Jason Jonkman

List of Publications by Year in descending order

51 papers	1,000 citations	840776 11 h-index	839539 18 g-index
68 all docs	68 docs citations	68 times ranked	604 citing authors

#	Article	IF	Citations
1	Influence of Control on the Pitch Damping of a Floating Wind Turbine. , 2008, , .		104
2	The Effect of Second-order Hydrodynamics on Floating Offshore Wind Turbines. Energy Procedia, 2013, 35, 253-264.	1.8	89
3	The New Modularization Framework for the FAST Wind Turbine CAE Tool. , 2013, , .		80
4	Development of Fully Coupled Aeroelastic and Hydrodynamic Models for Offshore Wind Turbines. , 2006, , .		64
5	Offshore Code Comparison Collaboration Continuation Within IEA Wind Task 30: Phase II Results Regarding a Floating Semisubmersible Wind System. , 2014, , .		58
6	Modeling and Control to Mitigate Resonant Load in Variable-Speed Wind Turbine Drivetrain. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2013, 1, 277-286.	5.4	53
7	The creation of a comprehensive metocean data set for offshore wind turbine simulations. Wind Energy, 2016, 19, 1151-1159.	4.2	48
8	Multimodel validation of single wakes in neutral and stratified atmospheric conditions. Wind Energy, 2020, 23, 2027-2055.	4.2	46
9	Development and Verification of a Fully Coupled Simulator for Offshore Wind Turbines. , 2007, , .		42
10	State-Space Control of Tower Motion for Deepwater Floating Offshore Wind Turbines. , 2008, , .		30
11	Development of performance specifications for hybrid modeling of floating wind turbines in wave basin tests. Journal of Ocean Engineering and Marine Energy, 2018, 4, 1-23.	1.7	26
12	OC6 phase I: Improvements to the OpenFAST predictions of nonlinear, low-frequency responses of a floating offshore wind turbine platform. Renewable Energy, 2022, 187, 282-301.	8.9	21
13	OC6 Phase Ib: Validation of the CFD predictions of difference-frequency wave excitation on a FOWT semisubmersible. Ocean Engineering, 2021, 241, 110026.	4.3	20
14	New Developments for the NWTC's FAST Aeroelastic HAWT Simulator. , 2004, , .		18
15	Modal Dynamics of Large Wind Turbines With Different Support Structures. , 2008, , .		15
16	Uncertainty Assessment of CFD Investigation of the Nonlinear Difference-Frequency Wave Loads on a Semisubmersible FOWT Platform. Sustainability, 2021, 13, 64.	3.2	15
17	Comparison of Hydrodynamic Load Predictions Between Reduced Order Engineering Models and Computational Fluid Dynamics for the OC4-DeepCwind Semi-Submersible. , 2014, , .		14
18	Comparison of Second-Order Loads on a Semisubmersible Floating Wind Turbine. , 2014, , .		13

