Rj Bessa

List of Publications by Year
in descending order

96 papers	4,628 citations	109264 35 h-index	128225 60 g-index
100 all docs	100 docs citations	100 times ranked	3587 citing authors

#	Article	IF	Citations
1	Functional model of residential consumption elasticity under dynamic tariffs. Energy and Buildings, 2022, 255, 111663.	3.1	6
2	How do Humans decide under Wind Power Forecast Uncertainty â€" an IEA Wind Task 36 Probabilistic Forecast Games and Experiments initiative. Journal of Physics: Conference Series, 2022, 2151, 012014.	0.3	3
3	Forecasting: theory and practice. International Journal of Forecasting, 2022, 38, 705-871.	3.9	256
4	Guest Editorial for the Special Section on Advances in Renewable Energy Forecasting: Predictability, Business Models and Applications in the Power Industry. IEEE Transactions on Sustainable Energy, 2022, 13, 1166-1168.	5.9	1
5	Scarcity events analysis in adequacy studies using CN2 rule mining. Energy and AI, 2022, 8, 100154.	5.8	6
6	A <scp>decisionâ€making</scp> experiment under wind power forecast uncertainty. Meteorological Applications, 2022, 29, .	0.9	5
7	Data-Driven Anomaly Detection and Event Log Profiling of SCADA Alarms. IEEE Access, 2022, 10, 73758-73773.	2.6	4
8	Conditional parametric model for sensitivity factors in LV grids: A privacy-preserving approach. Electric Power Systems Research, 2022, 211, 108316.	2.1	2
9	A critical overview of privacy-preserving approaches for collaborative forecasting. International Journal of Forecasting, 2021, 37, 322-342.	3.9	19
10	Towards Data Markets in Renewable Energy Forecasting. IEEE Transactions on Sustainable Energy, 2021, 12, 533-542.	5.9	30
11	Forecasting conditional extreme quantiles for wind energy. Electric Power Systems Research, 2021, 190, 106636.	2.1	14
12	A deep learning method for forecasting residual market curves. Electric Power Systems Research, 2021, 190, 106756.	2.1	3
13	An unsupervised approach for fault diagnosis of power transformers. Quality and Reliability Engineering International, 2021, 37, 2834-2852.	1.4	4
14	Privacy-Preserving Distributed Learning for Renewable Energy Forecasting. IEEE Transactions on Sustainable Energy, 2021, 12, 1777-1787.	5.9	20
15	Functional Scalability and Replicability Analysis for Smart Grid Functions: The InteGrid Project Approach. Energies, 2021, 14, 5685.	1.6	3
16	The future of forecasting for renewable energy. Wiley Interdisciplinary Reviews: Energy and Environment, 2020, 9, e365.	1.9	82
17	Architecture Model for a Holistic and Interoperable Digital Energy Management Platform. Procedia Manufacturing, 2020, 51, 1117-1124.	1.9	10
18	Simulating Tariff Impact in Electrical Energy Consumption Profiles With Conditional Variational Autoencoders. IEEE Access, 2020, 8, 131949-131966.	2.6	12

#	ARTICLE	IF	CITATIONS
19	Big data analytics for future electricity grids. Electric Power Systems Research, 2020, 189, 106788.	2.1	54
20	Extreme Quantiles Dynamic Line Rating Forecasts and Application on Network Operation. Energies, 2020, 13, 3090.	1.6	2
21	Reactive power provision by the DSO to the TSO considering renewable energy sources uncertainty. Sustainable Energy, Grids and Networks, 2020, 22, 100333.	2.3	17
22	On the Use of Causality Inference in Designing Tariffs to Implement More Effective Behavioral Demand Response Programs. Energies, 2019, 12, 2666.	1.6	3
23	Low Voltage Grid Data Visualisation with a Frame Representation and Cognitive Architecture. , 2019, , .		1
24	Data-driven predictive energy optimization in a wastewater pumping station. Applied Energy, 2019, 252, 113423.	5.1	57
25	Proactive management of distribution grids with chance-constrained linearized AC OPF. International Journal of Electrical Power and Energy Systems, 2019, 109, 332-342.	3.3	7
26	Using Causal Inference to Measure Residential Consumers Demand Response Elasticity. , 2019, , .		1
27	Through the looking glass: Seeing events in power systems dynamics. International Journal of Electrical Power and Energy Systems, 2019, 106, 411-419.	3.3	21
28	Optimal bidding strategy for variable-speed pump storage in day-ahead and frequency restoration reserve markets. Energy Systems, 2019, 10, 273-297.	1.8	2
29	Estimating the Active and Reactive Power Flexibility Area at the TSO-DSO Interface. IEEE Transactions on Power Systems, 2018, 33, 4741-4750.	4.6	168
30	The challenges of estimating the impact of distributed energy resources flexibility on the TSO/DSO boundary node operating points. Computers and Operations Research, 2018, 96, 294-304.	2.4	58
31	Active Distribution Grid Management Based on Robust AC Optimal Power Flow. IEEE Transactions on Smart Grid, 2018, 9, 6229-6241.	6.2	75
32	Future Trends for Big Data Application in Power Systems. , 2018, , 223-242.		13
33	Probabilistic Low-Voltage State Estimation Using Analog-Search Techniques. , 2018, , .		7
34	Data Economy for Prosumers in a Smart Grid Ecosystem. , 2018, , .		6
35	Improving Renewable Energy Forecasting With a Grid of Numerical Weather Predictions. IEEE Transactions on Sustainable Energy, 2017, 8, 1571-1580.	5.9	189
36	On the Profitability of Variable Speed Pump-Storage-Power in Frequency Restoration Reserve. Journal of Physics: Conference Series, 2017, 813, 012010.	0.3	3

