Gabriel D Weymouth

List of Publications by Year
in descending order

51	1,200	331670 21	377865 34
papers	citations	h-index	g-index

57	57	57	834
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Immersed boundary simulations of flows driven by moving thin membranes. Journal of Computational Physics, 2022, 457, 111076.	3.8	6
2	Effects of aspect ratio on rolling and twisting foils. Physical Review Fluids, 2021, 6, .	2.5	3
3	Fin sweep angle does not determine flapping propulsive performance. Journal of the Royal Society Interface, 2021, 18, 20210174.	3.4	9
4	On the concept of energized mass: A robust framework for low-order force modeling in flow past accelerating bodies. Physics of Fluids, 2021, 33, .	4.0	3
5	Deep learning of the spanwise-averaged Navierâ€“Stokes equations. Journal of Computational Physics, 2021, 434, 110199.	3.8	16
6	A resonant squid-inspired robot unlocks biological propulsive efficiency. Science Robotics, 2021, 6, .	17.6	56
7	Informed component label algorithm for robust identification of connected components with volume-of-fluid method. Computers and Fluids, 2020, 197, 104373.	2.5	8
8	Deflected wake interaction of tandem flapping foils. Journal of Fluid Mechanics, 2020, 903, .	3.4	24
9	Application of the Energized-Mass Concept to Describe Gust-Body Interactions. , 2020, , .		0
10	Influence of three-dimensionality on propulsive flapping. Journal of Fluid Mechanics, 2020, 886, .	3.4	32
11	Manoeuvring of an aquatic soft robot using thrust-vectoring. , 2019, , .		4
12	Wake behind a three-dimensional dry transom stern. PartÂ1. Flow structure and large-scale air entrainment. Journal of Fluid Mechanics, 2019, 875, 854-883.	3.4	23
13	Span effect on the turbulence nature of flow past a circular cylinder. Journal of Fluid Mechanics, 2019, 878, 306-323.	3.4	17
14	Universal scaling law for drag-to-thrust wake transition in flapping foils. Journal of Fluid Mechanics, 2019, 872, .	3.4	25
15	A Soft Aquatic Actuator for Unsteady Peak Power Amplification. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2968-2973.	5.8	28
16	A low-cost experimental rig for multi-DOF unsteady thrust measurements of aquatic bioinspired soft robots. , 2018, , .		2
17	Suppression of vortex-induced vibration of a square cylinder via continuous twisting at moderate Reynolds numbers. Journal of Wind Engineering and Industrial Aerodynamics, 2018, 177, 136-154.	3.9	9
18	Modeling Transverse Gusts Using Pitching, Plunging, and Surging Airfoil Motions. AIAA Journal, 2018, 56, 3271-3278.	2.6	22

#	Article	IF	Citations
19	Sensing on Robots Inspired by Nature. , 2017, , 77-110.		3
20	The boundary data immersion method for compressible flows with application to aeroacoustics. Journal of Computational Physics, 2017, 333, 440-461.	3.8	49
21	Added mass energy recovery of octopus-inspired shape change. Journal of Fluid Mechanics, 2017, 810, 155-174.	3.4	23
22	Performance augmentation mechanism of in-line tandem flapping foils. Journal of Fluid Mechanics, 2017, 827, 484-505.	3.4	63
23	The four-flipper swimming method of plesiosaurs enabled efficient and effective locomotion. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20170951.	2.6	26
24	Flow control with rotating cylinders. Journal of Fluid Mechanics, 2017, 825, 743-763.	3.4	42
25	Can added-mass variation act as a thrust force?. , 2017, , .		2
26	Analysis of two-dimensional and three-dimensional wakes of long circular cylinders. , 2017, , .		0
27	Shape of retracting foils that model morphing bodies controls shed energy and wake structure. Journal of Fluid Mechanics, 2016, 805, 355-383.	3.4	5
28	Vortex-Induced Motion of a Square Cylinder at Moderate Reynolds Numbers. , 2016, , .		3
29	Drag cancellation by added-mass pumping. Journal of Fluid Mechanics, 2016, 798, .	3.4	21
30	Principles of Wake Energy Recovery and Flow Structure in Bodies Undergoing Rapid Shape Change. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2016, , 15-43.	0.3	0
31	Biomimetic Survival Hydrodynamics and Flow Sensing. Annual Review of Fluid Mechanics, 2016, 48, 1-24.	25.0	97
32	Ultra-fast escape maneuver of an octopus-inspired robot. Bioinspiration and Biomimetics, 2015, 10, 016016.	2.9	50
33	Unsteady dynamics of rapid perching manoeuvres. Journal of Fluid Mechanics, 2015, 767, 323-341.	3.4	27
34	Accurate Cartesian-grid simulations of near-body flows at intermediate Reynolds numbers. Computer Methods in Applied Mechanics and Engineering, 2015, 283, 106-129.	6.6	53
35	On the Effect of Rapid Area Change in Perching-Like Maneuvers. , 2014, , .		1
36	Chaotic rotation of a towed elliptical cylinder. Journal of Fluid Mechanics, 2014, 743, 385-398.	3.4	6

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37	Ultra-fast escape of a deformable jet-propelled body. Journal of Fluid Mechanics, 2013, 721, 367-385.	3.4	66
38	Whisker-like geometries and their force reduction properties. , 2013, , .		14
39	Comparison and Synthesis of 2D+T and 3D Predictions of Non-Linear Ship Bow Waves. , 2013, , .		0
40	Physics-Based Learning Models for Ship Hydrodynamics. Journal of Ship Research, 2013, 57, 1-12.	1.1	17
41	Novel platform for ocean survey and autonomous sampling using multi-agent system. , 2013, , .		7
42	Physics-Based Learning Models for Ship Hydrodynamics. Journal of Ship Research, 2013, 57, 1-12.	1.1	9
43	Modeling and Inspection Applications of a Coastal Distributed Autonomous Sensor Network. , 2012, , .		0
44	Global vorticity shedding for a vanishing wing. Journal of Fluid Mechanics, 2012, 695, 112-134.	3.4	23
45	Global vorticity shedding for a shrinking cylinder. Journal of Fluid Mechanics, 2012, 702, 470-487.	3.4	25
46	Hydrodynamic object recognition using pressure sensing. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 19-38.	2.1	33
47	Conservative Volume-of-Fluid method for free-surface simulations on Cartesian-grids. Journal of Computational Physics, 2010, 229, 2853-2865.	3.8	168
48	Computational Naval Ship Hydrodynamics. , 2010, , .		0
49	Computational Naval Ship Hydrodynamics. , 2009, , .		1
50	Modeling Breaking Ship Waves for Design and Analysis of Naval Vessels. , 2006, , .		1
51	RANS Computational Fluid Dynamics Predictions of Pitch and Heave Ship Motions in Head Seas. Journal of Ship Research, 2005, 49, 80-97.	1.1	61