomized heuristics for the Capacitated Clustering Problem. Information Sciences, 2017, 417, 154-168.	4.0	11
106	Scatter Search and Path Relinking. International Journal of Swarm Intelligence Research, 2011, 2, 1-21.	0.5	10
107	Scatter search for the bandpass problem. Journal of Global Optimization, 2016, 66, 769-790.	1.1	10
108	Heuristics for the minâ€“max arc crossing problem in graphs. Expert Systems With Applications, 2018, 109, 100-113.	4.4	10

#	Article	IF	Citations
109	GRASP and tabu search for the generalized dispersion problem. Expert Systems With Applications, 2021, 173, 114703.	4.4	10
110	Arc crossing minimization in graphs with GRASP. IIE Transactions, 2001, 33, 913-919.	2.1	9
111	GRASP with exterior path-relinking and restricted local search for the multidimensional two-way number partitioning problem. Computers and Operations Research, 2017, 78, 243-254.	2.4	9
112	Multi-start Methods. , 2018, , 155-175.		9
113	Heuristics for the Bi-Objective Diversity Problem. Expert Systems With Applications, 2018, 108, 193-205.	4.4	9
114	Maxâ€“min dispersion with capacity and cost for a practical location problem. Expert Systems With Applications, 2022, 200, 116899.	4.4	9
115	GRASP with ejection chains for the dynamic memory allocation in embedded systems. Soft Computing, 2014, 18, 1515-1527.	2.1	8
116	Models and solution methods for the uncapacitated râ€allocation pâ€hub equitable center problem. International Transactions in Operational Research, 2018, 25, 1241-1267.	1.8	8
117	Heuristics for the Constrained Incremental Graph Drawing Problem. European Journal of Operational Research, 2019, 274, 710-729.	3.5	8
118	Tabu search for min-max edge crossing in graphs. Computers and Operations Research, 2020, 114, 104830.	2.4	8
119	Scatter Search. , 2006, , 139-152.		8
120	Adaptive memory programming for the dynamic bipartite drawing problem. Information Sciences, 2020, 517, 183-197.	4.0	7
121	Tabu search tutorial. A Graph Drawing Application. Top, 2021, 29, 319-350.	1.1	7
122	Multi-start Methods. , 2015, , 1-21.		7
123	Neural network prediction in a system for optimizing simulations. IIE Transactions, 2002, 34, 273-282.	2.1	6
124	Improving the performance of embedded systems with variable neighborhood search. Applied Soft Computing Journal, 2017, 53, 217-226.	4.1	6
125	Diversity and Equity Models. , 2018, , 979-998.		6
126	The Linear Ordering Polytope. Applied Mathematical Sciences (Switzerland), 2011, , 117-143.	0.4	6

#	Article	IF	Citations
127	Adaptive memory programing for the robust capacitated international sourcing problem. Computers and Operations Research, 2008, 35, 797-806.	2.4	5
128	Metaheuristic procedures for the lexicographic bottleneck assembly line balancing problem. Journal of the Operational Research Society, 2015, 66, 1815-1825.	2.1	5
129	New Ideas and Applications of Scatter Search and Path Relinking. Studies in Fuzziness and Soft Computing, 2004, , 367-383.	0.6	5
130	Scatter search for the bi-criteria p-median p-dispersion problem. Progress in Artificial Intelligence, 2018, 7, 31-40.	1.5	4
131	Tabu and Scatter Search for Artificial Neural Networks. Operations Research/ Computer Science Interfaces Series, 2003, , 79-96.	0.3	4
132	Pseudo-Cut Strategies for Global Optimization. International Journal of Applied Metaheuristic Computing, 2011, 2, 1-12.	0.5	4
133	A heuristic algorithm for project scheduling with splitting allowed. Journal of Heuristics, 1996, 2, 87-104.	1.1	3
134	Approximating Unknown Mappings: An Experimental Evaluation. Journal of Heuristics, 2005, 11, 219-232.	1.1	3
135	An Adaptive Memory Procedure for Continuous Optimization. , 2009, , .		3
136	Intelligent Multi-Start Methods. Profiles in Operations Research, 2019, , 221-243.	0.3	3
137	3D Inter-subject Medical Image Registration by Scatter Search. Lecture Notes in Computer Science, 2005, , 90-103.	1.0	3
138	Variable neighborhood descent for the incremental graph drawing. Electronic Notes in Discrete Mathematics, 2017, 58, 183-190.	0.4	2
139	Scatter Search. , 2018, , 717-740.		2
140	Metaheuristics for Business Analytics. EURO Advanced Tutorials on Operational Research, 2018, , .	0.6	2
141	Arc Crossing Minimization in Graphs with GRASP. IIE Transactions, 2001, 33, 913-919.	2.1	1
142	GRASP & evolutionary path relinking for medical image registration based on point matching. , 2010, , .		1
143	Linear Layout Problems. , 2018, , 1025-1049.		1
144	Linear Layout Problems. , 2016, , 1-25.		1

#	Article	IF	Citations
145	Greedy Randomized Adaptive Search Procedures. EURO Advanced Tutorials on Operational Research, 2018, , 57-83.	0.6	1
146	Rejoinder on: Tabu search tutorial. A Graph Drawing Application. Top, 2021, 29, 363-371.	1.1	0
147	Tabu Search. EURO Advanced Tutorials on Operational Research, 2018, , 85-103.	0.6	0
148	Pseudo-Cut Strategies for Global Optimization. , 0, , 188-198.		0
149	Scatter search for the minimum leaf spanning tree problem. Computers and Operations Research, 2022, , 105858.	2.4	0