

# Andrew Wynn

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

561  
citations

759233

12  
h-index

713466

21  
g-index

51  
all docs

51  
docs citations

51  
times ranked

324  
citing authors

#	ARTICLE	IF	CITATIONS
1	Modal-Based Nonlinear Model Predictive Control for 3-D Very Flexible Structures. IEEE Transactions on Automatic Control, 2022, 67, 2145-2160.	5.7	4
2	Some modelling improvements for prediction of wind turbine rotor loads in turbulent wind. Wind Energy, 2022, 25, 333-353.	4.2	4
3	Nonlinear optimal control for gust load alleviation with a physics-constrained data-driven internal model. , 2022, , .		3
4	Flutter Predictions for Very Flexible Wing Wind Tunnel Test. Journal of Aircraft, 2022, 59, 1082-1097.	2.4	16
5	Analytical bounds on the heat transport in internally heated convection. Journal of Fluid Mechanics, 2022, 938, .	3.4	6
6	The background method: theory and computations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210038.	3.4	5
7	Generalized Kelvin-Voigt Damping for Geometrically Nonlinear Beams. AIAA Journal, 2021, 59, 356-365.	2.6	4
8	Proof of Concept for a Hardware-in-the-Loop Nonlinear Control Framework for Very Flexible Aircraft. , 2021, , .		3
9	Data-driven feature identification and sparse representation of turbulent flows. International Journal of Heat and Fluid Flow, 2021, 88, 108766.	2.4	3
10	Bounds on heat transport for convection driven by internal heating. Journal of Fluid Mechanics, 2021, 919, .	3.4	11
11	Bounds for internally heated convection with fixed boundary heat flux. Journal of Fluid Mechanics, 2021, 922, .	3.4	6
12	Aeroelastic Control and Estimation with a Minimal Nonlinear Modal Description. AIAA Journal, 2021, 59, 2697-2713.	2.6	15
13	Chordal decomposition in operator-splitting methods for sparse semidefinite programs. Mathematical Programming, 2020, 180, 489-532.	2.4	41
14	New bounds on the vertical heat transport for Bénard-Marangoni convection at infinite Prandtl number. Journal of Fluid Mechanics, 2020, 885, .	3.4	5
15	Modal-Based Nonlinear Estimation and Control for Highly Flexible Aeroelastic Systems. , 2020, , .		0
16	Unsteady and three-dimensional aerodynamic effects on wind turbine rotor loads. , 2020, , .		1
17	Modal-based Model Predictive Control of Multibody Very Flexible Structures. IFAC-PapersOnLine, 2020, 53, 7472-7478.	0.9	0
18	A Nonlinear Modal-Based Framework for Low Computational Cost Optimal Control of 3D Very Flexible Structures. , 2019, , .		4

