

# RaÃ±l BaÃ±os

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1362452/publications.pdf>

Version: 2024-02-01

89  
papers

3,352  
citations

218592

26  
h-index

149623

56  
g-index

92  
all docs

92  
docs citations

92  
times ranked

4009  
citing authors

#	ARTICLE	IF	CITATIONS
1	Determination of Instantaneous Powers From a Novel Time-Domain Parameter Identification Method of Non-Linear Single-Phase Circuits. IEEE Transactions on Power Delivery, 2022, 37, 3608-3619.	2.9	10
2	Geometric Algebra Applied to Multiphase Electrical Circuits in Mixed Time-Frequency Domain by Means of Hypercomplex Hilbert Transform. Mathematics, 2022, 10, 1419.	1.1	4
3	Geometric Power and Poynting Vector: a Physical Derivation for Harmonic Power Flow using Geometric Algebra. , 2022, , .		1
4	Green Packaging from Consumer and Business Perspectives. Sustainability, 2021, 13, 1356.	1.6	80
5	Geometric Algebra Framework Applied to Symmetrical Balanced Three-Phase Systems for Sinusoidal and Non-Sinusoidal Voltage Supply. Mathematics, 2021, 9, 1259.	1.1	5
6	Vector Geometric Algebra in Power Systems: An Updated Formulation of Apparent Power under Non-Sinusoidal Conditions. Mathematics, 2021, 9, 1295.	1.1	11
7	Geometric Algebra for teaching AC Circuit Theory. International Journal of Circuit Theory and Applications, 2021, 49, 3473-3487.	1.3	2
8	Environmental Energy Sustainability at Universities. Sustainability, 2020, 12, 9219.	1.6	1
9	Multi-Objective Evolutionary Algorithms to Find Community Structures in Large Networks. Mathematics, 2020, 8, 2048.	1.1	6
10	Symmetry in Engineering Sciences II. Symmetry, 2020, 12, 1077.	1.1	2
11	A new approach to single-phase systems under sinusoidal and non-sinusoidal supply using geometric algebra. Electric Power Systems Research, 2020, 189, 106605.	2.1	12
12	Student Response Systems: A Multidisciplinary Analysis Using Visual Analytics. Education Sciences, 2020, 10, 348.	1.4	15
13	Energies and Its Worldwide Research. Energies, 2020, 13, 6700.	1.6	14
14	Electronics and Its Worldwide Research. Electronics (Switzerland), 2020, 9, 977.	1.8	1
15	Analysis of Research Topics and Scientific Collaborations in Energy Saving Using Bibliometric Techniques and Community Detection. Energies, 2019, 12, 2030.	1.6	18
16	Optimization Methods Applied to Power Systems. Energies, 2019, 12, 2302.	1.6	7
17	Symmetry in Engineering Sciences. Symmetry, 2019, 11, 797.	1.1	2
18	A Hybrid Active Filter Using the Backstepping Controller for Harmonic Current Compensation. Symmetry, 2019, 11, 1161.	1.1	4

#	ARTICLE	IF	CITATIONS
19	Analysis of power flow under non-sinusoidal conditions in the presence of harmonics and interharmonics using geometric algebra. International Journal of Electrical Power and Energy Systems, 2019, 111, 486-492.	3.3	15
20	Rampant Arch and Its Optimum Geometrical Generation. Symmetry, 2019, 11, 627.	1.1	5
21	Optimization of the Contracted Electric Power by Means of Genetic Algorithms. Energies, 2019, 12, 1270.	1.6	3
22	Online Store Locator: An Essential Resource for Retailers in the 21st Century. Social Sciences, 2019, 8, 53.	0.7	0
23	Quadrature Current Compensation in Non-Sinusoidal Circuits Using Geometric Algebra and Evolutionary Algorithms. Energies, 2019, 12, 692.	1.6	12
24	An Open Hardware Design for Internet of Things Power Quality and Energy Saving Solutions. Sensors, 2019, 19, 627.	2.1	42
25	Evolutionary Algorithms for Community Detection in Continental-Scale High-Voltage Transmission Grids. Symmetry, 2019, 11, 1472.	1.1	7
26	Geometric Algebra in Nonsinusoidal Power Systems: A Case of Study for Passive Compensation. Symmetry, 2019, 11, 1287.	1.1	4
27	Detection of Communities within the Multibody System Dynamics Network and Analysis of Their Relations. Symmetry, 2019, 11, 1525.	1.1	6
28	A fast method for identifying worldwide scientific collaborations using the Scopus database. Telematics and Informatics, 2018, 35, 168-185.	3.5	98
29	Analysis of Research Topics and Scientific Collaborations in Renewable Energy Using Community Detection. Sustainability, 2018, 10, 4510.	1.6	21
30	OpenZmeter: An Efficient Low-Cost Energy Smart Meter and Power Quality Analyzer. Sustainability, 2018, 10, 4038.	1.6	48
31	Power Quality: Scientific Collaboration Networks and Research Trends. Energies, 2018, 11, 2067.	1.6	31
32	A MATLAB application for monitoring the operation and power quality of electrical machines. , 2018, , .		1
33	Community detection in national-scale high voltage transmission networks using genetic algorithms. Advanced Engineering Informatics, 2018, 38, 232-241.	4.0	28
34	Simulation of power quality disturbances through the wavelet transform. , 2018, , .		7
35	Aprendizaje cooperativo a travÃ©s de las nuevas tecnologÃ­as: Una revisiÃ³n. @tic: Revista D'InnovaciÃ³n Educativa, 2018, , 16.	0.3	7
36	Experiencias de Aprendizaje Cooperativo en MatemÃ¡ticas   Cooperative learning experiences in mathematics. Espiral Cuadernos Del Profesorado, 2018, 11, 99-108.	0.5	3