#	Article	IF	Citations
19	Extending the Capabilities of the Mooring Analysis Program: A Survey of Dynamic Mooring Line Theories for Integration Into FAST. , 2014, , .		13
20	Validation of Hydrodynamic Load Models Using CFD for the OC4-DeepCwind Semisubmersible. , 2015, , .		13
21	FAST.Farm development and validation of structural load prediction against large eddy simulations. Wind Energy, 2021, 24, 428-449.	4.2	13
22	FAST.Farm load validation for single wake situations at alpha ventus. Wind Energy Science, 2021, 6, 1247-1262.	3.3	13
23	OC6 Phase Ia: CFD Simulations of the Free-Decay Motion of the DeepCwind Semisubmersible. Energies, 2022, 15, 389.	3.1	13
24	Numerical Stability and Accuracy of Temporally Coupled Multi-Physics Modules in Wind Turbine CAE Tools. , 2013, , .		12
25	Designing and Integrating Wind Power Laboratory Experiments in Power and Energy Systems Courses. IEEE Transactions on Power Systems, 2014, 29, 1944-1951.	6.5	12
26	Modeling the TetraSpar Floating Offshore Wind Turbine Foundation as a Flexible Structure in OrcaFlex and OpenFAST. Energies, 2021, 14, 7866.	3.1	11
27	Verification of a Numerical Model of the Offshore Wind Turbine From the Alpha Ventus Wind Farm Within OC5 Phase III. , 2018, , .		10
28	Numerical investigation of wind turbine wakes under high thrust coefficient. Wind Energy, 2022, 25, 605-617.	4.2	9
29	Development and Validation of an Aeroelastic Model of a Small Furling Wind Turbine. , 2005, , .		8
30	Computation of Nonlinear Hydrodynamic Loads on Floating Wind Turbines Using Fluid-Impulse Theory. , 2015, , .		8
31	Validation of Numerical Models of the Offshore Wind Turbine From the Alpha Ventus Wind Farm Against Full-Scale Measurements Within OC5 Phase III. Journal of Offshore Mechanics and Arctic Engineering, 2021, 143, .	1.2	8
32	A multipurpose lifting-line flow solver for arbitrary wind energy concepts. Wind Energy Science, 2022, 7, 455-467.	3.3	8
33	Wind turbine response in waked inflow: A modelling benchmark against full-scale measurements. Renewable Energy, 2022, 191, 868-887.	8.9	7
34	Numerical Prediction of Experimentally Observed Behavior of a Scale-Model of an Offshore Wind Turbine Supported by a Tension-Leg Platform. , 2013, , .		6
35	Computation of Wave Loads Under Multidirectional Sea States for Floating Offshore Wind Turbines. , 2014, , .		6
36	Assessment of Experimental Uncertainty for a Floating Wind Semisubmersible Under Hydrodynamic Loading. , 2018, , .		6

#	Article	IF	Citations
37	Functional Requirements for the WEIS Toolset to Enable Controls Co-Design of Floating Offshore Wind Turbines. , 2021, , .		5
38	Influence of wind turbine design parameters on linearized physics-based models in OpenFAST. Wind Energy Science, 2022, 7, 559-571.	3.3	5
39	Incorporation of Multi-Member Substructure Capabilities in FAST for Analysis of Offshore Wind Turbines. , 2012, , .		4
40	Impacts of providing inertial response on dynamic loads of wind turbine drivetrains. , 2014, , .		4
41	Bichromatic Wave Selection for Validation of the Difference-Frequency Transfer Function for the OC6 Validation Campaign. , 2019, , .		4
42	Validation of Numerical Models of the Offshore Wind Turbine From the Alpha Ventus Wind Farm Against Full-Scale Measurements Within OC5 Phase III. , 2019, , .		4
43	Investigation of the IEC Safety Standard for Small Wind Turbine Design Through Modeling and Testing. , 2003, , 340.		3
44	Offshore Code Comparison Collaboration: Phase III Results Regarding Tripod Support Structure Modeling. , 2009, , .		3
45	Investigation of Nonlinear Difference-Frequency Wave Excitation on a Semisubmersible Offshore-Wind Platform With Bichromatic-Wave CFD Simulations. , 2021, , .		3
46	Effect of Second-Order and Fully Nonlinear Wave Kinematics on a Tension-Leg-Platform Wind Turbine in Extreme Wave Conditions. , 2017, , .		3
47	Building and calibration of a fast model of the SWAY prototype floating wind turbine. , 2013, , .		2
48	Hydrodynamic Analysis of a Suspended Cylinder Under Regular Wave Loading Based on Computational Fluid Dynamics. , 2019, , .		1
49	Investigation of the IEC Safety Standard for Small Wind Turbine Design Through Modeling and Testing. , 2003, , .		0
50	Simulation tool to assess mechanical and electrical stresses on wind turbine generators. , 2013, , .		0
51	OC6 Phase II: Integration and verification of a new soilâ€“structure interaction model for offshore wind design. Wind Energy, 2022, 25, 793-810.	4.2	0