David Schlipf

List of Publications by Year
in descending order

66 papers	1,581 citations	394421 19 h-index	361022 35 g-index
73 all docs	73 docs citations	73 times ranked	909 citing authors

#	Article	IF	Citations
1	Nonlinear model predictive control of wind turbines using LIDAR. Wind Energy, 2013, 16, 1107-1129.	4.2	259
2	Long-term research challenges in wind energy â€" a research agenda by the European Academy of Wind Energy. Wind Energy Science, 2016, 1, 1-39.	3.3	162
3	Analysis of control-oriented wake modeling tools using lidar field results. Wind Energy Science, 2018, 3, 819-831.	3.3	76
4	Advanced controller research for multiâ€MW wind turbines in the UPWIND project. Wind Energy, 2012, 15, 119-145.	4.2	64
5	Optimizing Lidars for Wind Turbine Control Applicationsâ€"Results from the IEA Wind Task 32 Workshop. Remote Sensing, 2018, 10, 863.	4.0	48
6	Minute-Scale Forecasting of Wind Powerâ€"Results from the Collaborative Workshop of IEA Wind Task 32 and 36. Energies, 2019, 12, 712.	3.1	48
7	Nonlinear model predictive control of floating wind turbines with individual pitch control. , 2014, , .		47
8	Wind field reconstruction from nacelle-mounted lidar short-range measurements. Wind Energy Science, 2017, 2, 269-283.	3.3	43
9	IEA Wind Task 32: Wind Lidar Identifying and Mitigating Barriers to the Adoption of Wind Lidar. Remote Sensing, 2018, 10, 406.	4.0	41
10	Field Testing LIDAR-Based Feed-Forward Controls on the NREL Controls Advanced Research Turbine. , 2013, , .		40
11	Field Testing of Feedforward Collective Pitch Control on the CART2 Using a Nacelle-Based Lidar Scanner. Journal of Physics: Conference Series, 2014, 555, 012090.	0.4	38
12	Model of the Correlation between Lidar Systems and Wind Turbines for Lidar-Assisted Control. Journal of Atmospheric and Oceanic Technology, 2013, 30, 2233-2240.	1.3	37
13	Full-Scale Field Test of Wake Steering. Journal of Physics: Conference Series, 2017, 854, 012013.	0.4	37
14	Lidar-enhanced wind turbine control: Past, present, and future. , 2016, , .		34
15	The Triple Spar Campaign: Implementation and Test of a Blade Pitch Controller on a Scaled Floating Wind Turbine Model. Energy Procedia, 2017, 137, 323-338.	1.8	33
16	Robust gain scheduling baseline controller for floating offshore wind turbines. Wind Energy, 2020, 23, 17-30.	4.2	29
17	Collective Pitch Feedforward Control of Floating Wind Turbines Using Lidar. Journal of Ocean and Wind Energy, 2015, 2, .	0.7	28
18	ell_{1}-Optimal Control of Large Wind Turbines. IEEE Transactions on Control Systems Technology, 2013, 21, 1079-1089.	5.2	27

#	ARTICLE	IF	CITATIONS
19	Full-field assessment of wind turbine near-wake deviation in relation to yaw misalignment. Wind Energy Science, 2016, 1, 41-53.	3.3	22
20	Three Dimensional Dynamic Model Based Wind Field Reconstruction from Lidar Data. Journal of Physics: Conference Series, 2014, 524, 012005.	0.4	21
21	Multibody modeling for concept-level floating offshore wind turbine design. Multibody System Dynamics, 2020, 49, 203-236.	2.7	21
22	Detection of Wind Evolution and Lidar Trajectory Optimization for Lidar-Assisted Wind Turbine Control. Meteorologische Zeitschrift, 2015, 24, 565-579.	1.0	20
23	Wind Turbine Controller to Mitigate Structural Loads on a Floating Wind Turbine Platform. Journal of Offshore Mechanics and Arctic Engineering, 2019, 141, .	1.2	20
24	Comparison of linear and nonlinear model predictive control of wind turbines using LIDAR. , 2014, , .		19
25	Comparison of feedforward and model predictive control of wind turbines using LIDAR. , 2012, , .		18
26	Integrated Optimization of Floating Wind Turbine Systems. , 2014, , .		18
27	Control design methods for floating wind turbines for optimal disturbance rejection. Journal of Physics: Conference Series, 2016, 753, 092006.	0.4	17
28	Comparison of Two Independent Lidar-Based Pitch Control Designs. , 2012, , .		16
29	Wind Turbine Controller to Mitigate Structural Loads on a Floating Wind Turbine Platform. , 2016, , .		16
30	Evaluation of control methods for floating offshore wind turbines. Journal of Physics: Conference Series, 2018, 1104, 012033.	0.4	16
31	Lidar-based wake tracking for closed-loop wind farm control. Journal of Physics: Conference Series, 2016, 753, 052009.	0.4	15
32	Lidar-based wake tracking for closed-loop wind farm control. Wind Energy Science, 2017, 2, 257-267.	3.3	15
33	Efficient critical design load case identification for floating offshore wind turbines with a reduced nonlinear model. Journal of Physics: Conference Series, 2014, 555, 012069.	0.4	14
34	Importance of lidar measurement timing accuracy for wind turbine control. , 2014, , .		13
35	Optimization of a feed-forward controller using a CW-lidar system on the CART3. , 2015, , .		13
36	Wake redirecting using feedback control to improve the power output of wind farms. , 2016, , .		13

