

# Poul Srensen

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/293047/poul-sorensen-publications-by-citations.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

132  
papers

3,397  
citations

29  
h-index

55  
g-index

143  
ext. papers

4,201  
ext. citations

4  
avg, IF

5.33  
L-index

#	Paper	IF	Citations
132	Centralised power control of wind farm with doubly fed induction generators. <i>Renewable Energy</i> , <b>2006</b> , 31, 935-951	8.1	309
131	Frequency Control in Autonomous Power Systems With High Wind Power Penetration. <i>IEEE Transactions on Sustainable Energy</i> , <b>2012</b> , 3, 189-199	8.2	253
130	Wind and solar energy curtailment: A review of international experience. <i>Renewable and Sustainable Energy Reviews</i> , <b>2016</b> , 65, 577-586	16.2	228
129	Power Fluctuations From Large Wind Farms. <i>IEEE Transactions on Power Systems</i> , <b>2007</b> , 22, 958-965	7	186
128	Wind models for simulation of power fluctuations from wind farms. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2002</b> , 90, 1381-1402	3.7	170
127	Reactive power capability of a wind turbine with doubly fed induction generator. <i>Wind Energy</i> , <b>2007</b> , 10, 379-394	3.4	108
126	Releasable Kinetic Energy-Based Inertial Control of a DFIG Wind Power Plant. <i>IEEE Transactions on Sustainable Energy</i> , <b>2016</b> , 7, 279-288	8.2	105
125	Control of Variable Speed Wind Turbines with Doubly-Fed Induction Generators. <i>Wind Engineering</i> , <b>2004</b> , 28, 411-432	1.2	103
124	Long-term research challenges in wind energy & research agenda by the European Academy of Wind Energy. <i>Wind Energy Science</i> , <b>2016</b> , 1, 1-39	3.2	103
123	Fatigue loads for wind turbines operating in wakes. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>1999</b> , 80, 121-136	3.7	98
122	Modelling of power fluctuations from large offshore wind farms. <i>Wind Energy</i> , <b>2008</b> , 11, 29-43	3.4	86
121	Dynamic DroopBased Inertial Control of a Doubly-Fed Induction Generator. <i>IEEE Transactions on Sustainable Energy</i> , <b>2016</b> , 7, 924-933	8.2	74
120	Aspects of Relevance in Offshore Wind Farm Reliability Assessment. <i>IEEE Transactions on Energy Conversion</i> , <b>2007</b> , 22, 159-166	5.4	68
119	Variable speed wind turbines capability for temporary over-production <b>2009</b> ,		65
118	Co-ordinated voltage control of DFIG wind turbines in uninterrupted operation during grid faults. <i>Wind Energy</i> , <b>2007</b> , 10, 51-68	3.4	65
117	Regime-switching modelling of the fluctuations of offshore wind generation. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2008</b> , 96, 2327-2347	3.7	64
116	Generic dynamic wind turbine models for power system stability analysis: A comprehensive review. <i>Renewable and Sustainable Energy Reviews</i> , <b>2018</b> , 81, 1939-1952	16.2	51

