Antonio Mucherino

List of Publications by Year in descending order

60 papers	**1,741** citations	361045 **20** h-index	301761 **39** g-index
64 all docs	**64** docs citations	**64** times ranked	**884** citing authors

#	Article	IF	Citations
1	An Analysis on the Degrees of Freedom of Binary Representations for Solutions to Discretizable Distance Geometry Problems. Studies in Computational Intelligence, 2022, , 251-255.	0.7	1
2	A Distance Geometry Procedure Using theÂLevenberg-Marquardt Algorithm andÂwith Applications inÂBiology butÂNot only. Lecture Notes in Computer Science, 2022, , 142-152.	1.0	1
3	Improving the sampling process in the interval Branch-and-Prune algorithm for the discretizable molecular distance geometry problem. Applied Mathematics and Computation, 2021, 389, 125586.	1.4	3
4	Exploring Exhaustively the Conformations of a Tandem Domains Protein using a Discrete Distance Geometry Approach. Biophysical Journal, 2021, 120, 277a.	0.2	0
5	An application-based characterization of dynamical distance geometry problems. Optimization Letters, 2020, 14, 493-507.	0.9	6
6	The K-discretization and K-incident graphs for discretizable Distance Geometry. Optimization Letters, 2020, 14, 469-482.	0.9	2
7	Preface: Special issue on distances in optimization and graphs dedicated to the memory of Michel Deza. Optimization Letters, 2020, 14, 269-271.	0.9	0
8	Manipulating Two-Dimensional Animations by Dynamical Distance Geometry. Studies in Computational Intelligence, 2020, , 147-153.	0.7	1
9	Systematic Exploration of Protein Conformational Space Using a Distance Geometry Approach. Journal of Chemical Information and Modeling, 2019, 59, 4486-4503.	2.5	25
10	A Coarse-Grained Representation for Discretizable Distance Geometry with Interval Data. Lecture Notes in Computer Science, 2019, , 3-13.	1.0	5
11	A symmetry-based splitting strategy for discretizable distance geometry problems. Journal of Global Optimization, 2018, 71, 717-733.	1.1	8
12	Recent results on assigned and unassigned distance geometry with applications to protein molecules and nanostructures. Annals of Operations Research, 2018, 271, 161-203.	2.6	21
13	On the Exact Solution of the Distance Geometry with Interval Distances in Dimension 1. Studies in Computational Intelligence, 2018, , 123-134.	0.7	1
14	Recent advances on the interval distance geometry problem. Journal of Global Optimization, 2017, 69, 525-545.	1.1	24
15	Normalized Euclidean distance matrices for human motion retargeting. , 2017, , .		11
16	An Approach to Dynamical Distance Geometry. Lecture Notes in Computer Science, 2017, , 821-829.	1.0	11
17	Optimal partial discretization orders for discretizable distance geometry. International Transactions in Operational Research, 2016, 23, 947-967.	1.8	12
18	Assigned and unassigned distance geometry: applications to biological molecules and nanostructures. 4or, 2016, 14, 337-376.	1.0	45

#	Article	IF	Citations
19	Finding Optimal Discretization Orders for Molecular Distance Geometry by Answer Set Programming. Studies in Computational Intelligence, 2016, , 1-15.	0.7	1
20	Introducing the Environment in Ant Colony Optimization. Studies in Computational Intelligence, 2016, , 147-158.	0.7	7
21	An algorithm to enumerate all possible protein conformations verifying a set of distance constraints. BMC Bioinformatics, 2015, 16, 23.	1.2	42
22	A Pseudo de Bruijn Graph Representation for Discretization Orders for Distance Geometry. Lecture Notes in Computer Science, 2015, , 514-523.	1.0	8
23	Optimal Discretization Orders for Distance Geometry: A Theoretical Standpoint. Lecture Notes in Computer Science, 2015, , 234-242.	1.0	3
24	Discretization orders for protein side chains. Journal of Global Optimization, 2014, 60, 333-349.	1.1	21
25	Euclidean Distance Geometry and Applications. SIAM Review, 2014, 56, 3-69.	4.2	317
26	Discretization orders and efficient computation of cartesian coordinates for distance geometry. Optimization Letters, 2014, 8, 2111-2125.	0.9	28
27	On the number of realizations of certain Henneberg graphs arising in protein conformation. Discrete Applied Mathematics, 2014, 165, 213-232.	0.5	43
28	BetaMDGP: Protein Structure Determination Algorithm Based on the Beta-complex. Lecture Notes in Computer Science, 2014, , 130-155.	1.0	0
29	The interval Branch-and-Prune algorithm for the discretizable molecular distance geometry problem with inexact distances. Journal of Global Optimization, 2013, 56, 855-871.	1.1	81
30	The Discretizable Molecular Distance Geometry Problem seems Easier on Proteins. , 2013, , 47-60.		22
31	Distance Geometry in Structural Biology: New Perspectives. , 2013, , 329-350.		16
32	On the Identification of Discretization Orders for Distance Geometry with Intervals. Lecture Notes in Computer Science, 2013, , 231-238.	1.0	17
33	EXPLOITING SYMMETRY PROPERTIES OF THE DISCRETIZABLE MOLECULAR DISTANCE GEOMETRY PROBLEM. Journal of Bioinformatics and Computational Biology, 2012, 10, 1242009.	0.3	28
34	Recent advances on the Discretizable Molecular Distance Geometry Problem. European Journal of Operational Research, 2012, 219, 698-706.	3.5	63
35	The discretizable distance geometry problem. Optimization Letters, 2012, 6, 1671-1686.	0.9	60
36	The discretizable molecular distance geometry problem. Computational Optimization and Applications, 2012, 52, 115-146.	0.9	98

