Marcos J Rider

List of Publications by Year
in descending order

144	4,782	76326	102487
papers	citations	40	66
		h-index	g-index

145	145	145	3172
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Imposing Radiality Constraints in Distribution System Optimization Problems. IEEE Transactions on Power Systems, 2012, 27, 172-180.	6.5	408
2	Power system transmission network expansion planning using AC model. IET Generation, Transmission and Distribution, 2007, 1, 731.	2.5	182
3	A mixed-integer linear programming approach for optimal type, size and allocation of distributed generation in radial distribution systems. Electric Power Systems Research, 2013, 97, 133-143.	3.6	175
4	Transmission network expansion planning with security constraints. IET Generation, Transmission and Distribution, 2005, 152, 828.	1.1	150
5	Optimal Operation of Distribution Networks Considering Energy Storage Devices. IEEE Transactions on Smart Grid, 2015, 6, 2825-2836.	9.0	150
6	A mixed-integer LP model for the reconfiguration of radial electric distribution systems considering distributed generation. Electric Power Systems Research, 2013, 97, 51-60.	3.6	141
7	A Mixed-Integer Linear Programming Model for the Electric Vehicle Charging Coordination Problem in Unbalanced Electrical Distribution Systems. IEEE Transactions on Smart Grid, 2015, 6, 2200-2210.	9.0	115
8	Microgrids Energy Management Using Robust Convex Programming. IEEE Transactions on Smart Grid, 2019, 10, 4520-4530.	9.0	113
9	A New Mathematical Model for the Restoration Problem in Balanced Radial Distribution Systems. IEEE Transactions on Power Systems, 2016, 31, 1259-1268.	6.5	106
10	Centralized Self-Healing Scheme for Electrical Distribution Systems. IEEE Transactions on Smart Grid, 2016, 7, 145-155.	9.0	104
11	A Constructive Heuristic Algorithm for Distribution System Planning. IEEE Transactions on Power Systems, 2010, 25, 1734-1742.	6.5	97
12	Multistage Long-Term Expansion Planning of Electrical Distribution Systems Considering Multiple Alternatives. IEEE Transactions on Power Systems, 2016, 31, 1900-1914.	6.5	96
13	Transmission Network Expansion Planning Considering Uncertainty in Demand. IEEE Transactions on Power Systems, 2006, 21, 1565-1573.	6.5	94
14	A decentralized approach for optimal reactive power dispatch using a Lagrangian decomposition method. Electric Power Systems Research, 2012, 89, 148-156.	3.6	94
15	Efficient heuristic algorithm used for optimal capacitor placement in distribution systems. International Journal of Electrical Power and Energy Systems, 2010, 32, 71-78.	5.5	85
16	Optimal Conductor Size Selection and Reconductoring in Radial Distribution Systems Using a Mixed-Integer LP Approach. IEEE Transactions on Power Systems, 2013, 28, 10-20.	6.5	85
17	A mixed-integer LP model for the optimal allocation of voltage regulators and capacitors in radial distribution systems. International Journal of Electrical Power and Energy Systems, 2013, 48, 123-130.	5.5	85
18	Optimal reconfiguration of electrical distribution systems considering reliability indices improvement. International Journal of Electrical Power and Energy Systems, 2016, 78, 837-845.	5.5	83