115	Dynamic Modelling of Wind Farm Grid Interaction. <i>Wind Engineering</i> , <b>2002</b> , 26, 191-210	1.2	49
114	Simulation of the impact of wind power on the transient fault behavior of the Nordic power system. <i>Electric Power Systems Research</i> , <b>2007</b> , 77, 135-144	3.5	43
113	Model of a synthetic wind speed time series generator. <i>Wind Energy</i> , <b>2008</b> , 11, 193-209	3.4	42
112	. <i>IEEE Transactions on Power Delivery</i> , <b>2016</b> , 31, 829-838	4.3	40
111	Wind Power Fluctuation Smoothing Controller Based on Risk Assessment of Grid Frequency Deviation in an Isolated System. <i>IEEE Transactions on Sustainable Energy</i> , <b>2013</b> , 4, 379-392	8.2	39
110	Design of a wind turbine pitch angle controller for power system stabilisation. <i>Renewable Energy</i> , <b>2007</b> , 32, 2334-2349	8.1	38
109	European Balancing Act. <i>IEEE Power and Energy Magazine</i> , <b>2007</b> , 5, 90-103	2.4	35
108	Technical impacts of high penetration levels of wind power on power system stability. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , <b>2017</b> , 6, e216	4.7	33
107	Robust multi-model control of an autonomous wind power system. <i>Wind Energy</i> , <b>2006</b> , 9, 399-419	3.4	33
106	Code Shift: Grid Specifications and Dynamic Wind Turbine Models. <i>IEEE Power and Energy Magazine</i> , <b>2013</b> , 11, 72-82	2.4	31
105	Simulation of transcontinental wind and solar PV generation time series. <i>Renewable Energy</i> , <b>2018</b> , 118, 425-436	8.1	31
104	A fuzzy logic pitch angle controller for power system stabilization. <i>Wind Energy</i> , <b>2007</b> , 10, 19-30	3.4	30
103	Field Validation of IEC 61400-27-1 Wind Generation Type 3 Model With Plant Power Factor Controller. <i>IEEE Transactions on Energy Conversion</i> , <b>2016</b> , 31, 1170-1178	5.4	28
102	Improved Load-Shedding Scheme Considering Distributed Generation. <i>IEEE Transactions on Power Delivery</i> , <b>2017</b> , 32, 515-524	4.3	27
101	Illustration of Modern Wind Turbine Ancillary Services. <i>Energies</i> , <b>2010</b> , 3, 1290-1302	3.1	27
100	Modular structure of wind turbine models in IEC 61400-27-1 <b>2013</b> ,		24
99	. <i>IEEE Transactions on Energy Conversion</i> , <b>2011</b> , 26, 373-378	5.4	24
98	Wind farms connected to weak grids in India. <i>Wind Energy</i> , <b>2001</b> , 4, 137-149	3.4	24

97	Using time series simulation tools for assessing the effects of variable renewable energy generation on power and energy systems. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , <b>2019</b> , 8, e329	4.7	23
96	Wind model for low frequency power fluctuations in offshore wind farms. <i>Wind Energy</i> , <b>2009</b> , 13, 471-483	3.4	22
95	Spectral coherence model for power fluctuations in a wind farm. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2012</b> , 102, 14-21	3.7	20
94	. <i>IEEE Transactions on Sustainable Energy</i> , <b>2018</b> , 9, 1889-1898	8.2	19
93	Turbine Control strategies for wind farm power optimization <b>2015</b> ,		18
92	Power Quality Issues on Wind Power Installations in Denmark. <i>IEEE Power Engineering Society General Meeting</i> , <b>2007</b> ,		18
91	Implementation and validation of IEC generic type 1A wind turbine generator model. <i>International Transactions on Electrical Energy Systems</i> , <b>2015</b> , 25, 1804-1813	2.2	17
90	Initialisation of Grid-Connected Wind Turbine Models in Power-System Simulations. <i>Wind Engineering</i> , <b>2003</b> , 27, 21-38	1.2	17
89	Simulation Model of an Active-Stall Fixed-Speed Wind Turbine Controller. <i>Wind Engineering</i> , <b>2004</b> , 28, 177-195	1.2	17
88	Method for Assessing Grid Frequency Deviation Due to Wind Power Fluctuation Based on Time-Frequency Transformation <i>IEEE Transactions on Sustainable Energy</i> , <b>2012</b> , 3, 65-73	8.2	16
87	Wind farm modelling for power quality		15
86	Grid support of a wind farm with active stall wind turbines and AC grid connection. <i>Wind Energy</i> , <b>2006</b> , 9, 341-359	3.4	13
85	Impact of wind power in autonomous power systems-power fluctuations-modelling and control issues. <i>Wind Energy</i> , <b>2011</b> , 14, 133-153	3.4	12
84	Frequency modeling of wind power fluctuation and the application on power systems <b>2010</b> ,		12
83	Simulations of wind power integration with complementary power system planning tools. <i>Electric Power Systems Research</i> , <b>2008</b> , 78, 1069-1079	3.5	12
82	Reduced models of doubly fed induction generator system for wind turbine simulations. <i>Wind Energy</i> , <b>2006</b> , 9, 299-311	3.4	12
81	Control of Offshore Wind Turbines Connected to Diode-Rectifier-Based HVdc Systems. <i>IEEE Transactions on Sustainable Energy</i> , <b>2021</b> , 12, 514-523	8.2	12
80	High dimensional dependence in power systems: A review. <i>Renewable and Sustainable Energy Reviews</i> , <b>2018</b> , 94, 197-213	16.2	11