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37	Solar power forecasting with sparse vector autoregression structures. , 2017, , .		9
38	Multi-period flexibility forecast for low voltage prosumers. Energy, 2017, 141, 2251-2263.	4.5	28
39	LASSO vector autoregression structures for very shortâ€term wind power forecasting. Wind Energy, 2017, 20, 657-675.	1.9	77
40	Probabilistic Price Forecasting for Day-Ahead and Intraday Markets: Beyond the Statistical Model. Sustainability, 2017, 9, 1990.	1.6	40
41	LV state estimation and TSOâ€“DSO cooperation tools: results of the French field tests in the evolvDSO project. CIRED - Open Access Proceedings Journal, 2017, 2017, 1883-1887.	0.1	4
42	Towards Improved Understanding of the Applicability of Uncertainty Forecasts in the Electric Power Industry. Energies, 2017, 10, 1402.	1.6	75
43	Forecasting and setting power system operating reserves. , 2017, , 279-308.		10
44	Setting the maximum import net transfer capacity under extreme RES integration scenarios. , 2016, , .		2
45	Probabilistic forecasting of day-ahead electricity prices for the Iberian electricity market. , 2016, , .		5
46	Wind power probabilistic forecast in the Reproducing Kernel Hilbert Space. , 2016, , .		1
47	On-line quantile regression in the RKHS (Reproducing Kernel Hilbert Space) for operational probabilistic forecasting of wind power. Energy, 2016, 113, 355-365.	4.5	44
48	Optimization of the variable speed pump storage participation in frequency restoration reserve market. , 2016, , .		6
49	On the quality of the Gaussian copula for multi-temporal decision-making problems. , 2016, , .		6
50	From marginal to simultaneous prediction intervals of wind power. , 2015, , .		6
51	A modified negative selection algorithm applied in the diagnosis of voltage disturbances in distribution electrical systems. , 2015, , .		2
52	A hybrid short-term solar power forecasting tool. , 2015, , .		9
53	An ELM-AE State Estimator for real-time monitoring in poorly characterized distribution networks. , 2015, , .		3
54	Probabilistic solar power forecasting in smart grids using distributed information. International Journal of Electrical Power and Energy Systems, 2015, 72, 16-23.	3.3	101