#	ARTICLE	IF	CITATIONS
37	Adaptive community detection in complex networks using genetic algorithms. <i>Neurocomputing</i> , 2017, 266, 101-113.	3.5	95
38	An overview of research and energy evolution for small hydropower in Europe. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 75, 476-489.	8.2	87
39	Web GIS to enhance relational capital: the case of general merchandise retailers. <i>Journal of Knowledge Management</i> , 2016, 20, 578-593.	3.2	4
40	Energy benchmarking for shopping centers in Gulf Coast region. <i>Energy Policy</i> , 2016, 91, 247-255.	4.2	34
41	Higher-order statistics for power systems: Effects of the sampling frequency on ergodicity. <i>Applied Mathematical Modelling</i> , 2016, 40, 6924-6933.	2.2	3
42	Analysis of OpenMP and MPI implementations of meta-heuristics for vehicle routing problems. <i>Applied Soft Computing Journal</i> , 2016, 43, 262-275.	4.1	18
43	Power quality techniques research worldwide: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 54, 846-856.	8.2	60
44	The research of water use in Spain. <i>Journal of Cleaner Production</i> , 2016, 112, 4719-4732.	4.6	31
45	Leveraging cooperation for parallel multi-objective feature selection in high-dimensional EEG data. <i>Concurrency Computation Practice and Experience</i> , 2015, 27, 5476-5499.	1.4	10
46	Parallel alternatives for evolutionary multi-objective optimization in unsupervised feature selection. <i>Expert Systems With Applications</i> , 2015, 42, 4239-4252.	4.4	38
47	Parallel Cooperation for Large-Scale Multiobjective Optimization on Feature Selection Problems. <i>Lecture Notes in Computer Science</i> , 2015, , 693-705.	1.0	0
48	Feature selection in high-dimensional EEG data by parallel multi-objective optimization. , 2014, , .		9
49	Renewable energy production in Spain: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 33, 509-531.	8.2	104
50	The research on energy in Spain: A scientometric approach. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 29, 173-183.	8.2	53
51	Wind turbine selection for wind farm layout using multi-objective evolutionary algorithms. <i>Expert Systems With Applications</i> , 2014, 41, 6585-6595.	4.4	77
52	The assessment of evolutionary algorithms for analyzing the positional accuracy and uncertainty of maps. <i>Expert Systems With Applications</i> , 2014, 41, 6346-6360.	4.4	7
53	A Simulated Annealing-based parallel multi-objective approach to vehicle routing problems with time windows. <i>Expert Systems With Applications</i> , 2013, 40, 1696-1707.	4.4	101
54	A parallel multi-objective algorithm for two-dimensional bin packing with rotations and load balancing. <i>Expert Systems With Applications</i> , 2013, 40, 5169-5180.	4.4	28

