Francisco Gil-Montoya

List of Publications by Year
in descending order

147 papers	6,480 citations	76196 40 h-index	71532 76 g-index
150 all docs	150 docs citations	150 times ranked	7210 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	Formulating the geometric foundation of Clarke, Park, and FBD transformations by means of Clifford's geometric algebra. Mathematical Methods in the Applied Sciences, 2022, 45, 4252-4277.	1.2	6
3	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
4	Transfer of parasitology research to patents worldwide. Acta Tropica, 2022, 232, 106532.	0.9	0
5	The Effects of Soiling and Frequency of Optimal Cleaning of PV Panels in Palestine. Energies, 2022, 15, 4232.	1.6	10
6	Load Disaggregation Through Particle Filtering of Harmonic Features. , 2022, , .		0
7	Geometric Power and Poynting Vector: a Physical Derivation for Harmonic Power Flow using Geometric Algebra. , 2022, , .		1
8	Worldwide trends in energy market research. , 2021, , 277-292.		0
9	Worldwide Research Trends on Smart Homes. Power Systems, 2021, , 1-31.	0.3	0
10	The Significance of the Adaptive Thermal Comfort Practice over the Structure Retrofits to Sustain Indoor Thermal Comfort. Energies, 2021, 14, 2946.	1.6	26
11	Geometric Algebra Framework Applied to Symmetrical Balanced Three-Phase Systems for Sinusoidal and Non-Sinusoidal Voltage Supply. Mathematics, 2021, 9, 1259.	1.1	5
12	The Bibliometric Literature on Scopus and WoS: The Medicine and Environmental Sciences Categories as Case of Study. International Journal of Environmental Research and Public Health, 2021, 18, 5851.	1.2	14
13	Vector Geometric Algebra in Power Systems: An Updated Formulation of Apparent Power under Non-Sinusoidal Conditions. Mathematics, 2021, 9, 1295.	1.1	11
14	The Impact of Modern Artificial Lighting on the Optimum Window-to-Wall Ratio of Residential Buildings in Jordan. Applied Sciences (Switzerland), 2021, 11, 5888.	1.3	17
15	The Significance of Occupants' Interaction with Their Environment on Reducing Cooling Loads and Dermatological Distresses in East Mediterranean Climates. International Journal of Environmental Research and Public Health, 2021, 18, 8870.	1.2	13
16	Influence of the Advancement in the LED Lighting Technologies on the Optimum Windows-to-Wall Ratio of Jordanians Residential Buildings. Energies, 2021, 14, 5446.	1.6	12
17	Geometric Algebra for teaching AC Circuit Theory. International Journal of Circuit Theory and Applications, 2021, 49, 3473-3487.	1.3	2
18	Energy performance analytics and behavior prediction during unforeseen circumstances of retrofitted buildings in the arid climate. Energy Reports, 2021, 7, 6182-6195.	2.5	15

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19	Worldwide research trends on desalination. Desalination, 2021, 519, 115305.	4.0	41
20	Worldwide research trends on hydropower. , 2021, , 249-280.		2
21	A New Electromechanical Analogy Approach Based on Electrostatic Coupling for Vertical Dynamic Analysis of Planar Vehicle Models. IEEE Access, 2021, 9, 119492-119502.	2.6	8
22	Worldwide Research Trends in the Recycling of Materials. , 2020, , 303-312.		2
23	Analysis of non-active power in non-sinusoidal circuits using geometric algebra. International Journal of Electrical Power and Energy Systems, 2020, 116, 105541.	3.3	7
24	Environmental Energy Sustainability at Universities. Sustainability, 2020, 12, 9219.	1.6	1
25	Multi-Objective Evolutionary Algorithms to Find Community Structures in Large Networks. Mathematics, 2020, 8, 2048.	1.1	6
26	Assessing the Orange Tree Crown Volumes Using Google Maps as a Low-Cost Photogrammetric Alternative. Agronomy, 2020, 10, 893.	1.3	9
27	Symmetry in Engineering Sciences II. Symmetry, 2020, 12, 1077.	1.1	2
28	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
29	Energy Saving at Cities. Energies, 2020, 13, 3758.	1.6	4
30	A Multi-Level World Comprehensive Neural Network Model for Maximum Annual Solar Irradiation on a Flat Surface. Energies, 2020, 13, 6422.	1.6	29
31	Energies and Its Worldwide Research. Energies, 2020, 13, 6700.	1.6	14
32	Worldwide Research Trends on Medicinal Plants. International Journal of Environmental Research and Public Health, 2020, 17, 3376.	1.2	178
33	Electronics and Its Worldwide Research. Electronics (Switzerland), 2020, 9, 977.	1.8	1
34	Estimating the Optimum Tilt Angles for South-Facing Surfaces in Palestine. Energies, 2020, 13, 623.	1.6	47
35	Benchmarking Energy Use at University of Almeria (Spain). Sustainability, 2020, 12, 1336.	1.6	17
36	Worldwide Research on Low Cost Technologies through Bibliometric Analysis. Inventions, 2020, 5, 9.	1.3	11