#	ARTICLE	IF	CITATIONS
19	Nonlinear Aeroelastic Control of Very Flexible Aircraft Using Model Updating. Journal of Aircraft, 2018, 55, 1551-1563.	2.4	27
20	Bounds on heat transfer for Bårdâ€™Marangoni convection at infinite Prandtl number. Journal of Fluid Mechanics, 2018, 837, 562-596.	3.4	15
21	Aeroservoelastic Optimisation of Aerofoils with Compliant Flaps via Reparameterization and Variable Selection. AIAA Journal, 2018, 56, 1146-1157.	2.6	5
22	$\eta^2$ -admissibility of observation operators for hypercontractive semigroups. Journal of Evolution Equations, 2018, 18, 153-170.	1.1	7
23	Aeroelastic and Trajectory Control of High Altitude Long Endurance Aircraft. IEEE Transactions on Aerospace and Electronic Systems, 2018, 54, 2992-3003.	4.7	20
24	Automatic Landing Control of a Very Flexible Flying Wing. , 2018, , .		0
25	Aeroservoelastic Optimisation of an Aerofoil with Active Compliant Flap via Reparametrisation and Variable Selection. , 2017, , .		1
26	Dynamic reconstruction and data reconstruction for subsampled or irregularly sampled data. Journal of Fluid Mechanics, 2017, 825, 133-166.	3.4	1
27	Trajectory control of a very flexible flying wing. , 2017, , .		3
28	Optimization With Affine Homogeneous Quadratic Integral Inequality Constraints. IEEE Transactions on Automatic Control, 2017, 62, 6221-6236.	5.7	6
29	Fast ADMM for homogeneous self-dual embedding of sparse SDPs * *Y. Zheng and G. Fantuzzi contributed equally to this work. Y. Zheng is supported by the Clarendon Scholarship and the Jason Hu Scholarship.. IFAC-PapersOnLine, 2017, 50, 8411-8416.	0.9	9
30	Fast ADMM for semidefinite programs with chordal sparsity. , 2017, , .		25
31	Exact energy stability of Bårdâ€™Marangoni convection at infinite Prandtl number. Journal of Fluid Mechanics, 2017, 822, .	3.4	3
32	Aeroservoelastic Optimisation of an Aerofoil with Active Compliant Flap via Reparametrisation and Variable Selection. , 2016, , .		1
33	Semidefinite relaxation of a class of quadratic integral inequalities. , 2016, , .		2
34	Optimal bounds with semidefinite programming: An application to stress-driven shear flows. Physical Review E, 2016, 93, 043308.	2.1	11
35	Extremum seeking to control the amplitude and frequency of a pulsed jet for bluff body drag reduction. Experiments in Fluids, 2016, 57, 1.	2.4	12
36	Nonlinear Modal Aeroservoelastic Analysis Framework for Flexible Aircraft. AIAA Journal, 2016, 54, 3075-3090.	2.6	43

#	ARTICLE	IF	CITATIONS
37	Model-Predictive Control of Flexible Aircraft Dynamics using Nonlinear Reduced-Order Models. , 2016, , .		6
38	Robust Stability of Moving Horizon Estimation Under Bounded Disturbances. IEEE Transactions on Automatic Control, 2016, 61, 3509-3514.	5.7	49
39	Nonlinear Aeroservoelastic Analysis of Flexible Aircraft Described by Large Finite-Element Models. , 2015, , .		1
40	A method for normal-mode-based model reduction in nonlinear dynamics of slender structures. Computers and Structures, 2015, 159, 26-40.	4.4	28
41	Construction of an optimal background profile for the Kuramoto-Sivashinsky equation using semidefinite programming. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 23-32.	2.1	12
42	The weighted Weiss conjecture and reproducing kernel theses for generalized Hankel operators. Journal of Evolution Equations, 2014, 14, 85-120.	1.1	4
43	Convergence Guarantees for Moving Horizon Estimation Based on the Real-Time Iteration Scheme. IEEE Transactions on Automatic Control, 2014, 59, 2215-2221.	5.7	48
44	An energy-preserving description of nonlinear beam vibrations in modal coordinates. Journal of Sound and Vibration, 2013, 332, 5543-5558.	3.9	16
45	Robust Aeroelastic Control of Very Flexible Wings using Intrinsic Models. , 2013, , .		4
46	Optimal mode decomposition for high dimensional systems. , 2012, , .		18
47	Composition operators on weighted Bergman spaces of a half-plane. Proceedings of the Edinburgh Mathematical Society, 2011, 54, 373-379.	0.3	29
48	Observer design for systems with an energy preserving nonlinearity, with application to fluid flow. , 2011, , .		1
49	$\hat{\Gamma}$ -Admissibility of Observation Operators in Discrete and Continuous Time. Complex Analysis and Operator Theory, 2010, 4, 109-131.	0.6	13
50	-admissibility of the right-shift semigroup on. Systems and Control Letters, 2009, 58, 677-681.	2.3	4
51	Counterexamples to the Discrete and Continuous Weighted Weiss Conjectures. SIAM Journal on Control and Optimization, 2009, 48, 2620-2635.	2.1	6