Jan-Willem van Wingerden

List of Publications by Year in Descending Order

82 papers	1,519 citations	19 h-index	37 g-index
101 ext. papers	1,931 ext. citations	3.2 avg, IF	5.11 L-index

#	Paper	IF	Citations
82	Damping identification of offshore wind turbines using operational modal analysis: a review. *Wind Energy Science*, **2022**, 7, 161-184	3.2	1
81	The Proportional Integral Notch and Coleman Blade Effective Wind Speed Estimators and Their Similarities **2022**, 6, 2198-2203		2
80	The Immersion and Invariance Wind Speed Estimator Revisited and New Results **2022**, 6, 361-366		5
79	Load reduction for wind turbines: an output-constrained, subspace predictive repetitive control approach. *Wind Energy Science*, **2022**, 7, 523-537	3.2	0
78	Input torque measurements for wind turbine gearboxes using fiber-optic strain sensors. *Wind Energy Science*, **2022**, 7, 505-521	3.2	1
77	Using The Helix Mixing Approach On Floating Offshore Wind Turbines. *Journal of Physics: Conference Series*, **2022**, 2265, 042011	0.3	
76	On the load impact of dynamic wind farm wake mixing strategies. *Renewable Energy*, **2022**, 194, 582-595	8.1	
75	Blade Effective Wind Speed Estimation: A Subspace Predictive Repetitive Estimator Approach **2021**,		3
74	Floating offshore wind turbine fault diagnosis via regularized dynamic canonical correlation and fisher discriminant analysis. *IET Renewable Power Generation*, **2021**, 15, 4006	2.9	0
73	Model Predictive Control for Wake Redirection in Wind Farms: a Koopman Dynamic Mode Decomposition Approach **2021**,		1
72	Model-based design of a wave-feedforward control strategy in floating wind turbines. *Wind Energy Science*, **2021**, 6, 885-901	3.2	3
71	Data-Driven Incipient Fault Detection via Canonical Variate Dissimilarity and Mixed Kernel Principal Component Analysis. *IEEE Transactions on Industrial Informatics*, **2021**, 17, 5380-5390	11.9	7
70	Field experiment for open-loop yaw-based wake steering at a commercial onshore wind farm in Italy. *Wind Energy Science*, **2021**, 6, 159-176	3.2	16
69	Fault-tolerant individual pitch control of floating offshore wind turbines via subspace predictive repetitive control. *Wind Energy*, **2021**, 24, 1045-1065	3.4	2
68	Fault Detection of the Mooring system in Floating Offshore Wind Turbines based on the Wave-excited Linear Model. *Journal of Physics: Conference Series*, **2020**, 1618, 022049	0.3	1
67	On wind farm wake mixing strategies using dynamic individual pitch control. *Journal of Physics: Conference Series*, **2020**, 1618, 022050	0.3	2
66	Predicting the benefit of wake steering on the annual energy production of a wind farm using large eddy simulations and Gaussian process regression. *Journal of Physics: Conference Series*, **2020**, 1618, 022024	0.3	2

65	Dynamic Flow Modelling for Model-Predictive Wind Farm Control. *Journal of Physics: Conference Series*, **2020**, 1618, 022023	0.3	0
64	Closed-loop model-based wind farm control using FLORIS under time-varying inflow conditions. *Renewable Energy*, **2020**, 156, 719-730	8.1	22
63	The helix approach: Using dynamic individual pitch control to enhance wake mixing in wind farms. *Wind Energy*, **2020**, 23, 1739-1751	3.4	20
62	Periodic dynamic induction control of wind farms: proving the potential in simulations and wind tunnel experiments. *Wind Energy Science*, **2020**, 5, 245-257	3.2	30
61	Preventing wind turbine tower natural frequency excitation with a quasi-LPV model predictive control scheme. *Wind Energy*, **2020**, 23, 627-644	3.4	5
60	On the Potential of Reduced Order Models for Wind Farm Control: A Koopman Dynamic Mode Decomposition Approach. *Energies*, **2020**, 13, 6513	3.1	6
59	Revealing Time-Varying Joint Impedance With Kernel-Based Regression and Nonparametric Decomposition. *IEEE Transactions on Control Systems Technology*, **2020**, 28, 224-237	4.8	4
58	Tensor networks for MIMO LPV system identification. *International Journal of Control*, **2020**, 93, 797-811	1.5	5
57	Observability of the ambient conditions in model-based estimation for wind farm control: A focus on static models. *Wind Energy*, **2020**, 23, 1777-1791	3.4	5
56	A comprehensive model for transient behavior of tapping mode atomic force microscope. *Nonlinear Dynamics*, **2019**, 97, 1601-1617	5	2
55	Validation of a lookup-table approach to modeling turbine fatigue loads in wind farms under active wake control. *Wind Energy Science*, **2019**, 4, 549-561	3.2	14
54	Feedback-feedforward individual pitch control design for wind turbines with uncertain measurements **2019**,		6
53	Model-based closed-loop wind farm control for power maximization using Bayesian optimization: a large eddy simulation study **2019**,		4
52	Analysis and optimal individual pitch control decoupling by inclusion of an azimuth offset in the multiblade coordinate transformation. *Wind Energy*, **2019**, 22, 341-359	3.4	20
51	Adjoint-based model predictive control for optimal energy extraction in waked wind farms. *Control Engineering Practice*, **2019**, 84, 48-62	3.9	23
50	Tensor Nuclear Norm LPV Subspace Identification. *IEEE Transactions on Automatic Control*, **2018**, 63, 3897-3903	5.9	4
49	Control design, implementation, and evaluation for an in-field 500 kW wind turbine with a fixed-displacement hydraulic drivetrain. *Wind Energy Science*, **2018**, 3, 615-638	3.2	6
48	Online model calibration for a simplified LES model in pursuit of real-time closed-loop wind farm control. *Wind Energy Science*, **2018**, 3, 749-765	3.2	11

