Thomas A A Adcock

List of Publications by Year
in descending order

68 papers	1,590 citations	361413 20 h-index	315739 38 g-index
73 all docs	73 docs citations	73 times ranked	1065 citing authors

#	Article	IF	Citations
1	Foundations of offshore wind turbines: A review. Renewable and Sustainable Energy Reviews, 2019, 104, 379-393.	16.4	270
2	Tidal range energy resource and optimization â€" Past perspectives and future challenges. Renewable Energy, 2018, 127, 763-778.	8.9	148
3	The available power from tidal stream turbines in the Pentland Firth. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130072.	2.1	93
4	The physics of anomalous (â€˜rogueâ€™) ocean waves. Reports on Progress in Physics, 2014, 77, 105901.	20.1	84
5	Estimate of the tidal stream power resource of the Pentland Firth. Renewable Energy, 2014, 63, 650-657.	8.9	78
6	Laboratory recreation of the Draupner wave and the role of breaking in crossing seas. Journal of Fluid Mechanics, 2019, 860, 767-786.	3.4	76
7	Tidal power generation â€" A review of hydrodynamic modelling. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2015, 229, 755-771.	1.4	61
8	Did the Draupner wave occur in a crossing sea?. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 3004-3021.	2.1	58
9	Tidal stream energy resource assessment of the Anglesey Skerries. International Journal of Marine Energy, 2013, 3-4, e98-e111.	1.8	52
10	The Fluid Mechanics of Tidal Stream Energy Conversion. Annual Review of Fluid Mechanics, 2021, 53, 287-310.	25.0	39
11	Fully nonlinear simulations of unidirectional extreme waves provoked by strong depth transitions: The effect of slope. Physical Review Fluids, 2020, 5, .	2.5	34
12	Focusing of unidirectional wave groups on deep water: an approximate nonlinear SchrÃ¶dinger equation-based model. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 3083-3102.	2.1	30
13	Why rogue waves occur atop abrupt depth transitions. Journal of Fluid Mechanics, 2021, 919, .	3.4	28
14	Power extraction from tidal channels â€" Multiple tidal constituents, compound tides and overtides. Renewable Energy, 2014, 63, 797-806.	8.9	26
15	Surface wavepackets subject to an abrupt depth change. Part 1. Second-order theory. Journal of Fluid Mechanics, 2021, 915, .	3.4	26
16	Nonlinear dynamics of wave-groups in random seas: unexpected walls of water in the open ocean. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150660.	2.1	25
17	The set-down and set-up of directionally spread and crossing surface gravity wave groups. Journal of Fluid Mechanics, 2018, 835, 131-169.	3.4	25
18	DeRisk â€" Accurate Prediction of ULS Wave Loads. Outlook and First Results. Energy Procedia, 2016, 94, 379-387.	1.8	24

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19	Prediction of tidal currents using Bayesian machine learning. Ocean Engineering, 2018, 158, 221-231.	4.3	24
20	Performance of an ideal turbine in an inviscid shear flow. Journal of Fluid Mechanics, 2016, 796, 86-112.	3.4	23
21	Estimating ocean wave directional spreading from an Eulerian surface elevation time history. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 3361-3381.	2.1	20
22	The nonlinear evolution and approximate scaling of directionally spread wave groups on deep water. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 2704-2721.	2.1	20
23	Non-linear evolution of uni-directional focussed wave-groups on a deep water: A comparison of models. Applied Ocean Research, 2016, 59, 147-152.	4.1	19
24	Surface wavepackets subject to an abrupt depth change. Part 2. Experimental analysis. Journal of Fluid Mechanics, 2021, 915, .	3.4	19
25	Energy storage inherent in large tidal turbine farms. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20130580.	2.1	18
26	Experimental investigation of higher harmonic wave loads and moments on a vertical cylinder by a phase-manipulation method. Coastal Engineering, 2020, 160, 103747.	4.0	17
27	Tidal stream power in the Pentland Firth â€" long-term variability, multiple constituents and capacity factor. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2014, 228, 854-861.	1.4	16
28	Spatiotemporal Prediction of Tidal Currents Using Gaussian Processes. Journal of Geophysical Research: Oceans, 2019, 124, 2697-2715.	2.6	16
29	Spatial evolution of the kurtosis of steep unidirectional random waves. Journal of Fluid Mechanics, 2021, 908, .	3.4	16
30	Fast and local non-linear evolution of steep wave-groups on deep water: A comparison of approximate models to fully non-linear simulations. Physics of Fluids, 2016, 28, .	4.0	15
31	An electrical analogy for the Pentland Firth tidal stream power resource. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20130207.	2.1	13
32	Assessment of the Malaysian tidal stream energy resource using an upper bound approach. Journal of Ocean Engineering and Marine Energy, 2018, 4, 99-109.	1.7	13
33	On the arrangement of tidal turbines in rough and oscillatory channel flow. Journal of Fluid Mechanics, 2019, 865, 790-810.	3.4	11
34	Nonlinear Evolution of a Steep, Focusing Wave Group in Deep Water Simulated With oceanwave3d. Journal of Offshore Mechanics and Arctic Engineering, 2020, 142, .	1.2	10
35	On the Tidal Resonance of the Bristol Channel. International Journal of Offshore and Polar Engineering, 2017, 27, 177-183.	0.8	10
36	Tidal energy resource in Larantuka Strait, Indonesia. Proceedings of Institution of Civil Engineers: Energy, 2020, 173, 81-92.	0.6	9