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55	Power-to-Gas potential assessment of Portugal under special consideration of LCOE. , 2015, , .		5
56	Estimation of the flexibility range in the transmission-distribution boundary. , 2015, , .		49
57	Optimized Demand Response Bidding in the Wholesale Market under Scenarios of Prices and Temperatures. , 2015, , .		5
58	Spatial-Temporal Solar Power Forecasting for Smart Grids. IEEE Transactions on Industrial Informatics, 2015, 11, 232-241.	7.2	129
59	Framework for the participation of EV aggregators in the electricity market. , 2014, , .		7
60	An integrated approach for optimal coordination of wind power and hydro pumping storage. Wind Energy, 2014, 17, 829-852.	1.9	46
61	Solar power forecasting in smart grids using distributed information. , 2014, , .		9
62	Handling renewable energy variability and uncertainty in power systems operation. Wiley Interdisciplinary Reviews: Energy and Environment, 2014, 3, 156-178.	1.9	69
63	Optimization models for an EV aggregator selling secondary reserve in the electricity market. Electric Power Systems Research, 2014, 106, 36-50.	2.1	59
64	Application of probabilistic wind power forecasting in electricity markets. Wind Energy, 2013, 16, 321-338.	1.9	41
65	Global against divided optimization for the participation of an EV aggregator in the day-ahead electricity market. Part I: Theory. Electric Power Systems Research, 2013, 95, 309-318.	2.1	76
66	Global against divided optimization for the participation of an EV aggregator in the day-ahead electricity market. Part II: Numerical analysis. Electric Power Systems Research, 2013, 95, 319-329.	2.1	51
67	Optimization Models for EV Aggregator Participation in a Manual Reserve Market. IEEE Transactions on Power Systems, 2013, 28, 3085-3095.	4.6	99
68	Demand Dispatch and Probabilistic Wind Power Forecasting in Unit Commitment and Economic Dispatch: A Case Study of Illinois. IEEE Transactions on Sustainable Energy, 2013, 4, 250-261.	5.9	127
69	Methodologies to determine operating reserves due to increased wind power. , 2013, , .		17
70	Reliability Assessment Unit Commitment with Uncertain Wind Power. Energy Systems, 2013, , 3-20.	0.5	0
71	Operational Strategies for the Optimized Coordination of Wind Farms and Hydro-Pump Units. , 2012, , .		1
72	Forecasting issues for managing a portfolio of electric vehicles under a smart grid paradigm. , 2012, , .		9

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73	Wind Power Trading Under Uncertainty in LMP Markets. IEEE Transactions on Power Systems, 2012, 27, 894-903.	4.6	156
74	Reserve Setting and Steady-State Security Assessment Using Wind Power Uncertainty Forecast: A Case Study. IEEE Transactions on Sustainable Energy, 2012, 3, 827-836.	5.9	58
75	Methodologies to Determine Operating Reserves Due to Increased Wind Power. IEEE Transactions on Sustainable Energy, 2012, 3, 713-723.	5.9	238
76	Time Adaptive Conditional Kernel Density Estimation for Wind Power Forecasting. IEEE Transactions on Sustainable Energy, 2012, 3, 660-669.	5.9	135
77	Operational Management Algorithms for an EV Aggregator. , 2012, , .		0
78	Economic and technical management of an aggregation agent for electric vehicles: a literature survey. European Transactions on Electrical Power, 2012, 22, 334-350.	1.0	171
79	Time-adaptive quantile-copula for wind power probabilistic forecasting. Renewable Energy, 2012, 40, 29-39.	4.3	140
80	Optimized Bidding of a EV Aggregation Agent in the Electricity Market. IEEE Transactions on Smart Grid, 2012, 3, 443-452.	6.2	183
81	Quantile-copula density forecast for wind power uncertainty modeling. , 2011, , .		19
82	Wind power forecasting, unit commitment, and electricity market operations. , 2011, , .		3
83	Setting the Operating Reserve Using Probabilistic Wind Power Forecasts. IEEE Transactions on Power Systems, 2011, 26, 594-603.	4.6	227
84	Unit commitment and operating reserves with probabilistic wind power forecasts. , 2011, , .		29
85	Models for the EV aggregation agent business. , 2011, , .		13
86	â€˜Goodâ€™ or â€˜badâ€™ wind power forecasts: a relative concept. Wind Energy, 2011, 14, 625-636.	1.9	49
87	Wind power forecasting uncertainty and unit commitment. Applied Energy, 2011, 88, 4014-4023.	5.1	282
88	Wind Power Forecasting in U.S. Electricity Markets. Electricity Journal, 2010, 23, 71-82.	1.3	73
89	Information theoretic learning applied to wind power modeling. , 2010, , .		1
90	Comparison of probabilistic and deterministic approaches for setting operating reserve in systems with high penetration of wind power. , 2010, , .		6

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91	Risk management and optimal bidding for a wind power producer. , 2010, , .		53
92	The role of an aggregator agent for EV in the electricity market. , 2010, , .		70
93	Comparison of two new short-term wind-power forecasting systems. Renewable Energy, 2009, 34, 1848-1854.	4.3	138
94	Entropy and Correntropy Against Minimum Square Error in Offline and Online Three-Day Ahead Wind Power Forecasting. IEEE Transactions on Power Systems, 2009, 24, 1657-1666.	4.6	160
95	Operating reserve adequacy evaluation using uncertainties of wind power forecast. , 2009, , .		15
96	Improvement in wind power forecasting based on information entropy-related concepts. , 2008, , .		5