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19	Nonintrusive Load Monitoring Algorithm Using Mixed-Integer Linear Programming. IEEE Transactions on Consumer Electronics, 2018, 64, 180-187.	3.6	82
20	Transmission system expansion planning by a branch-and-bound algorithm. IET Generation, Transmission and Distribution, 2008, 2, 90.	2.5	77
21	Parsimonious Short-Term Load Forecasting for Optimal Operation Planning of Electrical Distribution Systems. IEEE Transactions on Power Systems, 2019, 34, 1427-1437.	6.5	74
22	Optimal Management of Energy Consumption and Comfort for Smart Buildings Operating in a Microgrid. IEEE Transactions on Smart Grid, 2019, 10, 3236-3247.	9.0	74
23	A Metaheuristic to Solve the Transmission Expansion Planning. IEEE Transactions on Power Systems, 2007, 22, 2289-2291.	6.5	72
24	Bilevel approach for optimal location and contract pricing of distributed generation in radial distribution systems using mixed-integer linear programming. IET Generation, Transmission and Distribution, 2013, 7, 724-734.	2.5	71
25	A New Methodology for the Optimal Charging Coordination of Electric Vehicles Considering Vehicle-to-Grid Technology. IEEE Transactions on Sustainable Energy, 2016, 7, 596-607.	8.8	71
26	A mixed-integer quadratically-constrained programming model for the distribution system expansion planning. International Journal of Electrical Power and Energy Systems, 2014, 62, 265-272.	5.5	69
27	Contingency Assessment and Network Reconfiguration in Distribution Grids Including Wind Power and Energy Storage. IEEE Transactions on Sustainable Energy, 2015, 6, 1524-1533.	8.8	67
28	Optimal Restoration/Maintenance Switching Sequence of Unbalanced Three-Phase Distribution Systems. IEEE Transactions on Smart Grid, 2018, 9, 6058-6068.	9.0	66
29	A Strategy to Solve the Multistage Transmission Expansion Planning Problem. IEEE Transactions on Power Systems, 2011, 26, 2574-2576.	6.5	57
30	Volt-VAr Control and Energy Storage Device Operation to Improve the Electric Vehicle Charging Coordination in Unbalanced Distribution Networks. IEEE Transactions on Sustainable Energy, 2017, 8, 1560-1570.	8.8	57
31	Optimal Operation of Unbalanced Three-Phase Islanded Droop-Based Microgrids. IEEE Transactions on Smart Grid, 2019, 10, 928-940.	9.0	56
32	Strategies to Reduce the Number of Variables and the Combinatorial Search Space of the Multistage Transmission Expansion Planning Problem. IEEE Transactions on Power Systems, 2013, 28, 2164-2173.	6.5	53
33	MILP branch flow model for concurrent AC multistage transmission expansion and reactive power planning with security constraints. IET Generation, Transmission and Distribution, 2016, 10, 3023-3032.	2.5	52
34	Security-constrained optimal energy management system for three-phase residential microgrids. Electric Power Systems Research, 2017, 146, 371-382.	3.6	52
35	Artificial neural networks for solving the power flow problem in electric power systems. Electric Power Systems Research, 2002, 62, 139-144.	3.6	50
36	Transmission-expansion planning using the DC model and nonlinear-programming technique. IET Generation, Transmission and Distribution, 2005, 152, 763.	1.1	50

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37	Application of a nonlinear reactive power pricing model for competitive electric markets. IET Generation, Transmission and Distribution, 2004, 151, 407.	1.1	48
38	Optimal Bidding Strategies for Thermal and Generic Programming Units in the Day-Ahead Electricity Market. IEEE Transactions on Power Systems, 2010, 25, 1504-1518.	6.5	47
39	Optimal Delivery Scheduling and Charging of EVs in the Navigation of a City Map. IEEE Transactions on Smart Grid, 2018, 9, 4815-4827.	9.0	47
40	An optimal stochastic energy management system for resilient microgrids. Applied Energy, 2021, 300, 117435.	10.1	45
41	Optimisationâ€bbased switch allocation to improve energy losses and service restoration in radial electrical distribution systems. IET Generation, Transmission and Distribution, 2016, 10, 2792-2801.	2.5	40
42	Decentralized electric vehicles charging coordination using only local voltage magnitude measurements. Electric Power Systems Research, 2018, 161, 139-151.	3.6	39
43	Multi-Objective Sizing of Battery Energy Storage Systems for Stackable Grid Applications. IEEE Transactions on Smart Grid, 2021, 12, 2708-2721.	9.0	39
44	Multistage Transmission Expansion Planning Considering Fixed Series Compensation Allocation. IEEE Transactions on Power Systems, 2013, 28, 3795-3805.	6.5	38
45	Robust optimisation applied to the reconfiguration of distribution systems with reliability constraints. IET Generation, Transmission and Distribution, 2016, 10, 917-927.	2.5	38
46	Distributed Self-Healing Scheme for Unbalanced Electrical Distribution Systems Based on Alternating Direction Method of Multipliers. IEEE Transactions on Power Systems, 2020, 35, 2190-2199.	6.5	35
47	Joint optimal operation of photovoltaic units and electric vehicles in residential networks with storage systems: A dynamic scheduling method. International Journal of Electrical Power and Energy Systems, 2018, 103, 136-145.	5.5	34
48	Risk/investmentâ€driven transmission expansion planning with multiple scenarios. IET Generation, Transmission and Distribution, 2013, 7, 154-165.	2.5	33
49	Robust Multi-Stage Substation Expansion Planning Considering Stochastic Demand. IEEE Transactions on Power Systems, 2016, 31, 2125-2134.	6.5	31
50	A Generalized Model for the Optimal Operation of Microgrids in Grid-Connected and Islanded Droop-Based Mode. IEEE Transactions on Smart Grid, 2019, 10, 5032-5045.	9.0	30
51	A stochastic programming model for the optimal operation of unbalanced three-phase islanded microgrids. International Journal of Electrical Power and Energy Systems, 2020, 115, 105446.	5.5	28
52	Optimal Reconfiguration of Electrical Distribution Systems Using Mathematical Programming. Journal of Control, Automation and Electrical Systems, 2014, 25, 103-111.	2.0	27
53	Shortâ€term expansion planning of radial electrical distribution systems using mixedâ€integer linear programming. IET Generation, Transmission and Distribution, 2015, 9, 256-266.	2.5	25
54	Reactive power pricing in deregulated electrical markets using a methodology based on the theory of marginal costs. , 0, , .		22

