Mac Gaunaa

List of Publications by Year
in descending order

#	Article	IF	Citations
1	A computationally efficient engineering aerodynamic model for swept wind turbine blades. Wind Energy Science, 2022, 7, 129-160.	3.3	8
2	A computationally efficient engineering aerodynamic model for non-planar wind turbine rotors. Wind Energy Science, 2022, 7, 75-104.	3.3	5
3	Wind tunnel benchmark tests of airfoils. Journal of Physics: Conference Series, 2022, 2265, 022097.	0.4	1
4	How should the lift and drag forces be calculated from 2-D airfoil data for dihedral or coned wind turbine blades?. Wind Energy Science, 2022, 7, 1341-1365.	3.3	3
5	Configuration optimization and global sensitivity analysis of Ground-Gen and Fly-Gen Airborne Wind Energy Systems. Renewable Energy, 2021, 178, 385-402.	8.9	9
6	Wind tunnel testing of a swept tip shape and comparison with multi-fidelity aerodynamic simulations. Wind Energy Science, 2021, 6, 1311-1324.	3.3	5
7	Increase in the annual energy production due to a retrofit of vortex generators on blades. Wind Energy, 2020, 23, 617-626.	4.2	8
8	Unified engineering models for the performance and cost of Ground-Gen and Fly-Gen crosswind Airborne Wind Energy Systems. Renewable Energy, 2020, 162, 893-907.	8.9	11
9	Wind tunnel tests of an airfoil with 18% relative thickness equipped with vortex generators. Journal of Physics: Conference Series, 2018, 1037, 022044.	0.4	7
10	Fast trailed and bound vorticity modeling of swept wind turbine blades. Journal of Physics: Conference Series, 2018, 1037, 062012.	0.4	7
11	The flow upstream of a row of aligned wind turbine rotors and its effect on power production. Wind Energy, 2017, 20, 63-77.	4.2	38
12	What is the critical height of leading edge roughness for aerodynamics?. Journal of Physics: Conference Series, 2016, 753, 022023.	0.4	8
13	Superposition of vortex cylinders for steady and unsteady simulation of rotors of finite tipâ€speed ratio. Wind Energy, 2016, 19, 1307-1323.	4.2	22
14	Toward an Engineering Model for the Aerodynamic Forces Acting on Wind Turbine Blades in Quasisteady Standstill and Blade Installation Situations. Journal of Physics: Conference Series, 2016, 753, 022007.	0.4	10
15	Modelling of Vortex-Induced Loading on a Single-Blade Installation Setup. Journal of Physics: Conference Series, 2016, 753, 082037.	0.4	2
16	Impact of a wind turbine on turbulence: Un-freezing turbulence by means of a simple vortex particle approach. Journal of Wind Engineering and Industrial Aerodynamics, 2016, 151, 37-47.	3.9	15
17	Full scale wind turbine test of vortex generators mounted on the entire blade. Journal of Physics: Conference Series, 2016, 753, 022001.	0.4	11
18	Cylindrical vortex wake model: skewed cylinder, application to yawed or tilted rotors. Wind Energy, 2016, 19, 345-358.	4.2	16

