Juan A RodrÃ-guez-VelÃ¡zquez

List of Publications by Year
in descending order

106 papers	2,585 citations	331259 21 h-index	205818 48 g-index
108 all docs	108 docs citations	108 times ranked	1505 citing authors

#	Article	IF	Citations
1	Subgraph centrality in complex networks. Physical Review E, 2005, 71, 056103.	0.8	890
2	Subgraph centrality and clustering in complex hyper-networks. Physica A: Statistical Mechanics and Its Applications, 2006, 364, 581-594.	1.2	217
3	Spectral measures of bipartivity in complex networks. Physical Review E, 2005, 72, 046105.	0.8	172
4	Atomic branching in molecules. International Journal of Quantum Chemistry, 2006, 106, 823-832.	1.0	87
5	On the metric dimension of corona product graphs. Computers and Mathematics With Applications, 2011, 61, 2793-2798.	1.4	83
6	On the strong metric dimension of corona product graphs and join graphs. Discrete Applied Mathematics, 2013, 161, 1022-1027.	0.5	56
7	On the Laplacian Spectrum and Walk-regular Hypergraphs. Linear and Multilinear Algebra, 2003, 51, 285-297.	0.5	48
8	On the Laplacian Eigenvalues and Metric Parameters of Hypergraphs. Linear and Multilinear Algebra, 2002, 50, 1-14.	0.5	45
9	A note on the partition dimension of Cartesian product graphs. Applied Mathematics and Computation, 2010, 217, 3571-3574.	1.4	44
10	On defensive alliances and line graphs. Applied Mathematics Letters, 2006, 19, 1345-1350.	1.5	42
11	On the partition dimension of trees. Discrete Applied Mathematics, 2014, 166, 204-209.	0.5	35
12	On the global offensive alliance number of a graph. Discrete Applied Mathematics, 2009, 157, 219-226.	0.5	34
13	Global offensive alliances in graphs. Electronic Notes in Discrete Mathematics, 2006, 25, 157-164.	0.4	32
14	Offensive <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:mi>r</mml:mi></mml:math>-alliances in graphs. Discrete Applied Mathematics, 2009, 157, 177-182.	0.5	31
15	A spectral approach to the RandiÄ‡ index. Linear Algebra and Its Applications, 2005, 400, 339-344.	0.4	27
16	On the strong metric dimension of Cartesian and direct products of graphs. Discrete Mathematics, 2014, 335, 8-19.	0.4	27
17	Laplacian eigenvalues and partition problems in hypergraphs. Applied Mathematics Letters, 2009, 22, 916-921.	1.5	26
18	On the (adjacency) metric dimension of corona and strong product graphs and their local variants: Combinatorial and computational results. Discrete Applied Mathematics, 2018, 236, 183-202.	0.5	25