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37	Energy Recovery from Waste Tires Using Pyrolysis: Palestine as Case of Study. Energies, 2020, 13, 1817.	1.6	45
38	Sustainable Thermal Energy Generation at Universities by Using Loquat Seeds as Biofuel. Sustainability, 2020, 12, 2093.	1.6	8
39	The Contribution of Spanish Science to Patents: Medicine as Case of Study. International Journal of Environmental Research and Public Health, 2020, 17, 3638.	1.2	7
40	Worldwide Research Trends on Hazardous Waste. , 2020, , 1-17.		0
41	The Role of Smart Contracts in Sustainability: Worldwide Research Trends. Sustainability, 2019, 11, 3049.	1.6	41
42	Analysis of Research Topics and Scientific Collaborations in Energy Saving Using Bibliometric Techniques and Community Detection. Energies, 2019, 12, 2030.	1.6	18
43	Worldwide Research Trends on Wheat and Barley: A Bibliometric Comparative Analysis. Agronomy, 2019, 9, 352.	1.3	266
44	Optimization Methods Applied to Power Systems. Energies, 2019, 12, 2302.	1.6	7
45	Symmetry in Engineering Sciences. Symmetry, 2019, 11, 797.	1.1	2
46	Bibliometric Maps of BIM and BIM in Universities: A Comparative Analysis. Sustainability, 2019, 11, 4398.	1.6	10
47	A Hybrid Active Filter Using the Backstepping Controller for Harmonic Current Compensation. Symmetry, 2019, 11, 1161.	1.1	4
48	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
49	Rampant Arch and Its Optimum Geometrical Generation. Symmetry, 2019, 11, 627.	1.1	5
50	Optimization of the Contracted Electric Power by Means of Genetic Algorithms. Energies, 2019, 12, 1270.	1.6	3
51	Date Seeds (Phoenix dactylifera L.) Valorization for Boilers in the Mediterranean Climate. Sustainability, 2019, 11, 711.	1.6	14
52	Urban design to achieving the sustainable energy of residential neighbourhoods in arid climate. Journal of Cleaner Production, 2019, 228, 135-152.	4.6	22
53	Quadrature Current Compensation in Non-Sinusoidal Circuits Using Geometric Algebra and Evolutionary Algorithms. Energies, 2019, 12, 692.	1.6	12
54	Wind missing data arrangement using wavelet based techniques for getting maximum likelihood. Energy Conversion and Management, 2019, 185, 552-561.	4.4	19