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55	Artificial neural networks for load flow and external equivalents studies. Electric Power Systems Research, 2010, 80, 1033-1041.	3.6	22
56	Planning of Distribution Systems Using Mixed-Integer Linear Programming Models Considering Network Reliability. Journal of Control, Automation and Electrical Systems, 2015, 26, 170-179.	2.0	22
57	Heuristic Algorithm to Solve the Short Term Transmission Network Expansion Planning. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	21
58	Reactive power dispatch and planning using a non-linear branch-and-bound algorithm. IET Generation, Transmission and Distribution, 2010, 4, 963.	2.5	21
59	Transmission network expansion planning considering repowering and reconfiguration. International Journal of Electrical Power and Energy Systems, 2015, 69, 213-221.	5.5	21
60	An unequivocal normalization-based paradigm to solve dynamic economic and emission active-reactive OPF (optimal power flow). Energy, 2014, 73, 554-566.	8.8	20
61	Sustainable charging schedule of electric buses in a University Campus: A rolling horizon approach. Renewable and Sustainable Energy Reviews, 2022, 161, 112276.	16.4	20
62	Multiâ€area environmentally constrained activeâ€"reactive optimal power flow: a shortâ€term tie line planning study. IET Generation, Transmission and Distribution, 2016, 10, 299-309.	2.5	19
63	Operation Planning of Electrical Distribution Systems Using a Mixed Integer Linear Model. Journal of Control, Automation and Electrical Systems, 2013, 24, 668-679.	2.0	18
64	Transmission network expansion planning for the Colombian electrical system: Connecting the Ituango hydroelectric power plant. Electric Power Systems Research, 2014, 110, 94-103.	3.6	18
65	An Unambiguous Distance-Based MIQP Model to Solve Economic Dispatch Problems with Disjoint Operating Zones. IEEE Transactions on Power Systems, 2016, 31, 825-826.	6.5	18
66	Probabilistic OPF Model for Unbalanced Three-Phase Electrical Distribution Systems Considering Robust Constraints. IEEE Transactions on Power Systems, 2019, 34, 3443-3454.	6.5	16
67	Genetic algorithm of Chu and Beasley for static and multistage transmission expansion planning. , 2006, , .		15
68	Enhanced higher-order interior-point method to minimise active power losses in electric energy systems. IET Generation, Transmission and Distribution, 2004, 151, 517.	1.1	14
69	A specialized genetic algorithm to solve the short term transmission network expansion planning. , 2009, , .		13
70	A stochastic programming model for the optimal electricity market bid problem with bilateral contracts for thermal and combined cycle units. Annals of Operations Research, 2012, 193, 107-127.	4.1	13
71	Increasing the hosting capacity for renewable energy in distribution networks. , 2017, , .		13
72	Towards a fast and robust interior point method for power system applications. IET Generation, Transmission and Distribution, 2004, 151, 575.	1.1	12

