Nikolay Krasimirov Dimitrov

List of Publications by Year
in descending order

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42	678	567281 15	580821 25
papers	citations	h-index	g-index

43	43	43	462
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	From wind to loads: wind turbine site-specific load estimation with surrogate models trained on high-fidelity load databases. Wind Energy Science, 2018, 3, 767-790.	3.3	66
2	Uncertainty propagation through an aeroelastic wind turbine model using polynomial surrogates. Renewable Energy, 2018, 119, 910-922.	8.9	61
3	Model of wind shear conditional on turbulence and its impact on wind turbine loads. Wind Energy, 2015, 18, 1917-1931.	4.2	48
4	Effects of normal and extreme turbulence spectral parameters on wind turbine loads. Renewable Energy, 2017, 101, 1180-1193.	8.9	41
5	Comparative analysis of methods for modelling the short-term probability distribution of extreme wind turbine loads. Wind Energy, 2016, 19, 717-737.	4.2	34
6	Turbulence characterization from a forward-looking nacelle lidar. Wind Energy Science, 2017, 2, 133-152.	3.3	34
7	Probabilistic Meteorological Characterization for Turbine Loads. Journal of Physics: Conference Series, 2014, 524, 012076.	0.4	27
8	A benchmarking exercise for environmental contours. Ocean Engineering, 2021, 236, 109504.	4.3	26
9	Application of simulated lidar scanning patterns to constrained Gaussian turbulence fields for load validation. Wind Energy, 2017, 20, 79-95.	4.2	23
10	Surrogate models for parameterized representation of wakeâ€induced loads in wind farms. Wind Energy, 2019, 22, 1371-1389.	4.2	22
11	Extreme wind fluctuations: joint statistics, extreme turbulence, and impact on wind turbine loads. Wind Energy Science, 2019, 4, 325-342.	3.3	22
12	Wind turbine load validation using lidarâ€based wind retrievals. Wind Energy, 2019, 22, 1512-1533.	4.2	19
13	Mapping Wind Farm Loads and Power Production - A Case Study on Horns Rev 1. Journal of Physics: Conference Series, 2016, 753, 032010.	0.4	17
14	Predictive repair scheduling of wind turbine driveâ€train components based on machine learning. Wind Energy, 2019, 22, 1230-1242.	4.2	17
15	Development and design of a semi-floater substructure for multi-megawatt wind turbines at 50+ m water depths. Ocean Engineering, 2016, 125, 226-237.	4.3	16
16	Impact of turbulence induced loads and wave kinematic models on fatigue reliability estimates of offshore wind turbine monopiles. Ocean Engineering, 2018, 155, 295-309.	4.3	15
17	Wind turbine site-specific load estimation using artificial neural networks calibrated by means of high-fidelity load simulations. Journal of Physics: Conference Series, 2018, 1037, 062027.	0.4	15
18	Wind turbine load validation in wakes using wind field reconstruction techniques and nacelle lidar wind retrievals. Wind Energy Science, 2021, 6, 841-866.	3.3	15

#	Article	IF	Citations
19	Reliability Analysis of a Composite Wind Turbine Blade Section Using the Model Correction Factor Method: Numerical Study and Validation. Applied Composite Materials, 2013, 20, 17-39.	2.5	14
20	Wind farm layout optimization with load constraints using surrogate modelling. Journal of Physics: Conference Series, 2020, 1618, 042035.	0.4	13
21	Aeroelastic load validation in wake conditions using nacelle-mounted lidar measurements. Wind Energy Science, 2020, 5, 1129-1154.	3.3	13
22	Spatial reliability analysis of a wind turbine blade cross section subjected to multi-axial extreme loading. Structural Safety, 2017, 66, 27-37.	5.3	12
23	Probabilistic fatigue life of balsa cored sandwich composites subjected to transverse shear. Journal of Sandwich Structures and Materials, 2015, 17, 562-577.	3.5	11
24	Effects of Bearing Configuration in wind Turbine Gearbox Reliability. Energy Procedia, 2015, 80, 392-400.	1.8	9
25	Probabilistic estimation of the Dynamic Wake Meandering model parameters using SpinnerLidar-derived wake characteristics. Wind Energy Science, 2021, 6, 1117-1142.	3.3	9
26	Virtual sensors for wind turbines with machine learningâ€based time series models. Wind Energy, 2022, 25, 1626-1645.	4.2	8
27	Probabilistic model for multi-axial dynamic load combinations for wind turbines. Engineering Structures, 2016, 117, 239-249.	5.3	7
28	Assessment and propagation of mechanical property uncertainties in fatigue life prediction of composite laminates. Journal of Composite Materials, 2018, 52, 3381-3398.	2.4	7
29	Inverse Directional Simulation: an environmental contour method providing an exact return period. Journal of Physics: Conference Series, 2020, 1618, 062048.	0.4	7
30	A surrogate model approach for associating wind farm load variations with turbine failures. Wind Energy Science, 2020, 5, 1007-1022.	3.3	7
31	Probabilistic structural assessment of conical grouted joint using numerical modelling. Ocean Engineering, 2018, 158, 232-252.	4.3	6
32	Influence of model parameters on the design of large diameter monopiles for multiâ€megawatt offshore wind turbines at 50â€m water depths. Wind Energy, 2019, 22, 794-812.	4.2	6
33	Bayesian inference model for fatigue life of laminated composites. Journal of Composite Materials, 2016, 50, 131-143.	2.4	5
34	From SCADA to lifetime assessment and performance optimization: how to use models and machine learning to extract useful insights from limited data. Journal of Physics: Conference Series, 2019, 1222, 012032.	0.4	5
35	Risk-based approach for rational categorization of damage observations from wind turbine blade inspections. Journal of Physics: Conference Series, 2018, 1037, 042021.	0.4	4
36	Wind turbine wake characterization using the SpinnerLidar measurements. Journal of Physics: Conference Series, 2020, 1618, 062040.	0.4	4

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37	Uncertainty propagation and sensitivity analysis of an artificial neural network used as wind turbine load surrogate model. Journal of Physics: Conference Series, 2020, 1618, 042040.	0.4	4
38	Validation of the dynamic wake meandering model with respect to loads and power production. Wind Energy Science, 2021, 6, 441-460.	3.3	3
39	Wind farm set point optimization with surrogate models for load and power output targets. Journal of Physics: Conference Series, 2021, 2018, 012013.	0.4	2
40	Using Transfer Learning to Build Physics-Informed Machine Learning Models for Improved Wind Farm Monitoring. Energies, 2022, 15, 558.	3.1	2
41	Probabilistic Modelling of Fatigue Life of Composite Laminates Using Bayesian Inference. , 2014, , .		1
42	Modelling of turbine power and local wind conditions in wind farm using an autoencoder neural network. Journal of Physics: Conference Series, 2022, 2265, 032069.	0.4	0