Roy Billinton

List of Publications by Year
in descending order

41 papers	1,482 citations	471509 17 h-index	552781 26 g-index
41 all docs	41 docs citations	41 times ranked	1047 citing authors

#	Article	IF	Citations
1	Multistate Wind Energy Conversion System Models for Adequacy Assessment of Generating Systems Incorporating Wind Energy. IEEE Transactions on Energy Conversion, 2008, 23, 163-170.	5.2	246
2	Probabilistic Power Flow Analysis Based on the Stochastic Response Surface Method. IEEE Transactions on Power Systems, 2016, 31, 2307-2315.	6.5	131
3	A Comprehensive Scheme for Reliability Centered Maintenance in Power Distribution Systemsâ€"Part I: Methodology. IEEE Transactions on Power Delivery, 2013, 28, 761-770.	4.3	107
4	Adequacy Assessment Considerations in Wind Integrated Power Systems. IEEE Transactions on Power Systems, 2012, 27, 2297-2305.	6.5	96
5	Composite System Adequacy Assessment Incorporating Large-Scale Wind Energy Conversion Systems Considering Wind Speed Correlation. IEEE Transactions on Power Systems, 2009, 24, 1375-1382.	6.5	90
6	Reliability Evaluation Considering Wind and Hydro Power Coordination. IEEE Transactions on Power Systems, 2010, 25, 685-693.	6.5	79
7	Effects of Load Sector Demand Side Management Applications in Generating Capacity Adequacy Assessment. IEEE Transactions on Power Systems, 2012, 27, 335-343.	6.5	78
8	Incorporating Wind Power in Generating Capacity Reliability Evaluation Using Different Models. IEEE Transactions on Power Systems, 2011, 26, 2509-2517.	6.5	66
9	A probabilistic reliability evaluation of a power system including Solar/Photovoltaic cell generator. , 2009, , .		65
10	A Comprehensive Scheme for Reliability-Centered Maintenance in Power Distribution Systemsâ€"Part II: Numerical Analysis. IEEE Transactions on Power Delivery, 2013, 28, 771-778.	4.3	57
11	Considering wind speed correlation of WECS in reliability evaluation using the time-shifting technique. Electric Power Systems Research, 2009, 79, 687-693.	3.6	52
12	Determination of the Optimum Capacity and Type of Wind Turbine Generators in a Power System Considering Reliability and Cost. IEEE Transactions on Energy Conversion, 2011, 26, 227-234.	5.2	43
13	An Appropriate Wind Model for Wind Integrated Power Systems Reliability Evaluation Considering Wind Speed Correlations. Applied Sciences (Switzerland), 2013, 3, 107-121.	2.5	37
14	Application of a Joint Deterministic-Probabilistic Criterion to Wind Integrated Bulk Power System Planning. IEEE Transactions on Power Systems, 2010, 25, 1384-1392.	6.5	36
15	Probabilistic reliability evaluation of power systems including wind turbine generators using a simplified multi-state model: A case study. , 2009, , .		34
16	Determination of Transmission Line Ampacities by Probability and Numerical Methods. IEEE Transactions on Power Apparatus and Systems / Technical Operations Committee, 1970, PAS-89, 1485-1492.	0.4	30
17	Energy and reliability benefits of wind energy conversion systems. Renewable Energy, 2011, 36, 1983-1988.	8.9	29
18	Utilization of the Area Risk Concept for Operational Reliability Evaluation of a Wind-Integrated Power System. IEEE Transactions on Power Systems, 2013, 28, 4771-4779.	6.5	29

#	Article	IF	Citations
19	Frequency and Duration Concepts in System Reliability Evaluation. IEEE Transactions on Reliability, 1975, R-24, 31-36.	4.6	25
20	Effects of demand side management on bulk system adequacy evaluation. , 2010, , .		21
21	Impacts of demand side management on bulk system reliability evaluation considering load forecast uncertainty. , 2011, , .		16
22	Customer Interruption Cost in Smart Grids. IEEE Transactions on Power Systems, 2014, 29, 994-995.	6.5	16
23	Assessment of CO<inf>2</inf> reduction by renewable energy generators. , 2010, , .		13
24	Operating Risk Analysis of Wind-integrated Power Systems. Electric Power Components and Systems, 2012, 40, 399-413.	1.8	12
25	Preventive maintenance scheduling in power generation systems using a quantitative risk criterion. Canadian Electrical Engineering Journal, 1983, 8, 28-39.	0.1	10
26	Basic models and methodologies for common mode and dependent transmission outage events. , 2012, , .		9
27	Composite generation and transmission system reliability evaluation incorporating two wind energy facilities considering wind speed correlation. , 2008, , .		7
28	A Frequency amd Duration Approach for Interconnected System Reliability Evaluation. IEEE Transactions on Power Apparatus and Systems / Technical Operations Committee, 1982, PAS-101, 1030-1039.	0.4	6
29	Distribution System Reliability Risk Assessment Using Historical Utility Data. Electric Power Components and Systems, 2007, 35, 693-713.	1.8	6
30	Pertinent factors influencing an effective load carrying capability and its application to intermittent generation. International Journal of Systems Assurance Engineering and Management, 2010, 1, 146-156.	2.4	6
31	Grid constrained probabilistic reliability evaluation of power systems including wind turbine generator. , 2010, , .		5
32	New efficient reserve rate index of power system including renewable energy generators. , 2010, , .		5
33	Reliability evaluation of multiple substations with distribution networks. , 2014, , .		5
34	Adequacy Assessment of Wind-Integrated Composite Generation and Transmission Systems. Springer Series in Reliability Engineering, 2011, , 141-167.	0.5	4
35	Area Annual Outage Cost Assessment of KEPCO System by TRELSS. , 2007, , .		3
36	Utilization of Multi-state Generating Unit Models in Unit Commitment Risk Analysis of Wind-integrated Power Systems. Electric Power Components and Systems, 2009, 37, 1118-1132.	1.8	2

#	Article	IF	Citations
37	Composite generation and transmission system adequacy assessment considering wind energy seasonal characteristics. , 2009, , .		2
38	Assessing transmission system flexibility associated with wind power integration using well-being analysis. , 2014, , .		2
39	Identification of Major Outage Years in Utility Reliability Performance. Electric Power Components and Systems, 2008, 36, 525-539.	1.8	1
40	Grid expansion planning considering probabilistic production and congestion costs based on nodal effective load model. , 2010, , .		1
41	Reliability Engineering â€" A Basic Component in an Undergraduate Curriculum. International Journal of Electrical Engineering and Education, 1984, 21, 159-168.	0.8	0