Eduardo Cotilla-Sanchez

List of Publications by Year
in descending order

52 papers	1,055 citations	687363 13 h-index	552781 26 g-index
52 all docs	52 docs citations	52 times ranked	1055 citing authors

#	Article	IF	Citations
1	Transmission Hosting Capacity of Distributed Energy Resources. IEEE Transactions on Sustainable Energy, 2021, 12, 794-801.	8.8	13
2	Resilience in an Evolving Electrical Grid. Energies, 2021, 14, 694.	3.1	15
3	Spatio-Temporal Frequency Domain Analysis of PMU Data for Unsupervised Event Detection. , 2021, , .		6
4	Data Driven Sparse Error Correction for PMU Measurements under GPS Spoofing Attacks. , 2021, , .		1
5	A Coupled Karhunenâ€“LoÃ¨ve and anisotropic sparse grid interpolation method for the probabilistic load flow problem. Electric Power Systems Research, 2021, 193, 107044.	3.6	2
6	Impacts of Earthquakes on Electrical Grid Resilience. , 2021, , .		4
7	Using Critical Slowing Down Features to Enhance Performance of Artificial Neural Networks for Time-Domain Power System Data. , 2021, , .		0
8	Exponential Modeling of Equipment Degradation in the Grid for More Reliable Contingency Analysis. , 2021, , .		1
9	On PMU Data Integrity Under GPS Spoofing Attacks: A Sparse Error Correction Framework. IEEE Transactions on Power Systems, 2021, 36, 5317-5332.	6.5	9
10	Mitigation of GPS Spoofing Attacks on PMUs via Multi-Period Sparse Error Correction. , 2021, , .		1
11	Relaxation Based Modeling of GMD Induced Cascading Failures in PowerModelsGMD.jl. , 2021, , .		1
12	A Risk-Based Approach to Assess the Operational Resilience of Transmission Grids. Applied Sciences (Switzerland), 2020, 10, 4761.	2.5	14
13	Electrical grid resilience framework with uncertainty. Electric Power Systems Research, 2020, 189, 106801.	3.6	21
14	Estimating the impact of ocean wave energy on power system reliability with a wellâ€being approach. IET Renewable Power Generation, 2020, 14, 608-615.	3.1	6
15	Evaluating Measurement-Based Dynamic Load Modeling Techniques and Metrics. IEEE Transactions on Power Systems, 2020, 35, 1805-1811.	6.5	5
16	A Monte Carlo methodology for earthquake impact analysis on the electrical grid. Electric Power Systems Research, 2020, 184, 106332.	3.6	42
17	Understanding the Impact of Decision Making on Robustness During Complex System Design: More Resilient Power Systems. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2020, 6, .	1.1	6
18	Transient Voltage Stability Effects on Hosting Capacity of Behind-the-Meter Devices. , 2020, , .		1

#	Article	IF	Citations
19	Charging Analysis of Ground Support Vehicles in an Electrified Airport. , 2019, , .		7
20	Rapid Method for Generation Prioritization during System Restoration with Renewable Resources. , 2019, , .		1
21	A generative graph model for electrical infrastructure networks. Journal of Complex Networks, 2019, 7, 128-162.	1.8	16
22	uGrid: Reliable Minigrid Design and Planning Toolset for Rural Electrification. IEEE Access, 2019, 7, 163988-163999.	4.2	5
23	Dynamic Frequency and Amplitude Estimation for Three-Phase Unbalanced Power Systems Using the Unscented Kalman Filter. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 3387-3395.	4.7	31
24	A Learning Scheme for Microgrid Reconnection. IEEE Transactions on Power Systems, 2018, 33, 691-700.	6.5	14
25	Augmenting the Traditional Bus-Branch Model for Seismic Resilience Analysis. , 2018, , .		9
26	SPARSE ERROR CORRECTION FOR PMU DATA UNDER GPS SPOOFING ATTACKS. , 2018, , .		6
27	Dynamic Composite Load Model Priority Placement Based on Electrical Centrality. , 2018, , .		0
28	A Power-Balanced Clustering Algorithm to Improve Electrical Infrastructure Resiliency. , 2018, , .		4
29	Adaptive masterâ€“slave unscented Kalman filter for grid voltage frequency estimation. IET Signal Processing, 2018, 12, 496-505.	1.5	14
30	Comparative study of clustering techniques for realâ€time dynamic model reduction. Statistical Analysis and Data Mining, 2017, 10, 263-276.	2.8	4
31	A rapid PMU-based load composition and PMU estimation method. Electric Power Systems Research, 2017, 143, 44-52.	3.6	6
32	Modeling power system buses using performance based earthquake engineering methods. , 2017, , .		4
33	Exploring security metrics for electric grid infrastructures leveraging attack graphs. , 2016, , .		5
34	An Optimization Framework for Decision Making in Large, Collaborative Energy Supply Systems. Journal of Energy Resources Technology, Transactions of the ASME, 2016, 138, .	2.3	1
35	Load oscillating smart meter attack. , 2016, , .		3
36	A backend framework for the efficient management of power system measurements. Electric Power Systems Research, 2016, 140, 797-805.	3.6	7

#	Article	IF	Citations
37	Benchmarking and Validation of Cascading Failure Analysis Tools. IEEE Transactions on Power Systems, 2016, 31, 4887-4900.	6.5	122
38	Dynamic Modeling of Cascading Failure in Power Systems. IEEE Transactions on Power Systems, 2016, 31, 2085-2095.	6.5	174
39	Dynamic probabilistic risk assessment of cascading outages. , 2015, , .		3
40	Rapid grid state estimation using Singular Value Decomposition similarity matching. , 2015, , .		0
41	Assessing the Impact of the Grid-Connected Pacific Marine Energy Center Wave Farm. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2015, 3, 1011-1020.	5.4	20
42	Advancing wave energy converter array-to-grid transmission systems. , 2015, , .		0
43	Managing PMU data sets with bitmap indexes. , 2014, , .		2
44	Social acceptance: Threats to effective smart grid deployment and power systems resilience. , 2014, , .		0
45	A policy switching approach to consolidating load shedding and islanding protection schemes. , 2014, , .		5
46	Understanding Early Indicators of Critical Transitions in Power Systems From Autocorrelation Functions. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 2747-2760.	5.4	22
47	Multi-Attribute Partitioning of Power Networks Based on Electrical Distance. IEEE Transactions on Power Systems, 2013, 28, 4979-4987.	6.5	180
48	Calculation of the autocorrelation function of the stochastic single machine infinite bus system. , 2013, , .		4
49	Load modeling methodologies for cascading outage simulation considering power system stability. , 2013, , .		6
50	Evaluating the impact of modeling assumptions for cascading failure simulation. , 2012, , .		16
51	Predicting Critical Transitions From Time Series Synchrophasor Data. IEEE Transactions on Smart Grid, 2012, 3, 1832-1840.	9.0	48
52	Comparing the Topological and Electrical Structure of the North American Electric Power Infrastructure. IEEE Systems Journal, 2012, 6, 616-626.	4.6	168