#	Article	IF	Citations
37	Parameterization of wind evolution using lidar. Wind Energy Science, 2021, 6, 61-91.	3.3	13
38	Parametric Wave Excitation Model for Floating Wind Turbines. Energy Procedia, 2016, 94, 290-305.	1.8	12
39	Systems Engineering for Lidar-Assisted Control: A Sequential Approach. Journal of Physics: Conference Series, 2018, 1102, 012014.	0.4	12
40	Nonlinear model predictive controller design for extreme load mitigation in transition operation region in wind turbines. , 2015, , .		10
41	Direct Speed Control using LIDAR and turbine data. , 2013, , .		9
42	Power Performance Measurements of the NREL CART-2 Wind Turbine Using a Nacelle-Based Lidar Scanner. Journal of Atmospheric and Oceanic Technology, 2014, 31, 2029-2034.	1.3	9
43	Flatness-based Feedforward Control of Wind Turbines Using Lidar. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5820-5825.	0.4	8
44	Prospects of Linear Model Predictive Control on a 10 MW Floating Wind Turbine. , 2015, , .		8
45	Optimization of Floating Offshore Wind Turbine Platforms With a Self-Tuning Controller. , 2017, , .		8
46	Investigation on the potential of individual blade control for lifetime extension. Journal of Physics: Conference Series, 2018, 1037, 032006.	0.4	8
47	â„‹âˆž controller design for closed-loop wake redirection. , 2017, , .		7
48	A Spectral Model of Grid Frequency for Assessing the Impact of Inertia Response on Wind Turbine Dynamics. Energies, 2021, 14, 2492.	3.1	7
49	The space-time structure of turbulence for lidar-assisted wind turbine control. Renewable Energy, 2022, 195, 293-310.	8.9	7
50	Adaptive Vorsteuerung fÃ¼r Windenergieanlagen. Automatisierungstechnik, 2013, 61, 329-338.	0.8	6
51	Turbulent Extreme Event Simulations for Lidar-Assisted Wind Turbine Control. Journal of Physics: Conference Series, 2016, 753, 052011.	0.4	6
52	IEA Wind Task 32 and Task 37: Optimizing Wind Turbines with Lidar-Assisted Control Using Systems Engineering. Journal of Physics: Conference Series, 2020, 1618, 042029.	0.4	6
53	Updates on the OpenFAST Lidar Simulator. Journal of Physics: Conference Series, 2022, 2265, 042030.	0.4	6
54	Robust lidar-based closed-loop wake redirection for wind farm control. IFAC-PapersOnLine, 2017, 50, 4498-4503.	0.9	5

#	Article	IF	Citations
55	IEA Wind Task 32: Best Practices for the Certification of Lidar-Assisted Control Applications. Journal of Physics: Conference Series, 2018, 1102, 012010.	0.4	5
56	Lidar-based Estimation of Turbulence Intensity for Controller Scheduling. Journal of Physics: Conference Series, 2020, 1618, 032053.	0.4	5
57	Modeling Uncertainties of Wind Field Reconstruction Using Lidar. Journal of Physics: Conference Series, 2020, 1452, 012088.	0.4	4
58	A Comparison Between LIDAR-Based Feedforward and DAC for Control of Wind Turbines. , 2018, , .		3
59	Lidar Wind Preview Quality Estimation for Wind Turbine Control. , 2021, , .		3
60	Loop shaping based robust control for floating offshore wind turbines. Journal of Physics: Conference Series, 2020, 1618, 022066.	0.4	3
61	Four-dimensional wind field generation for the aeroelastic simulation of wind turbines with lidars. Wind Energy Science, 2022, 7, 539-558.	3.3	3
62	Arrangements for enhanced measurements of a large turbine near-wake using LiDAR from the nacelle. IOP Conference Series: Earth and Environmental Science, 2008, 1, 012060.	0.3	1
63	Prospects of multivariable feedforward control of wind turbines using lidar. , 2016, , .		1
64	Lidar-assisted Extreme Load Reduction by Multi-variable Protective Derating. Journal of Physics: Conference Series, 2018, 1037, 032025.	0.4	1
65	Control Design For Disturbance Rejection in Wind Turbines. , 2018, , .		1
66	Efficient multibody modeling of offshore wind turbines with flexible substructures. Journal of Physics: Conference Series, 2022, 2265, 042007.	0.4	0