Edwin Rivas Trujillo

List of Publications by Year
in descending order

62	1,066	393982	476904
papers	citations	19 h-index	29 g-index

63	63	63	457
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Economic dispatch of energy storage systems in dc microgrids employing a semidefinite programming model. Journal of Energy Storage, 2019, 21, 1-8.	3.9	94
2	An energy management system for optimal operation of BSS in DC distributed generation environments based on a parallel PSO algorithm. Journal of Energy Storage, 2020, 29, 101488.	3.9	65
3	An exact MINLP model for optimal location and sizing of DGs in distribution networks: A general algebraic modeling system approach. Ain Shams Engineering Journal, 2020, 11, 409-418.	3.5	64
4	Integration of energy storage systems in AC distribution networks: Optimal location, selecting, and operation approach based on genetic algorithms. Journal of Energy Storage, 2019, 25, 100891.	3.9	39
5	Distribution Systems Operation Considering Energy Storage Devices and Distributed Generation. IEEE Latin America Transactions, 2017, 15, 890-900.	1.2	37
6	On the Efficiency in Electrical Networks with AC and DC Operation Technologies: A Comparative Study at the Distribution Stage. Electronics (Switzerland), 2020, 9, 1352.	1.8	37
7	Economic Dispatch of Renewable Generators and BESS in DC Microgrids Using Second-Order Cone Optimization. Energies, 2020, 13, 1703.	1.6	35
8	Economic Dispatch of BESS and Renewable Generators in DC Microgrids Using Voltage-Dependent Load Models. Energies, 2019, 12, 4494.	1.6	33
9	A Mixed-Integer Convex Model for the Optimal Placement and Sizing of Distributed Generators in Power Distribution Networks. Applied Sciences (Switzerland), 2021, 11, 627.	1.3	32
10	Optimal Location and Sizing of PV Sources in DC Networks for Minimizing Greenhouse Emissions in Diesel Generators. Symmetry, 2020, 12, 322.	1.1	31
11	Efficient Operative Cost Reduction in Distribution Grids Considering the Optimal Placement and Sizing of D-STATCOMs Using a Discrete-Continuous VSA. Applied Sciences (Switzerland), 2021, 11, 2175.	1.3	30
12	Vortex search and Chu-Beasley genetic algorithms for optimal location and sizing of distributed generators in distribution networks: A novel hybrid approach. Engineering Science and Technology, an International Journal, 2020, 23, 1351-1363.	2.0	26
13	A Hybrid Approach Based on SOCP and the Discrete Version of the SCA for Optimal Placement and Sizing DGs in AC Distribution Networks. Electronics (Switzerland), 2021, 10, 26.	1.8	26
14	Optimal Design of PV Systems in Electrical Distribution Networks by Minimizing the Annual Equivalent Operative Costs through the Discrete-Continuous Vortex Search Algorithm. Sensors, 2022, 22, 851.	2.1	26
15	Reduction of Losses and Operating Costs in Distribution Networks Using a Genetic Algorithm and Mathematical Optimization. Electronics (Switzerland), 2021, 10, 419.	1.8	25
16	Optimal Placement and Sizing of Wind Generators in AC Grids Considering Reactive Power Capability and Wind Speed Curves. Sustainability, 2020, 12, 2983.	1.6	24
17	Application of the Vortex Search Algorithm to the Phase-Balancing Problem in Distribution Systems. Energies, 2021, 14, 1282.	1.6	24
18	Relaxed convex model for optimal location and sizing of DGs in DC grids using sequential quadratic programming and random hyperplane approaches. International Journal of Electrical Power and Energy Systems, 2020, 115, 105442.	3.3	23

