

# Nikolay Dimitrov

## List of Publications by Year in descending order

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Version: 2024-02-01

24  
papers

488  
citations

687363

13  
h-index

677142

22  
g-index

25  
all docs

25  
docs citations

25  
times ranked

303  
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. <i>Wind Energy Science</i> , 2018, 3, 767-790.	3.3	66
2	Uncertainty propagation through an aeroelastic wind turbine model using polynomial surrogates. <i>Renewable Energy</i> , 2018, 119, 910-922.	8.9	61
3	Model of wind shear conditional on turbulence and its impact on wind turbine loads. <i>Wind Energy</i> , 2015, 18, 1917-1931.	4.2	48
4	Effects of normal and extreme turbulence spectral parameters on wind turbine loads. <i>Renewable Energy</i> , 2017, 101, 1180-1193.	8.9	41
5	Turbulence characterization from a forward-looking nacelle lidar. <i>Wind Energy Science</i> , 2017, 2, 133-152.	3.3	34
6	A benchmarking exercise for environmental contours. <i>Ocean Engineering</i> , 2021, 236, 109504.	4.3	26
7	Application of simulated lidar scanning patterns to constrained Gaussian turbulence fields for load validation. <i>Wind Energy</i> , 2017, 20, 79-95.	4.2	23
8	Surrogate models for parameterized representation of wake-induced loads in wind farms. <i>Wind Energy</i> , 2019, 22, 1371-1389.	4.2	22
9	Extreme wind fluctuations: joint statistics, extreme turbulence, and impact on wind turbine loads. <i>Wind Energy Science</i> , 2019, 4, 325-342.	3.3	22
10	Wind turbine load validation using lidar-based wind retrievals. <i>Wind Energy</i> , 2019, 22, 1512-1533.	4.2	19
11	Mapping Wind Farm Loads and Power Production - A Case Study on Horns Rev 1. <i>Journal of Physics: Conference Series</i> , 2016, 753, 032010.	0.4	17
12	Impact of turbulence induced loads and wave kinematic models on fatigue reliability estimates of offshore wind turbine monopiles. <i>Ocean Engineering</i> , 2018, 155, 295-309.	4.3	15
13	Wind turbine load validation in wakes using wind field reconstruction techniques and nacelle lidar wind retrievals. <i>Wind Energy Science</i> , 2021, 6, 841-866.	3.3	15
14	Reliability Analysis of a Composite Wind Turbine Blade Section Using the Model Correction Factor Method: Numerical Study and Validation. <i>Applied Composite Materials</i> , 2013, 20, 17-39.	2.5	14
15	Wind farm layout optimization with load constraints using surrogate modelling. <i>Journal of Physics: Conference Series</i> , 2020, 1618, 042035.	0.4	13
16	Aeroelastic load validation in wake conditions using nacelle-mounted lidar measurements. <i>Wind Energy Science</i> , 2020, 5, 1129-1154.	3.3	13
17	Probabilistic estimation of the Dynamic Wake Meandering model parameters using SpinnerLidar-derived wake characteristics. <i>Wind Energy Science</i> , 2021, 6, 1117-1142.	3.3	9
18	Virtual sensors for wind turbines with machine learning-based time series models. <i>Wind Energy</i> , 2022, 25, 1626-1645.	4.2	8

#	ARTICLE	IF	CITATIONS
19	Inverse Directional Simulation: an environmental contour method providing an exact return period. Journal of Physics: Conference Series, 2020, 1618, 062048.	0.4	7
20	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
21	Wind turbine wake characterization using the SpinnerLidar measurements. Journal of Physics: Conference Series, 2020, 1618, 062040.	0.4	4
22	Validation of the dynamic wake meandering model with respect to loads and power production. Wind Energy Science, 2021, 6, 441-460.	3.3	3
23	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
24	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