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55	Innovation and technology for sustainable mining activity: A worldwide research assessment. Journal of Cleaner Production, 2019, 221, 38-54.	4.6	103
56	An Open Hardware Design for Internet of Things Power Quality and Energy Saving Solutions. Sensors, 2019, 19, 627.	2.1	42
57	Evolutionary Algorithms for Community Detection in Continental-Scale High-Voltage Transmission Grids. Symmetry, 2019, 11, 1472.	1.1	7
58	Basket-Handle Arch and Its Optimum Symmetry Generation as a Structural Element and Keeping the Aesthetic Point of View. Symmetry, 2019, 11, 1243.	1.1	4
59	Coatings in Photovoltaic Solar Energy Worldwide Research. Coatings, 2019, 9, 797.	1.2	8
60	Geometric Algebra in Nonsinusoidal Power Systems: A Case of Study for Passive Compensation. Symmetry, 2019, 11, 1287.	1.1	4
61	The worldwide research trends on water ecosystem services. Ecological Indicators, 2019, 99, 310-323.	2.6	76
62	Plasmodium genomics: an approach for learning about and ending human malaria. Parasitology Research, 2019, 118, 1-27.	0.6	45
63	Proposed methodology for evaluation of small hydropower sustainability in a Mediterranean climate. Journal of Cleaner Production, 2019, 214, 717-729.	4.6	13
64	Detection of Communities within the Multibody System Dynamics Network and Analysis of Their Relations. Symmetry, 2019, 11, 1525.	1.1	6
65	Wind energy research in Mexico. Renewable Energy, 2018, 123, 719-729.	4.3	36
66	Mango stone properties as biofuel and its potential for reducing CO_2 emissions. Journal of Cleaner Production, 2018, 190, 53-62.	4.6	42
67	Low-pressure sprinkler irrigation in maize: Differences in water distribution above and below the crop canopy. Agricultural Water Management, 2018, 203, 353-365.	2.4	27
68	A fast method for identifying worldwide scientific collaborations using the Scopus database. Telematics and Informatics, 2018, 35, 168-185.	3.5	98
69	Trends in plant research using molecular markers. Planta, 2018, 247, 543-557.	1.6	114
70	Human parasitology worldwide research. Parasitology, 2018, 145, 699-712.	0.7	25
71	Analysis of Research Topics and Scientific Collaborations in Renewable Energy Using Community Detection. Sustainability, 2018, 10, 4510.	1.6	21
72	The Identification of Scientific Communities and Their Approach to Worldwide Malaria Research. International Journal of Environmental Research and Public Health, 2018, 15, 2703.	1.2	11

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73	The Higher Education Sustainability through Virtual Laboratories: The Spanish University as Case of Study. Sustainability, 2018, 10, 4040.	1.6	47
74	OpenZmeter: An Efficient Low-Cost Energy Smart Meter and Power Quality Analyzer. Sustainability, 2018, 10, 4038.	1.6	48
75	Sustainable Energy Based on Sunflower Seed Husk Boiler for Residential Buildings. Sustainability, 2018, 10, 3407.	1.6	59
76	Power Quality: Scientific Collaboration Networks and Research Trends. Energies, 2018, 11, 2067.	1.6	31
77	A daily baseline model based on transfer functions for the verification of energy saving. A case study of the administration room at the Palacio de la Madraza, Granada. Applied Energy, 2018, 224, 538-549.	5.1	13
78	Global trends in nitrate leaching research in the 1960â€"2017 period. Science of the Total Environment, 2018, 643, 400-413.	3.9	159
79	Genetic approach towards a vaccine against malaria. European Journal of Clinical Microbiology and Infectious Diseases, 2018, 37, 1829-1839.	1.3	5
80	A MATLAB application for monitoring the operation and power quality of electrical machines. , 2018, , .		1
81	Solar Reflector Materials Degradation Due to the Sand Deposited on the Backside Protective Paints. Energies, 2018, 11, 808.	1.6	9
82	Dielectric and Bioimpedance Research Studies: A Scientometric Approach Using the Scopus Database. Publications, 2018, 6, 6.	1.9	15
83	Worldwide Research on Plant Defense against Biotic Stresses as Improvement for Sustainable Agriculture. Sustainability, 2018, 10, 391.	1.6	126
84	Economic analysis of sustainable water use: A review of worldwide research. Journal of Cleaner Production, 2018, 198, 1120-1132.	4.6	77
85	Community detection in national-scale high voltage transmission networks using genetic algorithms. Advanced Engineering Informatics, 2018, 38, 232-241.	4.0	28
86	Microalgae research worldwide. Algal Research, 2018, 35, 50-60.	2.4	150
87	The Electric Bicycle: Worldwide Research Trends. Energies, 2018, 11, 1894.	1.6	60
88	Simulation of power quality disturbances through the wavelet transform. , 2018, , .		7
89	Indoor lighting techniques: An overview of evolution and new trends for energy saving. Energy and Buildings, 2017, 140, 50-60.	3.1	115
90	Rooftop analysis for solar flat plate collector assessment to achieving sustainability energy. Journal of Cleaner Production, 2017, 148, 545-554.	4.6	31