#	Article	IF	Citations
19	Modeling and control of a small hydro-power plant for a DC microgrid. Electric Power Systems Research, 2020, 180, 106104.	2.1	22
20	Control of a SMES for mitigating subsynchronous oscillations in power systems: A PBC-PI approach. Journal of Energy Storage, 2018, 20, 163-172.	3.9	21
21	Optimal Location-Reallocation of Battery Energy Storage Systems in DC Microgrids. Energies, 2020, 13, 2289.	1.6	19
22	Accurate and Efficient Derivative-Free Three-Phase Power Flow Method for Unbalanced Distribution Networks. Computation, 2021, 9, 61.	1.0	19
23	Direct power control of electrical energy storage systems: A passivity-based PI approach. Electric Power Systems Research, 2019, 175, 105885.	2.1	18
24	Simultaneous Minimization of Energy Losses and Greenhouse Gas Emissions in AC Distribution Networks Using BESS. Electronics (Switzerland), 2021, 10, 1002.	1.8	18
25	Optimal Integration of Photovoltaic Sources in Distribution Networks for Daily Energy Losses Minimization Using the Vortex Search Algorithm. Applied Sciences (Switzerland), 2021, 11, 4418.	1.3	17
26	Optimal Investments in PV Sources for Grid-Connected Distribution Networks: An Application of the Discreteâ€“Continuous Genetic Algorithm. Sustainability, 2021, 13, 13633.	1.6	17
27	A Comparative Study on Power Flow Methods for Direct-Current Networks Considering Processing Time and Numerical Convergence Errors. Electronics (Switzerland), 2020, 9, 2062.	1.8	15
28	Efficient Reduction in the Annual Investment Costs in AC Distribution Networks via Optimal Integration of Solar PV Sources Using the Newton Metaheuristic Algorithm. Applied Sciences (Switzerland), 2021, 11, 11525.	1.3	15
29	Improved Genetic Algorithm for Phase-Balancing in Three-Phase Distribution Networks: A Master-Slave Optimization Approach. Computation, 2021, 9, 67.	1.0	13
30	Black-Hole Optimization Applied to the Parametric Estimation in Distribution Transformers Considering Voltage and Current Measures. Computers, 2021, 10, 124.	2.1	13
31	An MI-SDP Model for Optimal Location and Sizing of Distributed Generators in DC Grids That Guarantees the Global Optimum. Applied Sciences (Switzerland), 2020, 10, 7681.	1.3	11
32	A Mixed-Integer Quadratic Formulation of the Phase-Balancing Problem in Residential Microgrids. Applied Sciences (Switzerland), 2021, 11, 1972.	1.3	11
33	Reduction of Annual Operational Costs in Power Systems through the Optimal Siting and Sizing of STATCOMs. Applied Sciences (Switzerland), 2021, 11, 4634.	1.3	11
34	Operating Cost Reduction in Distribution Networks Based on the Optimal Phase-Swapping including the Costs of the Working Groups and Energy Losses. Energies, 2021, 14, 4535.	1.6	11
35	Voltage Stability Margin in DC Grids With CPLs: A Recursive Newtonâ€“Raphson Approximation. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 300-304.	2.2	10
36	A Mixed-Integer Conic Formulation for Optimal Placement and Dimensioning of DGs in DC Distribution Networks. Electronics (Switzerland), 2021, 10, 176.	1.8	10

