Carlos Castro

List of Publications by Year in Descending Order

68 papers	**718** citations	**14** h-index	**24** g-index
80 ext. papers	**902** ext. citations	**3.9** avg, IF	**4.32** L-index

#	Paper	IF	Citations
68	Current Status and Perspectives of the Electric Sector in Brazil. *IEEE Latin America Transactions*, **2021**, 19, 660-668	0.7	
67	Optimal Maintenance Scheduling of Transmission Assets in the Brazilian Electric System. *Journal of Control, Automation and Electrical Systems*, **2021**, 32, 482-491	1.5	0
66	An efficient hybrid metaheuristics optimization technique applied to the AC electric transmission network expansion planning. *Swarm and Evolutionary Computation*, **2021**, 61, 100830	9.8	5
65	Allocation of PMU channels at substations for topology processing and state estimation. *IET Generation, Transmission and Distribution*, **2020**, 14, 2034-2045	2.5	3
64	Optimal Energy Management of Unbalanced Three-Phase Grid-Connected Microgrids **2019**,		2
63	Probabilistic OPF Model for Unbalanced Three-Phase Electrical Distribution Systems Considering Robust Constraints. *IEEE Transactions on Power Systems*, **2019**, 34, 3443-3454	7	8
62	Microgrids Energy Management Using Robust Convex Programming. *IEEE Transactions on Smart Grid*, **2019**, 10, 4520-4530	10.7	56
61	Transmission Expansion Planning Considering the Impact of Distributed Generation **2019**,		1
60	AC Transmission Expansion Planning Considering Uncertainty **2019**,		2
59	Optimal Conductor Size Selection in Radial Distribution Networks Using a Mixed-Integer Non-Linear Programming Formulation. *IEEE Latin America Transactions*, **2018**, 16, 2213-2220	0.7	8
58	New representation of PV buses in the current injection Newton power flow. *International Journal of Electrical Power and Energy Systems*, **2017**, 90, 237-244	5.1	7
57	Distribution Systems Operation Considering Energy Storage Devices and Distributed Generation. *IEEE Latin America Transactions*, **2017**, 15, 890-900	0.7	27
56	Optimal location, sizing and operation of energy storage in distribution systems using multi-objective approach. *IEEE Latin America Transactions*, **2017**, 15, 1084-1090	0.7	14
55	Optimal probabilistic charging of electric vehicles in distribution systems. *IET Electrical Systems in Transportation*, **2017**, 7, 246-251	2.1	31
54	Comparison of the dynamic response of wind turbine primary frequency controllers **2017**,		16
53	Energy management of isolated microgrids using mixed-integer second-order cone programming **2017**,		2
52	Biogeography based optimization algorithms applied to AC transmission expansion planning **2017**,		1

51	Mixed integer linear programming formulation for optimal reactive compensation and voltage control of distribution power systems **2017**,		1
50	Integrated AC/DC transmission expansion planning model considering VSC-MTDC systems **2017**,		2
49	Genetic algorithm-based phasor measurement unit placement method considering observability and security criteria. *IET Generation, Transmission and Distribution*, **2016**, 10, 270-280	2.5	50
48	Optimal allocation of energy storage devices in distribution systems considering lifetime characteristics of batteries **2016**,		3
47	Voltage stability margin determination using the channel components transform **2015**,		1
46	Transmission asset maintenance programming optimization - the Brazilian Electric System case. *IEEE Latin America Transactions*, **2015**, 13, 1414-1420	0.7	1
45	Specialized differential evolution technique to solve the alternating current model based transmission expansion planning problem. *International Journal of Electrical Power and Energy Systems*, **2015**, 68, 243-251	5.1	11
44	Expansion planning for smart transmission grids using AC model and shunt compensation. *IET Generation, Transmission and Distribution*, **2014**, 8, 966-975	2.5	35
43	Practical heuristic approach to solve the Optimal Transmission Switching problem for Smart Grids **2014**,		1
42	Security constrained transmission expansion planning for smart transmission grids based on the AC network model **2014**,		3
41	Efficient probabilistic power flow for weakly-meshed distribution networks **2014**,		2
40	Optimal substation PMU placement method for the two-level state estimator **2013**,		2
39	A robust power flow approach using synthetic dynamics and optimal multiplier **2013**,		1
38	Study of particle swarm optimization variations applied to transmission expansion planning **2013**,		4
37	Robust computation of voltage stability margins for transmission and distribution grids **2013**,		1
36	Comparison of particle swarm based meta-heuristics for the electric transmission network expansion planning problem **2011**,		13
35	Practical method for computing the maximum loading point using a load flow with step size optimisation. *IET Generation, Transmission and Distribution*, **2011**, 5, 1250	2.5	4
34	An efficient method for distribution systems reconfiguration and capacitor placement using a Chu-Beasley based genetic algorithm **2011**,		8

