Charles H K Williamson

List of Publications by Year
in descending order

65	12,445	76196	114278
papers	citations	40 h-index	63 g-index

68	68	68	3568
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Influence of a wall on the three-dimensional dynamics of a vortex pair. Journal of Fluid Mechanics, 2017, 817, 339-373.	1.4	12
2	Dynamics and Instabilities of Vortex Pairs. Annual Review of Fluid Mechanics, 2016, 48, 507-541.	10.8	213
3	Direct measurement of thrust and efficiency of an airfoil undergoing pure pitching. Journal of Fluid Mechanics, 2015, 765, 524-543.	1.4	97
4	Current blockage experiments: force time histories on obstacle arrays in combined steady and oscillatory motion. Journal of Fluid Mechanics, 2014, 739, 143-178.	1.4	13
5	Double laminar and turbulent meteor trails observed in space and simulated in the laboratory. Journal of Geophysical Research: Space Physics, 2013, 118, 3622-3625.	0.8	7
6	Computing Steady Vortex Flows of Prescribed Topology. Procedia IUTAM, 2013, 7, 67-76.	1.2	0
7	Instability of secondary vortices generated by a vortex pair in ground effect. Journal of Fluid Mechanics, 2012, 700, 148-186.	1.4	31
8	Determining the stability of steady two-dimensional flows through imperfect velocity-impulse diagrams. Journal of Fluid Mechanics, 2012, 706, 323-350.	1.4	18
9	Structure and stability of the finite-area von KÃ¡rmÃ¡n street. Physics of Fluids, 2012, 24, .	1.6	11
10	Developing a cyber-physical fluid dynamics facility for fluidâ€“structure interaction studies. Journal of Fluids and Structures, 2011, 27, 748-757.	1.5	47
11	A mathematical model of 2P and 2C vortex wakes. Journal of Fluids and Structures, 2011, 27, 774-783.	1.5	16
12	An efficient and general numerical method to compute steady uniform vortices. Journal of Computational Physics, 2011, 230, 6495-6511.	1.9	29
13	Resonant instability in two-dimensional vortex arrays. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 1164-1185.	1.0	8
14	Experiments on long-wavelength instability and reconnection of a vortex pair. Physics of Fluids, 2011, 23, .	1.6	44
15	Steady, unsteady and transient vortex-induced vibration predicted using controlled motion data. Journal of Fluid Mechanics, 2010, 649, 429-451.	1.4	13
16	Vortex-induced vibration of a rising and falling cylinder. Journal of Fluid Mechanics, 2010, 662, 352-383.	1.4	32
17	Stability of elliptical vortices from â€œImperfectâ€“Velocityâ€“Impulseâ€•diagrams. Theoretical and Computational Fluid Dynamics, 2010, 24, 181-188.	0.9	27
18	The effect of Reynolds number on the dynamics and wakes of freely rising and falling spheres. Journal of Fluid Mechanics, 2010, 651, 251-294.	1.4	144

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19	Stability of Conservative Flows and New Steady-Fluid Solutions from Bifurcation Diagrams Exploiting a Variational Argument. Physical Review Letters, 2010, 104, 044504.	2.9	15
20	Fluid forcing, wake modes, and transitions for a cylinder undergoing controlled oscillations. Journal of Fluids and Structures, 2009, 25, 697-712.	1.5	77
21	Prediction of vortex-induced vibration response by employing controlled motion. Journal of Fluid Mechanics, 2009, 634, 5.	1.4	165
22	A brief review of recent results in vortex-induced vibrations. Journal of Wind Engineering and Industrial Aerodynamics, 2008, 96, 713-735.	1.7	526
23	The effect of end conditions on the vortex-induced vibration of cylinders. Journal of Fluids and Structures, 2008, 24, 1227-1239.	1.5	83
24	Aerodynamics. , 2007, , 1043-1155.		3
25	Defining the â€˜modified Griffin plotâ€™ in vortex-induced vibration: revealing the effect of Reynolds number using controlled damping. Journal of Fluid Mechanics, 2006, 561, 147.	1.4	237
26	Employing controlled vibrations to predict fluid forces on a cylinder undergoing vortex-induced vibration. Journal of Fluids and Structures, 2006, 22, 877-884.	1.5	29
27	Title is missing!. Journal of Fluids and Structures, 2006, 22, 733-736.	1.5	0
28	Dynamics of a rising and falling cylinder. Journal of Fluids and Structures, 2006, 22, 837-843.	1.5	27
29	Vortex-induced vibrations of a pivoted cylinder. Journal of Fluid Mechanics, 2005, 522, 215-252.	1.4	70
30	Vortex-induced vibrations of a sphere. Journal of Fluid Mechanics, 2005, 531, 11-47.	1.4	124
31	VORTEX-INDUCED VIBRATIONS. Annual Review of Fluid Mechanics, 2004, 36, 413-455.	10.8	1,890
32	The effect of two degrees of freedom on vortex-induced vibration at low mass and damping. Journal of Fluid Mechanics, 2004, 509, 23-62.	1.4	591
33	Vortex-induced vibration of a cylinder with two degrees of freedom. Journal of Fluids and Structures, 2003, 17, 1035-1042.	1.5	194
34	A new family of uniform vortices related to vortex configurations before merging. Journal of Fluid Mechanics, 2003, 493, 219-229.	1.4	32
35	The physical mechanism for vortex merging. Journal of Fluid Mechanics, 2003, 475, 41-77.	1.4	207
36	A COMPLEMENTARY NUMERICAL AND PHYSICAL INVESTIGATION OF VORTEX-INDUCED VIBRATION. Journal of Fluids and Structures, 2001, 15, 481-488.	1.5	109