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19	Functional centrality in graphs. Linear and Multilinear Algebra, 2007, 55, 293-302.	0.5	24
20	On the Local Metric Dimension of Corona Product Graphs. Bulletin of the Malaysian Mathematical Sciences Society, 2016, 39, 157-173.	0.4	24
21	Computing the k -metric dimension of graphs. Applied Mathematics and Computation, 2017, 300, 60-69.	1.4	23
22	Roman domination in Cartesian product graphs and strong product graphs. Applicable Analysis and Discrete Mathematics, 2013, 7, 262-274.	0.3	22
23	Global defensive <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:mi>k</mml:mi></mml:math>-alliances in graphs. Discrete Applied Mathematics, 2009, 157, 211-218.	0.5	21
24	A survey on alliances and related parameters in graphs. Electronic Journal of Graph Theory and Applications, 2014, 2, 70-86.	0.2	21
25	The <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si6.gif" display="inline" overflow="scroll"><mml:mi>k</mml:mi></mml:math>-metric dimension of the lexicographic product of graphs. Discrete Mathematics, 2016, 339, 1924-1934.	0.4	19
26	Defensive <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:mi>k</mml:mi></mml:math>-alliances in graphs. Applied Mathematics Letters, 2009, 22, 96-100.	1.5	18
27	The k-Metric Dimension of Corona Product Graphs. Bulletin of the Malaysian Mathematical Sciences Society, 2016, 39, 135-156.	0.4	18
28	The simultaneous metric dimension of graph families. Discrete Applied Mathematics, 2016, 198, 241-250.	0.5	18
29	The Local Metric Dimension of Strong Product Graphs. Graphs and Combinatorics, 2016, 32, 1263-1278.	0.2	17
30	On the super domination number of lexicographic product graphs. Discrete Applied Mathematics, 2019, 263, 118-129.	0.5	17
31	On the k-metric dimension of metric spaces. Ars Mathematica Contemporanea, 2019, 16, 25-38.	0.3	14
32	Computing the local metric dimension of a graph from the local metric dimension of primary subgraphs. International Journal of Computer Mathematics, 2015, 92, 686-693.	1.0	13
33	Strong metric dimension of rooted product graphs. International Journal of Computer Mathematics, 2016, 93, 1265-1280.	1.0	13
34	On the weak Roman domination number of lexicographic product graphs. Discrete Applied Mathematics, 2019, 263, 257-270.	0.5	13
35	Double domination in lexicographic product graphs. Discrete Applied Mathematics, 2020, 284, 290-300.	0.5	13
36	Bounding the diameter and the mean distance of a graph from its eigenvalues: Laplacian versus adjacency matrix methods. Discrete Mathematics, 1999, 196, 267-275.	0.4	12

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37	On reliability indices of communication networks. Computers and Mathematics With Applications, 2009, 58, 1433-1440.	1.4	12
38	On the adjacency dimension of graphs. Applicable Analysis and Discrete Mathematics, 2016, 10, 102-127.	0.3	12
39	On global offensive <mml:math altimg="si1.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.	1.5	11
40	Partitioning a graph into offensive <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:mi>k</mml:mi></mml:math>-alliances. Discrete Applied Mathematics, 2011, 159, 224-231.	0.5	11
41	k-metric resolvability in graphs. Electronic Notes in Discrete Mathematics, 2014, 46, 121-128.	0.4	11
42	Strong resolving graphs: The realization and the characterization problems. Discrete Applied Mathematics, 2018, 236, 270-287.	0.5	11
43	Total Weak Roman Domination in Graphs. Symmetry, 2019, 11, 831.	1.1	11
44	On the General RandiÄ‡ index of polymeric networks modelled by generalized SierpiÅ„ski graphs. Discrete Applied Mathematics, 2019, 263, 140-151.	0.5	11
45	The metric dimension of strong product graphs. Carpathian Journal of Mathematics, 2015, 31, 261-268.	0.4	11
46	Partitioning a graph into defensive k-alliances. Acta Mathematica Sinica, English Series, 2011, 27, 73-82.	0.2	10
47	On The (k,t)-Metric Dimension Of Graphs. Computer Journal, 2021, 64, 707-720.	1.5	10
48	Two new topological indices based on graph adjacency matrix eigenvalues and eigenvectors. Journal of Mathematical Chemistry, 2019, 57, 1053-1074.	0.7	9
49	A note on double domination in graphs. Discrete Applied Mathematics, 2021, 300, 107-111.	0.5	9
50	Boundary defensive <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si8.gif" display="inline" overflow="scroll"><mml:mi>k</mml:mi></mml:math>-alliances in graphs. Discrete Applied Mathematics, 2010, 158, 1205-1211.	0.5	8
51	On the strong metric dimension of the strong products of graphs. Open Mathematics, 2015, 13, .	0.5	8
52	The Local Metric Dimension of the Lexicographic Product of Graphs. Bulletin of the Malaysian Mathematical Sciences Society, 2019, 42, 2481-2496.	0.4	8
53	Notions of Metric Dimension of Corona Products: Combinatorial and Computational Results. Lecture Notes in Computer Science, 2014, , 153-166.	1.0	8
54	Closed formulae for the strong metric dimension of lexicographic product graphs. Discussiones Mathematicae - Graph Theory, 2016, 36, 1051.	0.2	8