47	A control-oriented dynamic wind farm model: WFSim. *Wind Energy Science*, **2018**, 3, 75-95	3.2	39
46	Robust active wake control in consideration of wind direction variability and uncertainty. *Wind Energy Science*, **2018**, 3, 869-882	3.2	28
45	Validating subspace predictive repetitive control under turbulent wind conditions with wind tunnel experiment. *Journal of Physics: Conference Series*, **2018**, 1037, 032008	0.3	1
44	Data-driven repetitive control: Wind tunnel experiments under turbulent conditions. *Control Engineering Practice*, **2018**, 80, 105-115	3.9	18
43	Wind farm multi-objective wake redirection for optimizing power production and loads. *Energy*, **2017**, 121, 561-569	7.9	52
42	Predictor-Based Tensor Regression (PBTR) for LPV subspace identification. *Automatica*, **2017**, 79, 235-243	5.7	16
41	H∞ controller design for closed-loop wake redirection **2017**,		6
40	Active Power Control of Waked Wind Farms. *IFAC-PapersOnLine*, **2017**, 50, 4484-4491	0.7	26
39	Robust lidar-based closed-loop wake redirection for wind farm control. *IFAC-PapersOnLine*, **2017**, 50, 4498-4503	0.7	3
38	Adjoint-based model predictive control of wind farms: Beyond the quasi steady-state power maximization * *This work has been funded by the Ministry for Sciences and Culture of the Federal State of Lower Saxony, Germany as part of the PhD Programme on System Integration of Renewable Energies (SEE) and by the German Ministry of Economic Affairs and Energy (BMWi) in the scope of the WIMS-Cluster project (EKZ 0324005). *IFAC-PapersOnLine*, 2017, 50, 4510-4515	0.7	12
37	Iterative feedback tuning of wind turbine controllers. *Wind Energy Science*, **2017**, 2, 153-173	3.2	1
36	Quasi Linear Parameter Varying modeling for wind farm control using the 2D Navier-Stokes equations **2016**,		12
35	Wind tunnel tests with combined pitch and free-floating flap control: data-driven iterative feedforward controller tuning. *Wind Energy Science*, **2016**, 1, 205-220	3.2	3
34	Yaw-Misalignment and its Impact on Wind Turbine Loads and Wind Farm Power Output. *Journal of Physics: Conference Series*, **2016**, 753, 062013	0.3	11
33	Wind Tunnel Testing of Subspace Predictive Repetitive Control for Variable Pitch Wind Turbines. *IEEE Transactions on Control Systems Technology*, **2015**, 23, 2101-2116	4.8	29
32	Tensor regression for LPV subspace identification. *IFAC-PapersOnLine*, **2015**, 48, 421-426	0.7	
31	Simulation comparison of wake mitigation control strategies for a two-turbine case. *Wind Energy*, **2015**, 18, 2135-2143	3.4	143
30	Tensor regression for LTI subspace identification **2015**,		1

#	Publication		
29	Tensor regression for LTI subspace identification: free parametrizations**This work is funded and supported by the Design for Reliable Power Performance (D4REL) program, project code P91202.. *IFAC-PapersOnLine*, **2015**, 48, 909-914	0.7	
28	Hierarchical subspace identification of directed acyclic graphs. *International Journal of Control*, **2015**, 88, 123-137	1.5	8
27	Evaluating techniques for redirecting turbine wakes using SOWFA. *Renewable Energy*, **2014**, 70, 211-218	8.1	225
26	Experimental wind tunnel testing of linear individual pitch control for two-bladed wind turbines. *Journal of Physics: Conference Series*, **2014**, 524, 012056	0.3	5
25	Global Identification of Wind Turbines Using a Hammerstein Identification Method. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 1471-1478	4.8	35
24	Rejection of Periodic Wind Disturbances on a Smart Rotor Test Section Using Lifted Repetitive Control. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 347-359	4.8	40
23	LPV Identification of Wind Turbine Rotor Vibrational Dynamics Using Periodic Disturbance Basis Functions. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 1183-1190	4.8	17
22	Parameter estimation for spatially interconnected descriptor systems using Sequentially Semi-Separable matrices **2013**,		1
21	Closed-loop subspace identification methods: an overview. *IET Control Theory and Applications*, **2013**, 7, 1339-1358	2.5	77
20	Recursive Predictor-Based Subspace Identification With Application to the Real-Time Closed-Loop Tracking of Flutter. *IEEE Transactions on Control Systems Technology*, **2012**, 20, 934-949	4.8	50
19	Refinements and Tests of an Advanced Controller to Mitigate Fatigue Loads in the Controls Advanced Research Turbine **2011**,		15
18	Linear Parameter Varying Identification of Freeway Traffic Models. *IEEE Transactions on Control Systems Technology*, **2011**, 19, 31-45	4.8	18
17	LPV subspace identification of the edgewise vibrational dynamics of a wind turbine rotor **2011**,		4
16	Rejection of periodic wind disturbances on an experimental Smart rotor section using lifted repetitive control **2011**,		2
15	Two-Degree-of-Freedom Active Vibration Control of a Prototyped Smart Rotor. *IEEE Transactions on Control Systems Technology*, **2011**, 19, 284-296	4.8	56
14	LPV identification of an aeroelastic flutter model **2010**,		3
13	Subspace Identification of Hammerstein Wiener Systems Operating in Closed-loop. *Lecture Notes in Control and Information Sciences*, **2010**, 229-239	0.5	2
12	Subspace identification of Bilinear and LPV systems for open- and closed-loop data. *Automatica*, **2009**, 45, 372-381	5.7	165