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37	Optimal Demand Reconfiguration in Three-Phase Distribution Grids Using an MI-Convex Model. Symmetry, 2021, 13, 1124.	1.1	10
38	An Improved Crow Search Algorithm Applied to the Phase Swapping Problem in Asymmetric Distribution Systems. Symmetry, 2021, 13, 1329.	1.1	9
39	Sine-Cosine Algorithm for OPF Analysis in Distribution Systems to Size Distributed Generators. Communications in Computer and Information Science, 2019, , 28-39.	0.4	9
40	Mixed-Integer Programming Model for Transmission Network Expansion Planning with Battery Energy Storage Systems (BESS). Energies, 2020, 13, 4386.	1.6	8
41	Optimal Selection and Location of BESS Systems in Medium-Voltage Rural Distribution Networks for Minimizing Greenhouse Gas Emissions. Electronics (Switzerland), 2020, 9, 2097.	1.8	7
42	Application of the Crow Search Algorithm to the Problem of the Parametric Estimation in Transformers Considering Voltage and Current Measures. Computers, 2022, 11, 9.	2.1	7
43	Optimal Allocation and Sizing of PV Generation Units in Distribution Networks via the Generalized Normal Distribution Optimization Approach. Computers, 2022, 11, 53.	2.1	7
44	Optimal Pole-Swapping in Bipolar DC Networks Using Discrete Metaheuristic Optimizers. Electronics (Switzerland), 2022, 11, 2034.	1.8	7
45	On the Optimal Selection and Integration of Batteries in DC Grids through a Mixed-Integer Quadratic Convex Formulation. Electronics (Switzerland), 2021, 10, 2339.	1.8	6
46	A Two-Stage Approach to Locate and Size PV Sources in Distribution Networks for Annual Grid Operative Costs Minimization. Electronics (Switzerland), 2022, 11, 961.	1.8	6
47	An Approximate Mixed-Integer Convex Model to Reduce Annual Operating Costs in Radial Distribution Networks Using STATCOMs. Electronics (Switzerland), 2021, 10, 3102.	1.8	6
48	Vulnerability Analysis to Maximize the Resilience of Power Systems Considering Demand Response and Distributed Generation. Electronics (Switzerland), 2021, 10, 1498.	1.8	5
49	Approximated Mixed-Integer Convex Model for Phase Balancing in Three-Phase Electric Networks. Computers, 2021, 10, 109.	2.1	5
50	Quasi-Dynamic Analysis of a Local Distribution System with Distributed Generation. Study Case: The IEEE 13 Node System. Tecno LÃ³gicas, 2019, 22, 195-212.	0.1	5
51	Application of the Hurricane Optimization Algorithm to Estimate Parameters in Single-Phase Transformers Considering Voltage and Current Measures. Computers, 2022, 11, 55.	2.1	4
52	Coordinated Control System between Gridâ€“VSC and a DC Microgrid with Hybrid Energy Storage System. Electronics (Switzerland), 2021, 10, 2699.	1.8	3
53	Application of the Hurricane-Based Optimization Algorithm to the Phase-Balancing Problem in Three-Phase Asymmetric Networks. Computers, 2022, 11, 43.	2.1	3
54	Application of the Multiverse Optimization Method to Solve the Optimal Power Flow Problem in Alternating Current Networks. Electronics (Switzerland), 2022, 11, 1287.	1.8	3

#	Article	IF	Citations
55	Black hole optimizer for the optimal power injection in distribution networks using DG. Journal of Physics: Conference Series, 2021, 2135, 012010.	0.3	2
56	On the optimal reconfiguration of radial AC distribution networks using an MINLP formulation: A GAMS-based approach. Ingenieria E Investigacion, 2022, 42, e91192.	0.2	2
57	Extraction of Polyphenols from Unripened Coffee (Coffea Arabica) Residues and Use as a Natural Coagulant for Removing Turbidity. Processes, 2022, 10, 1105.	1.3	1
58	Selection and Location of Fixed-Step Capacitor Banks in Distribution Grids for Minimization of Annual Operating Costs: A Two-Stage Approach. Computers, 2022, 11, 105.	2.1	1
59	Respuesta de la demanda en el mercado elÃ©ctrico Colombiano: modelado e implementaciÃ³n web. VisiÃ³n ElectrÃ³nica, 2018, 12, 243-251.	0.1	0
60	Incentive-based demand response: Case study. Scientia Et Technica, 2020, 25, 216-222.	0.1	0
61	Generador lineal para un generador eÃ³lico de baja potencia, selecciÃ³n, diseÃ±o y simulaciÃ³n en comsol multiphysic. Revista VÃ±culos, 2020, 17, 120-128.	0.0	0
62	Modelo de desarrollo de producto para proyectos academicos. Revista BoletÃn Redipe, 2022, 11, 141-155.	0.0	0