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55	Estimating the higher-order RandiÄ‡ index. Chemical Physics Letters, 2010, 489, 118-120.	1.2	7
56	Closed formulae for the local metric dimension of corona product graphs. Electronic Notes in Discrete Mathematics, 2014, 46, 27-34.	0.4	7
57	On the Secure Total Domination Number of Graphs. Symmetry, 2019, 11, 1165.	1.1	7
58	On the roman domination number of generalized SierpiÅ„ski graphs. Filomat, 2017, 31, 6515-6528.	0.2	7
59	Computing the metric dimension of a graph from primary subgraphs. Discussiones Mathematicae - Graph Theory, 2017, 37, 273.	0.2	7
60	Computing global offensive alliances in Cartesian product graphs. Discrete Applied Mathematics, 2013, 161, 284-293.	0.5	6
61	Simultaneous Resolvability in Graph Families. Electronic Notes in Discrete Mathematics, 2014, 46, 241-248.	0.4	6
62	The strong metric dimension of generalized SierpiÅ„ski graphs with pendant vertices. Ars Mathematica Contemporanea, 2017, 12, 127-134.	0.3	6
63	On the Strong Metric Dimension of Cartesian Sum Graphs. Fundamenta Informaticae, 2015, 141, 57-69.	0.3	5
64	The Simultaneous Metric Dimension of Families Composed by Lexicographic Product Graphs. Graphs and Combinatorics, 2016, 32, 2093-2120.	0.2	5
65	Closed formulas for the total Roman domination number of lexicographic product graphs. Ars Mathematica Contemporanea, 2021, 20, 233-241.	0.3	5
66	On the perfect differential of a graph. Quaestiones Mathematicae, 2022, 45, 327-345.	0.2	5
67	On generalized Sierpi'nski graphs. Discussiones Mathematicae - Graph Theory, 2017, 37, 547.	0.2	5
68	Nordhaus-Gaddum results for the convex domination number of a graph. Periodica Mathematica Hungarica, 2012, 65, 125-134.	0.5	4
69	Partitioning a Graph into Global Powerful k-Alliances. Graphs and Combinatorics, 2012, 28, 575-583.	0.2	4
70	The Terminal Hosoya Polynomial of Some Families of Composite Graphs. International Journal of Combinatorics, 2014, 2014, 1-4.	0.2	4
71	Relationships Between the 2-Metric Dimension and the 2-Adjacency Dimension in the Lexicographic Product of Graphs. Graphs and Combinatorics, 2016, 32, 2367-2392.	0.2	4
72	The Simultaneous Strong Metric Dimension of Graph Families. Bulletin of the Malaysian Mathematical Sciences Society, 2016, 39, 175-192.	0.4	4