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37	The influence of finite depth on the evolution of extreme wave statistics in numerical wave tanks. Coastal Engineering, 2021, 166, 103870.	4.0	9
38	Harmonic-induced wave breaking due to abrupt depth transitions: An experimental and numerical study. Coastal Engineering, 2022, 171, 104041.	4.0	9
39	On the shape of large wave-groups on deep waterâ€"The influence of bandwidth and spreading. Physics of Fluids, 2016, 28, .	4.0	8
40	Rapid spectral evolution of steep surface wave groups with directional spreading. Journal of Fluid Mechanics, 2021, 907, .	3.4	8
41	On the Tidal Stream Resource of Two Headland Sites in the English Channel: Portland Bill and Isle of Wight. , 2014, , .		6
42	Fractal-like actuator disc theory for optimal energy extraction. Journal of Fluid Mechanics, 2021, 927, .	3.4	6
43	The Focusing of Uni-Directional Gaussian Wave-Groups in Finite Depth: An Approximate NLSE Based Approach. , 2010, , .		5
44	On tidal stream turbines placed off headlands. Journal of Renewable and Sustainable Energy, 2015, 7, 061706.	2.0	5
45	Field measurement of nonlinear changes to large gravity wave groups. Journal of Fluid Mechanics, 2019, 873, 1158-1178.	3.4	5
46	The impact of a tidal barrage on coastal flooding due to storm surge in the Severn Estuary. Journal of Ocean Engineering and Marine Energy, 2019, 5, 217-226.	1.7	5
47	A note on the tuning of tidal turbines in channels. Journal of Ocean Engineering and Marine Energy, 2019, 5, 85-98.	1.7	5
48	Wave breaking and jet formation on axisymmetric surface gravity waves. Journal of Fluid Mechanics, 2022, 935, .	3.4	5
49	The effect of bed roughness uncertainty on tidal stream power estimates for the Pentland Firth. Royal Society Open Science, 2020, 7, 191127.	2.4	4
50	Data driven analysis on the extreme wave statistics over an area. Applied Ocean Research, 2021, 115, 102809.	4.1	4
51	Implementation of Tidal Stream Turbines and Tidal Barrage Structures in DG-SWEM. , 2019, , .		4
52	Briefing: Young Coastal Scientists and Engineers Conference 2010. Proceedings of the Institution of Civil Engineers: Maritime Engineering, 2011, 164, 3-13.	0.2	3
53	Unidirectional power extraction from a channel connecting a bay to the open ocean. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2013, 227, 826-832.	1.4	3
54	A note on the set-up under the Draupner wave. Journal of Ocean Engineering and Marine Energy, 2017, 3, 89-94.	1.7	3

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55	Performance of non-uniform tidal turbine arrays in uniform flow. Journal of Ocean Engineering and Marine Energy, 2018, 4, 231-241.	1.7	3
56	A Note on the Second-Order Contribution to Extreme Waves Generated During Hurricanes. Journal of Offshore Mechanics and Arctic Engineering, 2019, 141, .	1.2	3
57	Modification of tidal resonance in the Severn Estuary by a barrage and lagoon. Journal of Ocean Engineering and Marine Energy, 2020, 6, 171-181.	1.7	3
58	Estimating ocean wave directional spreading using wave following buoys: a comparison of experimental buoy and gauge data. Journal of Ocean Engineering and Marine Energy, 2022, 8, 83-97.	1.7	3
59	Estimating spaceâ€"time wave statistics using a sequential sampling method and Gaussian process regression. Applied Ocean Research, 2022, 122, 103127.	4.1	3
60	A reduced order model for spaceâ€"time wave statistics using probabilistic decompositionâ€"synthesis method. Ocean Engineering, 2022, 259, 111860.	4.3	3
61	A note on the power potential of tidal currents in channels. International Journal of Marine Energy, 2014, 6, 1-17.	1.8	2
62	A note on the variation in shape of linear rogue waves in the ocean. Underwater Technology, 2015, 33, 75-80.	0.3	2
63	Combined power and thrust capping in the design of tidal turbine farms. Renewable Energy, 2019, 133, 1247-1256.	8.9	2
64	Impact of the Swansea Bay Lagoon on Storm Surges in the Bristol Channel. , 2019, , .		2
65	The Mulberry Harbours: A Review of an Early Example of Offshore Engineering. , 2009, , .		1
66	The waves at the Mulberry Harbours. Journal of Ocean Engineering and Marine Energy, 2017, 3, 285-292.	1.7	0
67	Anomalous wave statistics following sudden depth transitions: application of an alternative Boussinesq-type formulation. Journal of Ocean Engineering and Marine Energy, 2021, 7, 145-155.	1.7	0
68	A Note on the Effects of Local Blockage and Dynamic Tuning on Tidal Turbine Performance. Journal of Offshore Mechanics and Arctic Engineering, 2021, 143, .	1.2	0