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91	The metagenomics worldwide research. Current Genetics, 2017, 63, 819-829.	0.8	72
92	Towards forest sustainability in Mediterranean countries using biomass as fuel for heating. Journal of Cleaner Production, 2017, 156, 624-634.	4.6	40
93	Adaptive community detection in complex networks using genetic algorithms. Neurocomputing, 2017, 266, 101-113.	3.5	95
94	Controlled deficit irrigation for orange trees in Mediterranean countries. Journal of Cleaner Production, 2017, 162, 130-140.	4.6	27
95	Electric vehicles in Spain: An overview of charging systems. Renewable and Sustainable Energy Reviews, 2017, 77, 970-983.	8.2	115
96	Intelligent homesâ€™ technologies to optimize the energy performance for the net zero energy home. Energy and Buildings, 2017, 153, 262-274.	3.1	84
97	An overview of research and energy evolution for small hydropower in Europe. Renewable and Sustainable Energy Reviews, 2017, 75, 476-489.	8.2	87
98	Worldwide Scientific Production Indexed by Scopus on Labour Relations. Publications, 2017, 5, 25.	1.9	29
99	Worldwide Research on Energy Efficiency and Sustainability in Public Buildings. Sustainability, 2017, 9, 1294.	1.6	87
100	DNA Damage Repair System in Plants: A Worldwide Research Update. Genes, 2017, 8, 299.	1.0	33
101	Assessment of the Potential of UAV Video Image Analysis for Planning Irrigation Needs of Golf Courses. Water (Switzerland), 2016, 8, 584.	1.2	15
102	Conversion of an existing electrostatic precipitator casing to Pulse Jet Fabric filter in fossil power plants. DYNA (Colombia), 2016, 83, 189-197.	0.2	2
103	Solar greenhouse dryer system for wood chips improvement as biofuel. Journal of Cleaner Production, 2016, 135, 1233-1241.	4.6	41
104	An overview of renewable energy potential in Palestine. Renewable and Sustainable Energy Reviews, 2016, 65, 943-960.	8.2	81
105	Energy retrofit strategies for housing sector in the arid climate. Energy and Buildings, 2016, 131, 158-171.	3.1	45
106	Improvement of efficiency through an energy management program as a sustainable practice in schools. Journal of Cleaner Production, 2016, 135, 794-805.	4.6	59
107	Intelligent low cost telecontrol system for agricultural vehicles in harmful environments. Journal of Cleaner Production, 2016, 113, 204-215.	4.6	24
108	Energy benchmarking for shopping centers in Gulf Coast region. Energy Policy, 2016, 91, 247-255.	4.2	34

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109	Higher-order statistics for power systems: Effects of the sampling frequency on ergodicity. Applied Mathematical Modelling, 2016, 40, 6924-6933.	2.2	3
110	Power quality techniques research worldwide: A review. Renewable and Sustainable Energy Reviews, 2016, 54, 846-856.	8.2	60
111	The research of water use in Spain. Journal of Cleaner Production, 2016, 112, 4719-4732.	4.6	31
112	An overview of energy balance compared to sustainable energy in United Arab Emirates. Renewable and Sustainable Energy Reviews, 2016, 55, 1195-1209.	8.2	55
113	Olive Cake Improvement for Bioenergy: the Drying Kinetics. International Journal of Green Energy, 2015, 12, 559-569.	2.1	23
114	Review of bioclimatic architecture strategies for achieving thermal comfort. Renewable and Sustainable Energy Reviews, 2015, 49, 736-755.	8.2	180
115	Optimal displacement of photovoltaic array's rows using a novel shading model. Applied Energy, 2015, 144, 1-9.	5.1	60
116	A parabolic-trough collector for cleaner industrial process heat. Journal of Cleaner Production, 2015, 89, 272-285.	4.6	95
117	Wave energy resource assessment at southern coast of the Gulf of Mexico. DYNA (Colombia), 2015, 82, 49-55.	0.2	1
118	Wireless surveillance sytem for greenhouse crops. DYNA (Colombia), 2014, 81, 164.	0.2	22
119	Renewable energy production in Spain: A review. Renewable and Sustainable Energy Reviews, 2014, 33, 509-531.	8.2	104
120	The research on energy in spain: A scientometric approach. Renewable and Sustainable Energy Reviews, 2014, 29, 173-183.	8.2	53
121	Wind turbine selection for wind farm layout using multi-objective evolutionary algorithms. Expert Systems With Applications, 2014, 41, 6585-6595.	4.4	77
122	The assessment of evolutionary algorithms for analyzing the positional accuracy and uncertainty of maps. Expert Systems With Applications, 2014, 41, 6346-6360.	4.4	7
123	An active contour computer algorithm for the classification of cucumbers. Computers and Electronics in Agriculture, 2013, 92, 75-81.	3.7	35
124	A monitoring system for intensive agriculture based on mesh networks and the android system. Computers and Electronics in Agriculture, 2013, 99, 14-20.	3.7	39
125	Scientific production of renewable energies worldwide: An overview. Renewable and Sustainable Energy Reviews, 2013, 18, 134-143.	8.2	278
126	A Pareto-based multi-objective evolutionary algorithm for automatic rule generation in network intrusion detection systems. Soft Computing, 2013, 17, 255-263.	2.1	42