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73	Transmission network expansion planning in full open market considering security constraints. , 2005, , .		12
74	A Search Space Reduction Strategy and a Mathematical Model for Multistage Transmission Expansion Planning with $$N-1$$ N - 1 Security Constrains. Journal of Control, Automation and Electrical Systems, 2015, 26, 57-67.	2.0	12
75	Optimal Multi-Scenario, Multi-Objective Allocation of Fault Indicators in Electrical Distribution Systems Using a Mixed-Integer Linear Programming Model. IEEE Transactions on Smart Grid, 2019, 10, 4508-4519.	9.0	12
76	An MILP model for the plug-in electric vehicle charging coordination problem in electrical distribution systems. , 2014, , .		11
77	Optimal Operation of Radial Distribution Systems Using Extended Dynamic Programming. IEEE Transactions on Power Systems, 2018, 33, 1352-1363.	6.5	11
78	Enhanced Coordination Strategy for an Aggregator of Distributed Energy Resources Participating in the Day-Ahead Reserve Market. Energies, 2020, 13, 1965.	3.1	11
79	Optimal Reactive Power Dispatch With Discrete Controllers Using a Branch-and-Bound Algorithm: A Semidefinite Relaxation Approach. IEEE Transactions on Power Systems, 2021, 36, 4539-4550.	6.5	11
80	Optimized Reactive Power Capability of Wind Power Plants With Tap-Changing Transformers. IEEE Transactions on Sustainable Energy, 2021, 12, 1935-1946.	8.8	10
81	A constructive heuristic algorithm to short term transmission network expansion planning. , 0, , .		9
82	Multi-areas optimal reactive power flow. , 2008, , .		9
83	Economic externalities in transmission network expansion planning. Energy Economics, 2017, 68, 109-115.	12.1	9
84	Distflow based state estimation for power distribution networks. Energy Systems, 2018, 9, 1055-1070.	3.0	8
85	Adaptive Protection Methodology for Modern Electric Power Distribution Systems. Journal of Control, Automation and Electrical Systems, 2021, 32, 1377-1388.	2.0	8
86	Transmission network expansion planning considering uncertainness in demand. , 0, , .		7
87	Ill-conditioned Optimal Power Flow solutions and performance of non-linear programming solvers. , 2009, , .		7
88	An efficient implementation of tabu search in feeder reconfiguration of distribution systems. , 2012, , .		7
89	An MILP model for optimal management of energy consumption and comfort in smart buildings. , 2017, , .		7
90	Semidefinite relaxation and generalised benders decomposition to solve the transmission expansion network and reactive power planning. IET Generation, Transmission and Distribution, 2020, 14, 2160-2168.	2.5	7

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91	Higher order interior-point method for minimising load-shedding in a competitive electric power market. IET Generation, Transmission and Distribution, 2004, 151, 433.	1.1	6
92	Power flow model based on artificial neural networks. , 2005, , .		6
93	Decentralized AC power flow for real-time multi-TSO power system operation. , 2010, , .		6
94	A set of linear equations to calculate the steady-state operation of an electrical distribution system. , 2011, , .		6
95	Optimal location of FACTS devices for generation costs reduction and stability enhancement. , 2014, , .		6
96	Nâˆ'1 Multi-contingency transient stability constrained AC optimal power flow with volt/var controllers. Electric Power Systems Research, 2020, 188, 106526.	3.6	6
97	Fair Congestion Management in Distribution Systems using Virtual Power Lines. , 2021, , .		6
98	How to efficiently incorporate facts devices in optimal active power flow model. Journal of Industrial and Management Optimization, 2010, 6, 315-331.	1.3	6
99	Branch and Bound Algorithm for Transmission Network Expansion Planning Using DC Model. , 2007, , .		5
100	An Enhanced Genetic Algorithm to Solve the Static and Multistage Transmission Network Expansion Planning. Journal of Electrical and Computer Engineering, 2012, 2012, 1-12.	0.9	5
101	A modified Branch and Bound algorithm to solve the transmission expansion planning problem. , 2013, , .		5
102	An MILP model for the analysis of operation of energy storage devices in distribution systems. , 2016, , .		5
103	A higher order interior point method to minimize active power loss in electric energy systems. , 0, , .		4
104	Distribution network planning using a constructive heuristic algorithm. , 2009, , .		4
105	Optimized Integration of a Set of Small Renewable Sources Into a Bulk Power System. IEEE Transactions on Power Systems, 2021, 36, 248-260.	6.5	4
106	Framework for optimizing the demand contracted by large customers. IET Generation, Transmission and Distribution, 2020, 14, 635-644.	2.5	4
107	Power System State Estimation: A New Method Based on Current Equations. , 2007, , .		3
108	Domain Reduction Using GRASP Construction Phase for Transmission Expansion Planning Problem. Lecture Notes in Computer Science, 2012, , 87-98.	1.3	3