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37	MULTIPLE MODES OF VORTEX-INDUCED VIBRATION OF A SPHERE. Journal of Fluids and Structures, 2001, 15, 555-563.	1.5	58
38	MEAN AND FLUCTUATING VELOCITY FIELDS IN THE WAKE OF A FREELY-VIBRATING CYLINDER. Journal of Fluids and Structures, 2001, 15, 489-501.	1.5	55
39	VORTEX-INDUCED VIBRATION OF A FLEXIBLE CANTILEVER. Journal of Fluids and Structures, 2001, 15, 651-658.	1.5	74
40	THE PHYSICAL MECHANISM OF TRANSITION IN BLUFF BODY WAKES. Journal of Fluids and Structures, 2001, 15, 607-616.	1.5	130
41	Modes of vortex formation and frequency response of a freely vibrating cylinder. Journal of Fluid Mechanics, 2000, 420, 85-130.	1.4	758
42	MOTIONS, FORCES AND MODE TRANSITIONS IN VORTEX-INDUCED VIBRATIONS AT LOW MASS-DAMPING. Journal of Fluids and Structures, 1999, 13, 813-851.	1.5	901
43	A SERIES IN 1/âˆšRe TO REPRESENT THE STROUHALâ€“REYNOLDS NUMBER RELATIONSHIP OF THE CYLINDER WAKE. Journal of Fluids and Structures, 1998, 12, 1073-1085.	1.5	188
44	Cooperative elliptic instability of a vortex pair. Journal of Fluid Mechanics, 1998, 360, 85-119.	1.4	284
45	Cell Formation in Cylinder Wakes at Low Reynolds Numbers. Physical Review Letters, 1997, 78, 1259-1262.	2.9	10
46	The instability of the shear layer separating from a bluff body. Journal of Fluid Mechanics, 1997, 333, 375-402.	1.4	369
47	Three-dimensional effects in turbulent bluff-body wakes. Journal of Fluid Mechanics, 1997, 343, 235-265.	1.4	93
48	Turbulent structures in the trailing vortex wake of a delta wing. Experimental Thermal and Fluid Science, 1997, 14, 2-8.	1.5	5
49	DYNAMICS AND FORCING OF A TETHERED SPHERE IN A FLUID FLOW. Journal of Fluids and Structures, 1997, 11, 293-305.	1.5	80
50	FLUID FORCES AND DYNAMICS OF A HYDROELASTIC STRUCTURE WITH VERY LOW MASS AND DAMPING. Journal of Fluids and Structures, 1997, 11, 973-982.	1.5	331
51	The instability of the separated shear layer from a bluff body. Physics of Fluids, 1996, 8, 1347-1349.	1.6	45
52	Three-dimensional wake transition. Journal of Fluid Mechanics, 1996, 328, 345-407.	1.4	541
53	DYNAMICS OF A HYDROELASTIC CYLINDER WITH VERY LOW MASS AND DAMPING. Journal of Fluids and Structures, 1996, 10, 455-472.	1.5	494
54	Three-dimensional vortex dynamics in bluff body wakes. Experimental Thermal and Fluid Science, 1996, 12, 150-168.	1.5	51

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55	A new mechanism for oblique wave resonance in the â€˜naturalâ€™ far wake. Journal of Fluid Mechanics, 1993, 256, 269-313.	1.4	60
56	Acoustic forcing of oblique wave resonance in the far wake. Journal of Fluid Mechanics, 1993, 256, 315-341.	1.4	24
57	Wave interactions in the far wake of a body. Physics of Fluids A, Fluid Dynamics, 1993, 5, 1854-1856.	1.6	16
58	The natural and forced formation of spot-like â€˜vortex dislocationsâ€™ in the transition of a wake. Journal of Fluid Mechanics, 1992, 243, 393.	1.4	336
59	Oblique and parallel modes of vortex shedding in the wake of a circular cylinder at low Reynolds numbers. Journal of Fluid Mechanics, 1989, 206, 579-627.	1.4	936
60	The existence of two stages in the transition to three-dimensionality of a cylinder wake. Physics of Fluids, 1988, 31, 3165.	1.4	425
61	Defining a universal and continuous Strouhalâ€“Reynolds number relationship for the laminar vortex shedding of a circular cylinder. Physics of Fluids, 1988, 31, 2742.	1.4	341
62	Fluid forces on a small cylinder in the presence of a large cylinder in relative oscillatory flow. Applied Ocean Research, 1985, 7, 124-127.	1.8	9
63	In-line response of a cylinder in oscillatory flow. Applied Ocean Research, 1985, 7, 97-106.	1.8	20
64	Sinusoidal flow relative to circular cylinders. Journal of Fluid Mechanics, 1985, 155, 141.	1.4	282
65	Evolution of a single wake behind a pair of bluff bodies. Journal of Fluid Mechanics, 1985, 159, 1.	1.4	386