33	Practical method for computing the maximum loading point based on load flow with step size optimization **2010**,		1
32	Distribution systems operation optimisation through reconfiguration and capacitor allocation by a dedicated genetic algorithm. *IET Generation, Transmission and Distribution*, **2010**, 4, 1213	2.5	64
31	**2009**,		1
30	New method based on load flow with step size optimization for calculating the maximum loading point **2009**,		1
29	Ill-conditioned Optimal Power Flow solutions and performance of non-linear programming solvers **2009**,		2
28	Multi-criteria contingency ranking method for voltage stability. *Electric Power Systems Research*, **2009**, 79, 220-225	3.5	14
27	Security constrained optimal active power flow via network model and interior point method. *Controle and Automacao*, **2009**, 20, 206-216		3
26	Maximization of voltage stability margin by optimal reactive compensation **2008**,		3
25	Maximum loading point computation based on load flow with step size optimization **2008**,		4
24	Reconfiguration of distribution systems by a modified genetic algorithm **2007**,		3
23	Power System Loading Margin Estimation Using a Neuro-Fuzzy Approach. *IEEE Transactions on Power Systems*, **2007**, 22, 1955-1964	7	17
22	An efficient geometric parameterization technique for the continuation power flow. *Electric Power Systems Research*, **2007**, 77, 71-82	3.5	17
21	Transient Stability using Energy Function Method in Power Systems Close to Voltage Collapse **2007**,		2
20	Fast computation of voltage stability security margins using nonlinear programming techniques. *IEEE Transactions on Power Systems*, **2006**, 21, 19-27	7	38
19	Voltage stability security margin assessment via artificial neural networks **2005**,		2
18	Power flow model based on artificial neural networks **2005**,		3
17	Parameterized fast decoupled power flow methods for obtaining the maximum loading point of power systems: Part I. Mathematical modeling. *Electric Power Systems Research*, **2004**, 69, 93-104	3.5	10
16	Parameterized fast decoupled power flow methods for obtaining the maximum loading point of power systems. *Electric Power Systems Research*, **2004**, 69, 85-92	3.5	2

#	Publication		
15	A critical evaluation of a maximum loading point estimation method for voltage stability analysis. *Electric Power Systems Research*, **2004**, 70, 195-202	3.5	5
14	Real power losses reduction and loading margin improvement via continuation method. *IEEE Transactions on Power Systems*, **2004**, 19, 1690-1692	7	10
13	A lecture on autotransformers for power engineering students. *IEEE Transactions on Education*, **2003**, 46, 373-378	2.1	0
12	Alternative parameters for the continuation power flow method. *Electric Power Systems Research*, **2003**, 66, 105-113	3.5	8
11	Continuation fast decoupled power flow with secant predictor. *IEEE Transactions on Power Systems*, **2003**, 18, 1078-1085	7	40
10	A new efficient nonlinear programming based method for branch overload elimination. *Controle and Automacao*, **2003**, 14, 76-82		1
9	Improved method for the calculation of power systems low voltage solutions. *International Journal of Electrical Power and Energy Systems*, **2002**, 24, 503-513	5.1	5
8	A New Efficient Nonlinear Programming-Based Method for Branch Overload Elimination. *Electric Power Components and Systems*, **2002**, 30, 525-537	1	
7	A critical evaluation of step size optimization based load flow methods. *IEEE Transactions on Power Systems*, **2000**, 15, 202-207	7	77
6	Comparison of compensation methods applied to the analysis of topological changes in electrical networks. *International Journal of Electrical Power and Energy Systems*, **1997**, 19, 511-518	5.1	1
5	Comparison of different screening techniques for the contingency selection function. *International Journal of Electrical Power and Energy Systems*, **1996**, 18, 425-430	5.1	5
4	. *IEEE Transactions on Power Systems*, **1994**, 9, 1651-1657	7	12
3	. *IEEE Transactions on Power Systems*, **1993**, 8, 807-814	7	12
2	An efficient reconfiguration algorithm for loss reduction of distribution systems. *Electric Power Systems Research*, **1990**, 19, 137-144	3.5	25
1	Transmission Expansion Planning by using DC and AC Models and Particle Swarm Optimization260-284		2