79	Wind power integration into the automatic generation control of power systems with large-scale wind power. <i>Journal of Engineering</i> , <b>2014</b> , 2014, 538-545	0.7	11
78	Compensating active power imbalances in power system with large-scale wind power penetration. <i>Journal of Modern Power Systems and Clean Energy</i> , <b>2016</b> , 4, 229-237	4	10
77	Adequacy of frequency reserves for high wind power generation. <i>IET Renewable Power Generation</i> , <b>2017</b> , 11, 1286-1294	2.9	10
76	Cross-Spectra Over the Sea from Observations and Mesoscale Modelling. <i>Boundary-Layer Meteorology</i> , <b>2013</b> , 146, 297-318	3.4	10
75	Dynamic security issues in autonomous power systems with increasing wind power penetration. <i>Electric Power Systems Research</i> , <b>2011</b> , 81, 880-887	3.5	10
74	North Sea offshore grid development: combined optimisation of grid and generation investments towards 2050. <i>IET Renewable Power Generation</i> , <b>2020</b> , 14, 1259-1267	2.9	10
73	Understanding IEC standard wind turbine models using SimPowerSystems. <i>Wind Engineering</i> , <b>2016</b> , 40, 212-227	1.2	10
72	Real-time impact of power balancing on power system operation with large scale integration of wind power. <i>Journal of Modern Power Systems and Clean Energy</i> , <b>2017</b> , 5, 202-210	4	9
71	Combination of meteorological reanalysis data and stochastic simulation for modelling wind generation variability. <i>Renewable Energy</i> , <b>2020</b> , 159, 991-999	8.1	9
70	Virtual inertia for variable speed wind turbines. <i>Wind Energy</i> , <b>2012</b> , n/a-n/a	3.4	9
69	Power System Operation with Large Scale Wind Power Integration <b>2007</b> ,		9
68	Simulation Model of a Transient Fault Controller for an Active-Stall Wind Turbine. <i>Wind Engineering</i> , <b>2005</b> , 29, 33-47	1.2	9
67	A new simulation platform to model, optimize and design wind turbines		9
66	Reactive Power Capability Model of Wind Power Plant Using Aggregated Wind Power Collection System. <i>Energies</i> , <b>2019</b> , 12, 1607	3.1	8
65	Unbalanced voltage faults: the impact on structural loads of doubly fed asynchronous generator wind turbines. <i>Wind Energy</i> , <b>2014</b> , 17, 1123-1135	3.4	8
64	Impact of fault ride-through requirements on fixed-speed wind turbine structural loads. <i>Wind Energy</i> , <b>2011</b> , 14, 1-11	3.4	8
63	A Complex Frequency Domain Model of Wind Turbine Structures. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , <b>1995</b> , 117, 311-317	2.3	8
62	Application of microscale wind and detailed wind power plant data in large-scale wind generation simulations. <i>Electric Power Systems Research</i> , <b>2021</b> , 190, 106638	3.5	8