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73	The Simultaneous Local Metric Dimension of Graph Families. Symmetry, 2017, 9, 132.	1.1	4
74	On distances in generalized SierpiÅ„ski graphs. Applicable Analysis and Discrete Mathematics, 2018, 12, 49-69.	0.3	4
75	Protection of lexicographic product graphs. Discussiones Mathematicae - Graph Theory, 2019, 42, 139.	0.2	4
76	Total protection of lexicographic product graphs. Discussiones Mathematicae - Graph Theory, 2020, 42, 967.	0.2	4
77	The Hosoya polynomial of distance-regular graphs. Discrete Applied Mathematics, 2014, 178, 153-156.	0.5	3
78	On the strong metric dimension of product graphs. Electronic Notes in Discrete Mathematics, 2014, 46, 169-176.	0.4	3
79	Erratum to â€œOn the strong metric dimension of the strong products of graphsâ€• Open Mathematics, 2015, 13, .	0.5	3
80	Secure w-Domination in Graphs. Symmetry, 2020, 12, 1948.	1.1	3
81	Secure Italian domination in graphs. Journal of Combinatorial Optimization, 2021, 41, 56-72.	0.8	3
82	Italian Domination in Rooted Product Graphs. Bulletin of the Malaysian Mathematical Sciences Society, 2021, 44, 497-508.	0.4	3
83	From (Secure) w-Domination in Graphs to Protection of Lexicographic Product Graphs. Bulletin of the Malaysian Mathematical Sciences Society, 2021, 44, 3747-3765.	0.4	3
84	Lexicographic metric spaces: Basic properties and the metric dimension. Applicable Analysis and Discrete Mathematics, 2020, 14, 20-32.	0.3	3
85	Analogies between the geodetic number and the Steiner number of some classes of graphs. Filomat, 2015, 29, 1781-1788.	0.2	3
86	Criteria for ranking (poly)cyclic chemical constitutional graphs and their vertices via centrality measures. Journal of Mathematical Chemistry, 2020, 58, 439-457.	0.7	2
87	Total Domination in Rooted Product Graphs. Symmetry, 2020, 12, 1929.	1.1	2
88	Weak Roman domination in rooted product graphs. AIMS Mathematics, 2021, 6, 3641-3653.	0.7	2
89	Solution of the Chen-ChvÃ¡tal conjecture for specific classes of metric spaces. AIMS Mathematics, 2021, 6, 7766-7781.	0.7	2
90	Secure domination in rooted product graphs. Journal of Combinatorial Optimization, 2021, 41, 401-413.	0.8	2

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91	From the Quasi-Total Strong Differential to Quasi-Total Italian Domination in Graphs. Symmetry, 2021, 13, 1036.	1.1	2
92	Universal lines in graphs. Quaestiones Mathematicae, 2022, 45, 1485-1500.	0.2	2
93	From the Strong Differential to Italian Domination in Graphs. Mediterranean Journal of Mathematics, 2021, 18, 1.	0.4	2
94	On spectral bounds for cutsets. Discrete Mathematics, 2002, 257, 101-109.	0.4	1
95	The <mml:math altimg="si2.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	0.5	1
96	Alliance free and alliance cover sets. Acta Mathematica Sinica, English Series, 2011, 27, 497-504.	0.2	1
97	Simultaneous Resolvability in Families of Corona Product Graphs. Bulletin of the Malaysian Mathematical Sciences Society, 2018, 41, 1541-1560.	0.4	1
98	Secure Total Domination in Rooted Product Graphs. Mathematics, 2020, 8, 600.	1.1	1
99	On the 2-Packing Differential of a Graph. Results in Mathematics, 2021, 76, 1.	0.4	1
100	Weak total resolvability in graphs. Discussiones Mathematicae - Graph Theory, 2016, 36, 185.	0.2	1
101	Corona metric spaces: Basic properties, universal lines, and the metric dimension. AIMS Mathematics, 2022, 7, 13763-13776.	0.7	1
102	The limit case of a domination property. Acta Mathematica Sinica, English Series, 2012, 28, 463-468.	0.2	0
103	Alliance free sets in Cartesian product graphs. Discrete Applied Mathematics, 2013, 161, 1618-1625.	0.5	0
104	Similarities and Differences Between the Vertex Cover Number and the Weakly Connected Domination Number of a Graph. Fundamenta Informaticae, 2017, 152, 273-287.	0.3	0
105	On the RandiÄ‡ Index of Corona Product Graphs. , 2011, 2011, 1-7.		0
106	Perfect Domination, Roman Domination and Perfect Roman Domination in Lexicographic Product Graphs. Fundamenta Informaticae, 2022, 185, 201-220.	0.3	0