#	ARTICLE	IF	CITATIONS
55	A Pareto-based multi-objective evolutionary algorithm for automatic rule generation in network intrusion detection systems. <i>Soft Computing</i> , 2013, 17, 255-263.	2.1	42
56	Genetic algorithm for S-transform optimisation in the analysis and classification of electrical signal perturbations. <i>Expert Systems With Applications</i> , 2013, 40, 6766-6777.	4.4	28
57	A hybrid meta-heuristic for multi-objective vehicle routing problems with time windows. <i>Computers and Industrial Engineering</i> , 2013, 65, 286-296.	3.4	118
58	Engaging students in computer-supported cooperative learning. <i>International Journal of Learning Technology</i> , 2013, 8, 297.	0.2	5
59	A Multi-Objective Evolutionary Algorithm for Network Intrusion Detection Systems. <i>Lecture Notes in Computer Science</i> , 2011, , 73-80.	1.0	4
60	Cooperative learning and electronic group portfolio: tutoring tools, development of competences and assessment. <i>International Journal of Learning Technology</i> , 2011, 6, 46.	0.2	5
61	Multi-objective crop planning using pareto-based evolutionary algorithms. <i>Agricultural Economics (United Kingdom)</i> , 2011, 42, 649-656.	2.0	34
62	Resilience Indexes for Water Distribution Network Design: A Performance Analysis Under Demand Uncertainty. <i>Water Resources Management</i> , 2011, 25, 2351-2366.	1.9	67
63	Parallelism on multicore processors using Parallel.FX. <i>Advances in Engineering Software</i> , 2011, 42, 259-265.	1.8	6
64	Optimization methods applied to renewable and sustainable energy: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2011, 15, 1753-1766.	8.2	1,276
65	A memetic algorithm for two-dimensional multi-objective bin-packing with constraints. , 2011, , .		2
66	Annealing-tabu PAES: a multi-objective hybrid meta-heuristic. <i>Optimization</i> , 2011, 60, 1473-1491.	1.0	6
67	Ant Colony Optimization for Water Distribution Network Design: A Comparative Study. <i>Lecture Notes in Computer Science</i> , 2011, , 300-307.	1.0	12
68	A memetic algorithm applied to the design of water distribution networks. <i>Applied Soft Computing Journal</i> , 2010, 10, 261-266.	4.1	70
69	Minimization of voltage deviation and power losses in power networks using Pareto optimization methods. <i>Engineering Applications of Artificial Intelligence</i> , 2010, 23, 695-703.	4.3	42
70	A Pareto-based memetic algorithm for optimization of looped water distribution systems. <i>Engineering Optimization</i> , 2010, 42, 223-240.	1.5	7
71	Multi-Objective Evolutionary Algorithms Used in Greenhouse Planning for Recycling Biomass into Energy. <i>Advances in Intelligent and Soft Computing</i> , 2010, , 463-470.	0.2	1
72	A New Memetic Algorithm for the Two-Dimensional Bin-Packing Problem with Rotations. <i>Advances in Intelligent and Soft Computing</i> , 2010, , 541-548.	0.2	4

#	ARTICLE	IF	CITATIONS
73	Implementation of scatter search for multi-objective optimization: a comparative study. Computational Optimization and Applications, 2009, 42, 421-441.	0.9	28
74	Design of a Snort-Based Hybrid Intrusion Detection System. Lecture Notes in Computer Science, 2009, , 515-522.	1.0	20
75	Application of Several Meta-Heuristic Techniques to the Optimization of Real Looped Water Distribution Networks. Water Resources Management, 2008, 22, 1367-1379.	1.9	100
76	Optimal Design of Gravity-Fed Looped Water Distribution Networks Considering the Resilience Index. Journal of Water Resources Planning and Management - ASCE, 2008, 134, 234-238.	1.3	44
77	IMPROVING THE PERFORMANCE OF MULTI-OBJECTIVE EVOLUTIONARY ALGORITHMS USING THE ISLAND PARALLEL MODEL. Parallel Processing Letters, 2007, 17, 127-139.	0.4	3
78	A hybrid method for solving multi-objective global optimization problems. Journal of Global Optimization, 2007, 38, 265-281.	1.1	27
79	A Memetic Algorithm for Water Distribution Network Design. , 2007, , 279-289.		15
80	Parallelization of population-based multi-objective meta-heuristics: An empirical study. Applied Mathematical Modelling, 2006, 30, 578-592.	2.2	10
81	Performance Analysis of Parallel Strategies for Bi-objective Network Partitioning. Advances in Intelligent and Soft Computing, 2006, , 291-300.	0.2	1
82	Optimizaci3n de Tensi3n en Redes de Distribuci3n utilizando T3cnicas de Optimizaci3n Evolutiva. Informacion Tecnologica (discontinued), 2006, 17, .	0.1	3
83	Adapting Multi-Objective Meta-Heuristics for Graph Partitioning. , 2006, , 123-132.		0
84	A Parallel Multilevel Metaheuristic for Graph Partitioning. Journal of Heuristics, 2004, 10, 315-336.	1.1	25
85	Parallel heuristic search in multilevel graph partitioning. , 2004, , .		4
86	A New Pareto-Based Algorithm for Multi-objective Graph Partitioning. Lecture Notes in Computer Science, 2004, , 779-788.	1.0	1
87	A parallel evolutionary algorithm for circuit partitioning. , 2003, , .		3
88	Multilevel Heuristic Algorithm for Graph Partitioning. Lecture Notes in Computer Science, 2003, , 143-153.	1.0	22
89	A Mixed Heuristic for Circuit Partitioning. Computational Optimization and Applications, 2002, 23, 321-340.	0.9	23