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127	Integration of communication technologies in sensor networks toÂmonitor the Amazon environment. Journal of Cleaner Production, 2013, 59, 32-42.	4.6	29
128	Pareto-based evolutionary algorithms for the calculation of transformation parameters and accuracy assessment of historical maps. Computers and Geosciences, 2013, 57, 124-132.	2.0	20
129	Genetic algorithm for S-transform optimisation in the analysis and classification of electrical signal perturbations. Expert Systems With Applications, 2013, 40, 6766-6777.	4.4	28
130	Engaging students in computer-supported cooperative learning. International Journal of Learning Technology, 2013, 8, 297.	0.2	5
131	A Multi-Objective Evolutionary Algorithm for Network Intrusion Detection Systems. Lecture Notes in Computer Science, 2011, , 73-80.	1.0	4
132	Cooperative learning and electronic group portfolio: tutoring tools, development of competences and assessment. International Journal of Learning Technology, 2011, 6, 46.	0.2	5
133	Multi-objective crop planning using pareto-based evolutionary algorithms. Agricultural Economics (United Kingdom), 2011, 42, 649-656.	2.0	34
134	Comparative analysis of power variables in high performance embedded and x86 architectures using GNU/Linux. Computers and Electrical Engineering, 2011, 37, 541-549.	3.0	7
135	Improving the climate safety of workers in AlmerÃa-type greenhouses in Spain byÂpredicting the periods when they are most likely to suffer thermal stress. Applied Ergonomics, 2011, 42, 391-396.	1.7	25
136	Is the wind a periodical phenomenon? The case of Mexico. Renewable and Sustainable Energy Reviews, 2011, 15, 721-728.	8.2	38
137	Optimization methods applied to renewable and sustainable energy: A review. Renewable and Sustainable Energy Reviews, 2011, 15, 1753-1766.	8.2	1,276
138	zEnergy: An open source project for power quality assessment and monitoring. , 2011, , .		6
139	Annealing-tabu PAES: a multi-objective hybrid meta-heuristic. Optimization, 2011, 60, 1473-1491.	1.0	6
140	Open source tool for energy saving and efficient system management. , 2011, , .		0
141	A memetic algorithm applied to the design of water distribution networks. Applied Soft Computing Journal, 2010, 10, 261-266.	4.1	70
142	Minimization of voltage deviation and power losses in power networks using Pareto optimization methods. Engineering Applications of Artificial Intelligence, 2010, 23, 695-703.	4.3	42
143	Cryptanalysis of Hash Functions Using Advanced Multiprocessing. Advances in Intelligent and Soft Computing, 2010, , 221-228.	0.2	1
144	Multi-Objective Evolutionary Algorithms Used in Greenhouse Planning for Recycling Biomass into Energy. Advances in Intelligent and Soft Computing, 2010, , 463-470.	0.2	1

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145	OptimizaciÃ³n de TensiÃ³n en Redes de DistribuciÃ³n utilizando TÃ©cnicas de OptimizaciÃ³n Evolutiva. Informacion Tecnologica (discontinued), 2006, 17, .	0.1	3
146	A Parallel Multilevel Metaheuristic for Graph Partitioning. Journal of Heuristics, 2004, 10, 315-336.	1.1	25
147	Multilevel Heuristic Algorithm for Graph Partitioning. Lecture Notes in Computer Science, 2003, , 143-153.	1.0	22