61	Power-Smoothing Scheme of a DFIG Using the Adaptive Gain Depending on the Rotor Speed and Frequency Deviation. <i>Energies</i> , <b>2017</b> , 10, 555	3.1	7
60	Generic models of wind turbine generators for advanced applications in a VSC-based offshore HVDC network <b>2012</b> ,		7
59	Wind farms' spatial distribution effect on power system reserves requirements <b>2010</b> ,		7
58	Managing critical weather conditions in a large-scale wind based European power system □The twenties project <b>2011</b> ,		7
57	Utilisation of real-scale renewable energy test facility for validation of generic wind turbine and wind power plant controller models. <i>IET Renewable Power Generation</i> , <b>2016</b> , 10, 1123-1131	2.9	6
56	Fault-Ride Trough Validation of IEC 61400-27-1 Type 3 and Type 4 Models of Different Wind Turbine Manufacturers. <i>Energies</i> , <b>2019</b> , 12, 3039	3.1	6
55	Influence of current limitation on voltage stability with Voltage Sourced Converter HVDC <b>2013</b> ,		6
54	Testing of a controller for an ETO-based STATCOM through controller hardware-in-the-loop simulation <b>2009</b> ,		6
53	North Sea region energy system towards 2050: integrated offshore grid and sector coupling drive offshore wind power installations. <i>Wind Energy Science</i> , <b>2020</b> , 5, 1705-1712	3.2	6
52	Possible power of down-regulated offshore wind power plants: The PossPOW algorithm. <i>Wind Energy</i> , <b>2019</b> , 22, 205-218	3.4	6
51	Statistical Analysis of Offshore Wind and other VRE Generation to Estimate the Variability in Future Residual Load. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 1104, 012011	0.3	6
50	Effects of Wind Power Technology Development on Large-scale VRE Generation Variability <b>2019</b> ,		5
49	Inertia Dependent Droop Based Frequency Containment Process. <i>Energies</i> , <b>2019</b> , 12, 1648	3.1	5
48	On Feasibility of Autonomous Frequency-Support Provision From Offshore HVDC Grids. <i>IEEE Transactions on Power Delivery</i> , <b>2020</b> , 1-1	4.3	5
47	Modeling of the dynamics of wind to power conversion including high wind speed behavior. <i>Wind Energy</i> , <b>2016</b> , 19, 923-938	3.4	5
46	Asymmetrical fault analysis at the offshore network of HVDC connected wind power plants <b>2017</b> ,		5
45	Adequacy of operating reserves for power systems in future european wind power scenarios <b>2015</b> ,		5
44	Wind turbine measurement technique□n open laboratory for educational purposes. <i>Wind Energy</i> , <b>2008</b> , 11, 281-295	3.4	5

43	Windfarm Generation Assessment for Reliability Analysis of Power Systems. <i>Wind Engineering</i> , <b>2007</b> , 31, 383-400	1.2	5
42	Modeling and Control of VSC Based DC Connection for Active Stall Wind Farms to Grid. <i>IEEJ Transactions on Industry Applications</i> , <b>2006</b> , 126, 622-629	0.2	5
41	European and Indian Grid Codes for Utility Scale Hybrid Power Plants. <i>Energies</i> , <b>2021</b> , 14, 4335	3.1	5
40	Coordinated Control of HVDC and HVAC Power Transmission Systems Integrating a Large Offshore Wind Farm. <i>Energies</i> , <b>2019</b> , 12, 3435	3.1	5
39	Control of VSC-HVDC in offshore AC islands with wind power plants: Comparison of two alternatives <b>2015</b> ,		4
38	Implementation of Electrical Simulation Model for IEC Standard Type-3A Generator <b>2013</b> ,		4
37	<b>2017</b> ,		4
36	Grid integration impacts on wind turbine design and development <b>2009</b> ,		4
35	The Relevance of the Dynamic Stall Effect for Transient Fault Operations of Active-Stall Wind Turbines. <i>Wind Engineering</i> , <b>2005</b> , 29, 353-364	1.2	4
34	Wind Farm Power Fluctuations <b>2007</b> , 139-145		4
33	Validation of European-scale simulated wind speed and wind generation time series. <i>Applied Energy</i> , <b>2022</b> , 305, 117794	10.7	4
32	Primary reserve studies for high wind power penetrated systems <b>2015</b> ,		3
31	Aggregated wind power plant models consisting of IEC wind turbine models <b>2015</b> ,		3
30	Wind energy development in China (WED) The Danish-Chinese collaboration project <b>2009</b> ,		3
29	Increasing the Accuracy of Hourly Multi-Output Solar Power Forecast with Physics-Informed Machine Learning.. <i>Sensors</i> , <b>2022</b> , 22,	3.8	3
28	Generic characterization of electrical test benches for AC- and HVDC-connected wind power plants. <i>Wind Energy Science</i> , <b>2020</b> , 5, 561-575	3.2	3
27	Invited Lectures. <i>Wind Engineers JAWE</i> , <b>2001</b> , 2001, 9-72	0	3
26	Cluster Control of Offshore Wind Power Plants Connected to a Common HVDC Station. <i>Energy Procedia</i> , <b>2016</b> , 94, 232-240	2.3	3