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37	Discretization orders for distance geometry problems. Optimization Letters, 2012, 6, 783-796.	0.9	62
38	Molecular distance geometry methods: from continuous to discrete. International Transactions in Operational Research, 2011, 18, 33-51.	1.8	90
39	On the computation of protein backbones by using artificial backbones of hydrogens. Journal of Global Optimization, 2011, 50, 329-344.	1.1	30
40	Influence of Pruning Devices on the Solution of Molecular Distance Geometry Problems. Lecture Notes in Computer Science, 2011, , 206-217.	1.0	12
41	On the Number of Solutions of the Discretizable Molecular Distance Geometry Problem. Lecture Notes in Computer Science, 2011, , 322-342.	1.0	8
42	MD-jeep: An Implementation of a Branch and Prune Algorithm for Distance Geometry Problems. Lecture Notes in Computer Science, 2010, , 186-197.	1.0	16
43	DISCRETE APPROACHES FOR SOLVING MOLECULAR DISTANCE GEOMETRY PROBLEMS USING NMR DATA. International Journal of Computational Bioscience, 2010, 1, .	0.2	8
44	Modeling and Solving Real-Life Global Optimization Problems with Meta-heuristic Methods. Springer Optimization and Its Applications, 2009, , 403-419.	0.6	6
45	Comparisons between an exact and a metaheuristic algorithm for the molecular distance geometry problem. , 2009, , .		17
46	On a discretizable subclass of instances of the molecular distance geometry problem. , 2009, , .		13
47	A survey of data mining techniques applied to agriculture. Operational Research, 2009, 9, 121-140.	1.3	78
48	Application of Monkey Search Meta-heuristic to Solving Instances of the Multidimensional Assignment Problem. Lecture Notes in Control and Information Sciences, 2009, , 385-397.	0.6	5
49	Data Mining in Agriculture. Springer Optimization and Its Applications, 2009, , .	0.6	111
50	Understanding the role of the topology in protein folding by computational inverse folding experiments. Computational Biology and Chemistry, 2008, 32, 233-239.	1.1	3
51	Monkey search: a novel metaheuristic search for global optimization. AIP Conference Proceedings, 2007, , .	0.3	181
52	Interior-Point Solver for Large-Scale Quadratic Programming Problems with Bound Constraints. Journal of Optimization Theory and Applications, 2006, 129, 55-75.	0.8	22
53	An adaptive branching scheme for the Branch & Prune algorithm applied to Distance Geometry. , 0, , .		8
54	Ant Colony Optimization with environment changes: an application to GPS surveying. , 0, , .		7

#	Article	IF	Citations
55	A Distance-Based Approach for Human Posture Simulations. , 0, , .		5
56	An Efficient Exhaustive Search for the Discretizable Distance Geometry Problem with Interval Data. , 0, , .		5
57	The Referenced Vertex Ordering Problem: Theory, Applications, and Solution Methods. Open Journal of Mathematical Optimization, 0, 2, 1-29.	0.0	4
58	A New Approach to the Discretization of Multidimensional Scaling. , 0, , .		1
59	An optical processor for matrix-by-vector multiplication: an application to the distance geometry problem in 1D. Journal of Optics (United Kingdom), 0, , .	1.0	0
60	Preface: special issue on optimization in distance geometry. Journal of Global Optimization, 0, , 1.	1.1	0