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19	Sizing and control of trailing edge flaps on a smart rotor for maximum power generation in low fatigue wind regimes. Wind Energy, 2016, 19, 607-624.	4.2	22
20	Aeroelastic large eddy simulations using vortex methods: unfrozen turbulent and sheared inflow. Journal of Physics: Conference Series, 2015, 625, 012019.	0.4	16
21	Cylindrical vortex wake model: right cylinder. Wind Energy, 2015, 18, 1973-1987.	4.2	31
22	Aerodynamic response of an airfoil section undergoing pitch motion and trailing edge flap deflection: a comparison of simulation methods. Wind Energy, 2015, 18, 1273-1290.	4.2	17
23	Wind turbine blade vibration at standstill conditionsâ€"the effect of imposing lag on the aerodynamic response of an elastically mounted airfoil. Wind Energy, 2015, 18, 515-527.	4.2	14
24	Investigation of a new model accounting for rotors of finite tip-speed ratio in yaw or tilt. Journal of Physics: Conference Series, 2014, 524, 012124.	0.4	5
25	Development of new tip-loss corrections based on vortex theory and vortex methods. Journal of Physics: Conference Series, 2014, 555, 012012.	0.4	11
26	Analysis of aeroelastic loads and their contributions to fatigue damage. Journal of Physics: Conference Series, 2014, 555, 012007.	0.4	17
27	Vortexâ€induced vibrations of a DU96â€Wâ€180 airfoil at 90Â° angle of attack. Wind Energy, 2014, 17, 1495-1514.	4.2	29
28	The Effect of Mounting Vortex Generators on the DTU 10MW Reference Wind Turbine Blade. Journal of Physics: Conference Series, 2014, 524, 012034.	0.4	21
29	Selfâ€induced vibrations of a DU96â€Wâ€180 airfoil in stall. Wind Energy, 2014, 17, 641-655.	4.2	12
30	Sizing and Control of Trailing Edge Flaps on a Smart Rotor for Maximum Power Generation in Low Fatigue Wind Regimes. , 2014, , .		2
31	First-order aerodynamic and aeroelastic behavior of a single-blade installation setup. Journal of Physics: Conference Series, 2014, 524, 012073.	0.4	6
32	Indicial lift response function: an empirical relation for finiteâ€thickness airfoils, and effects on aeroelastic simulations. Wind Energy, 2013, 16, 681-693.	4.2	12
33	Vortex methods to answer the need for improved understanding and modelling of tipâ€loss factors. IET Renewable Power Generation, 2013, 7, 311-320.	3.1	24
34	Modeling the Temporal Response of a Microtab in an Aeroelastic Model of a Wind Turbine. , 2011, , .		3
35	Indicial Response Function for Finite-Thickness Airfoils, A Semi-Empirical Approach. , 2011, , .		2
36	Prediction of steady aerodynamic performance of rotors with winglets using simple prescribed wake methods. , 2011, , .		5

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37	Stability investigation of an airfoil section with active flap control. Wind Energy, 2010, 13, 151-166.	4.2	17
38	Wind tunnel test on airfoil RisÃ¸â€•B1â€•18 with an Active Trailing Edge Flap. Wind Energy, 2010, 13, 207-219.	4.2	45
39	Deformable trailing edge flaps for modern megawatt wind turbine controllers using strain gauge sensors. Wind Energy, 2010, 13, 193-206.	4.2	81
40	Unsteady twoâ€•dimensional potentialâ€•flow model for thin variable geometry airfoils. Wind Energy, 2010, 13, 167-192.	4.2	22
41	Design of a wind turbine rotor for maximum aerodynamic efficiency. Wind Energy, 2009, 12, 261-273.	4.2	54
42	A dynamic stall model for airfoils with deformable trailing edges. Wind Energy, 2009, 12, 734-751.	4.2	25
43	Investigation of Stability Issues for an Adaptive Trailing Edge System. , 2009, , .		1
44	Implementing a Dynamic Stall Model for Airfoils with Deformable Trailing Edges. , 2008, , .		4
45	Increased Aerodynamic Efficiency of Wind Turbine Rotors Using Winglets. , 2008, , .		10
46	Design and Verification of Airfoils Resistant to Surface Contamination and Turbulence Intensity. , 2008, , .		15
47	Determination of the Maximum Aerodynamic Efficiency of Wind Turbine Rotors with Winglets. Journal of Physics: Conference Series, 2007, 75, 012006.	0.4	37
48	A Dynamic Stall Model for Airfoils with Deformable Trailing Edges. Journal of Physics: Conference Series, 2007, 75, 012028.	0.4	8
49	Wind Tunnel Test on Wind Turbine Airfoil with Adaptive Trailing Edge Geometry. , 2007, , .		41
50	Performance of the RisÃ¸-B1 Airfoil Family for Wind Turbines. , 2007, , 231-234.		3
51	Potential Load Reduction Using Airfoils with Variable Trailing Edge Geometry. Journal of Solar Energy Engineering, Transactions of the ASME, 2005, 127, 503-516.	1.8	98
52	Design and Verification of the RisÃ¸-B1 Airfoil Family for Wind Turbines. Journal of Solar Energy Engineering, Transactions of the ASME, 2004, 126, 1002-1010.	1.8	64
53	Viscous and Aeroelastic Effects on Wind Turbine Blades. The VISCEL project. Part I: 3D Navier-Stokes Rotor simulations. Wind Energy, 2003, 6, 365-385.	4.2	22
54	Viscous and Aeroelastic Effects on Wind Turbine Blades. The VISCEL Project. Part II: Aeroelastic Stability Investigations. Wind Energy, 2003, 6, 387-403.	4.2	49