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109	Closure to Discussion on "Imposing Radiality Constraints in Distribution System Optimization Problems". IEEE Transactions on Power Systems, 2013, 28, 568-569.	6.5	3
110	Mathematical Optimization of Unbalanced Networks with Smart Grid Devices. Power Systems, 2018, , 65-114.	0.5	3
111	Distributed Service Restoration of Active Electrical Distribution Systems using ADMM. , 2019, , .		3
112	Secondary Reserve Provision through a Smart Aggregation Strategy of Electric Vehicles. , 2021, , .		3
113	Optimal bidding strategies for thermal and combined cycle units in the day-ahead electricity market with bilateral contracts. , 2009, , .		2
114	Optimal allocation of capacitors in radial distribution systems with distributed generation. , 2011, , .		2
115	A novel straightforward compromising method for dynamic economic and emission dispatch considering valve-point effect. , 2013, , .		2
116	Optimal charging coordination of electric vehicles in unbalanced electrical distribution system considering vehicle-to-grid technology. , 2015, , .		2
117	A MILP model for optimal charging coordination of storage devices and electric vehicles considering V2G technology. , 2015, , .		2
118	Plug-in electric vehicle charging coordination in electrical distribution systems using a Tabu Search algorithm. , 2015, , .		2
119	Optimal volt-VAr control operation for energy cost reduction in distribution systems considering a voltage dependent load model. , 2016, , .		2
120	Optimization approach for the allocation of remote-controlled switches in real-scale electrical distribution systems. , 2017, , .		2
121	Optimal Sizing of Stationary Energy Storage Systems Participating in Primary Frequency Regulation Markets. , 2018, , .		2
122	Optimal Operation of Battery and Hydrogen Energy Storage Systems in Electrical Distribution Networks for Peak Shaving. , 2019, , .		2
123	Transmission Expansion Planning by using DC and AC Models and Particle Swarm Optimization. , 0, , 260-284.		2
124	A Branch and Bound Algorithm for Transmission Network Expansion Planning Using Nonconvex Mixed-Integer Nonlinear Programming Models. IEEE Access, 2022, 10, 39875-39888.	4.2	2
125	PLANEAMIENTO DE LA EXPANSIÓN DE LA RED DE TRANSMISIÓN EN SISTEMAS ELÉCTRICOS DE POTENCIA CONSIDERANDO RECONFIGURACIONES DE RED. Informacion Tecnologica (discontinued), 2014, 25, 85-96.	0.3	1
126	A mixed-binary linear formulation for the distribution system expansion planning problem. , 2014, , .		1

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127	Multistage transmission expansion planning considering fixed series compensation allocation. , 2014, , .		1
128	Control Tuning of Energy Storage Systems based on Operating Point Consistency. , 2018, , .		1
129	A Stochastic Market-Clearing Model Using Semidefinite Relaxation. , 2019, , .		1
130	Economic Impact of the Active Power Droop Gain in Droop-Based Islanded Microgrids. , 2019, , .		1
131	Connecting a Cluster of Small Renewable Sources to a Power System. , 2019, , .		1
132	Adaptive Robust Linear Programming Model for the Charging Scheduling and Reactive Power Control of EV Fleets. , 2021, , .		1
133	An MPEC Model for the Optimal Operation of Unbalanced Three-phase Distribution Systems. , 2021, , .		1
134	Electric Distribution Network Planning Under Uncertainty. Energy Systems, 2020, , 293-323.	0.5	1
135	A review of power system voltage and angular stability dynamics. , 0, , .		0
136	Software development with computer graphics, distributed data base and OOP for deregulated power systems analysis. , 0, , .		0
137	Mathematical decomposition technique applied to the probabilistic power flow problem. , 2010, , .		0
138	Advanced network reconfiguration system applied to CEMIG-D system. , 2013, , .		0
139	A Branch and Bound algorithm to solve nonconvex MINLP problems via novel division strategy: An electric power system case study. , 2017, , .		0
140	A Search Space Reduction Strategy within the MILP Branch Flow Model for Concurrent AC Multistage Transmission Expansion and Reactive Power Planning. , 2018, , .		0
141	Optimal restoration switching sequence in smart distribution networks. , 2018, , .		0
142	A Discrete Time Domain-Based MILP Framework for Control Parameter Tuning. IEEE Systems Journal, 2021, 15, 3462-3469.	4.6	0
143	Optimal Restoration of Electrical Distribution Systems Considering Switching Sequence. Energy Systems, 2020, , 273-291.	0.5	0
144	Design and Simulation of a Centralized Self-Healing Scheme for Unbalanced Three-phase Electrical Distribution Systems. Journal of Control, Automation and Electrical Systems, 2022, 33, 901-911.	2.0	0