25	. <i>IEEE Power and Energy Magazine</i> , <b>2019</b> , 17, 79-88	2.4	2
24	Quantifying robustness of Type 4 wind power plant as reactive power source. <i>International Journal of Electrical Power and Energy Systems</i> , <b>2020</b> , 122, 106181	5.1	2
23	Phase angle calculation dynamics of type-4 wind turbines in rms simulations during severe voltage dips. <i>IET Renewable Power Generation</i> , <b>2016</b> , 10, 1069-1186	2.9	2
22	Estimation of the Possible Power of a Wind Farm. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2014</b> , 47, 6782-6787		2
21	Offshore variability in critical weather conditions in large-scale wind based Danish power system <b>2013</b> ,		2
20	Fast simulation approaches for power fluctuation model of wind farm based on frequency domain <b>2012</b> ,		2
19	Wind power variability and power system reserves in South Africa. <i>Journal of Energy in Southern Africa</i> , <b>2018</b> , 29, 59-71	1.8	2
18	Enhanced Wind Power Plant Control Strategy During Stressed Voltage Conditions. <i>IEEE Access</i> , <b>2020</b> , 8, 120025-120035	3.5	2
17	Optimal battery operation for revenue maximization of wind-storage hybrid power plant. <i>Electric Power Systems Research</i> , <b>2020</b> , 189, 106631	3.5	2
16	Power fluctuations in high-installation- density offshore wind fleets. <i>Wind Energy Science</i> , <b>2021</b> , 6, 461-476	3.6	2
15	Fast Frequency Support from Hybrid Wind Power Plants Using Supercapacitors. <i>Energies</i> , <b>2021</b> , 14, 34953	3.1	2
14	Test methodology for validation of multi-frequency models of renewable energy generators using small-signal perturbations. <i>IET Renewable Power Generation</i> , <b>2021</b> , 15, 3564	2.9	2
13	Impact of Primary Frequency Control of Offshore HVDC Grids on Interarea Modes of Power Systems. <i>Energies</i> , <b>2019</b> , 12, 3879	3.1	2
12	Technical Impacts of High Penetration Levels of Wind Power on Power System Stability <b>2019</b> , 47-65		1
11	Offshore Wind Farms <b>2015</b> , 1-46		1
10	Wind Farms in Weak Power Networks in India <b>2005</b> , 331-348		1
9	Voltage stability assessment accounting for current-limited converters. <i>Electric Power Systems Research</i> , <b>2020</b> , 189, 106772	3.5	1
8	Coordinated fast primary frequency control from offshore wind power plants in MTDC system <b>2016</b> ,		1



7	The Influence of Large-Scale Wind Farm Wake Losses and Sector Coupling on the Development of Offshore Grids. <i>SSRN Electronic Journal</i> ,	1	1
6	Generic Multi-Frequency Modelling of Converter-Connected Renewable Energy Generators Considering Frequency and Sequence Couplings. <i>IEEE Transactions on Energy Conversion</i> , <b>2021</b> , 1-1	5.4	1
5	Benchmarking physics-informed machine learning-based short term PV-power forecasting tools. <i>Energy Reports</i> , <b>2022</b> , 8, 6512-6520	4.6	1
4	The Value of Sector Coupling for the Development of Offshore Power Grids. <i>Energies</i> , <b>2022</b> , 15, 747	3.1	0
3	Status and Prospects of European Renewable-Based Energy Systems Facilitated by Smart Grid Technologies. <i>Green Energy and Technology</i> , <b>2014</b> , 47-57	0.6	0
2	Wind Farms in Weak Power Networks in India <b>2012</b> , 739-752		
1	Large-scale wind generation simulations: From the analysis of current installations to modelling the future. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 1102, 012034	0.3	