Gregor J Macfarlane

List of Publications by Year
in descending order

37	905	471509 17	454955 30
papers	citations	h-index	g-index

37	37	37	456
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Scaling and air compressibility effects on a three-dimensional offshore stationary OWC wave energy converter. Applied Energy, 2017, 189, 1-20.	10.1	102
2	Experimental and numerical investigations on the hydrodynamic performance of a floatingâ€“moored oscillating water column wave energy converter. Applied Energy, 2017, 205, 369-390.	10.1	100
3	Hydrodynamic performance of singleâ€“chamber and dualâ€“chamber offshoreâ€“stationary Oscillating Water Column devices using CFD. Applied Energy, 2018, 228, 82-96.	10.1	80
4	Numerical energy balance analysis for an onshore oscillating water columnâ€“wave energy converter. Energy, 2016, 116, 539-557.	8.8	74
5	Underwater geometrical impact on the hydrodynamic performance of an offshore oscillating water columnâ€“wave energy converter. Renewable Energy, 2017, 105, 209-231.	8.9	65
6	Numerical hydrodynamic analysis of an offshore stationaryâ€“floating oscillating water columnâ€“wave energy converter using CFD. International Journal of Naval Architecture and Ocean Engineering, 2017, 9, 77-99.	2.3	58
7	Investigations on 3D effects and correlation between wave height and lip submergence of an offshore stationary OWC wave energy converter. Applied Ocean Research, 2017, 64, 203-216.	4.1	47
8	Experimental investigation of multiple Oscillating Water Column Wave Energy Converters integrated in a floating breakwater: Energy extraction performance. Applied Ocean Research, 2020, 97, 102086.	4.1	44
9	Energy balance analysis for an oscillating water column wave energy converter. Ocean Engineering, 2012, 54, 26-33.	4.3	41
10	Experimental and numerical measurements of wave forces on a 3D offshore stationary OWC wave energy converter. Ocean Engineering, 2017, 144, 98-117.	4.3	35
11	Experimental and numerical investigations on the intact and damage survivability of a floatingâ€“moored oscillating water column device. Applied Ocean Research, 2017, 68, 276-292.	4.1	34
12	Effect of RANS-based turbulence models on nonlinear wave generation in a two-phase numerical wave tank. Progress in Computational Fluid Dynamics, 2017, 17, 141.	0.2	29
13	Time-frequency analysis of ship wave patterns in shallow water: modelling and experiments. Ocean Engineering, 2018, 158, 123-131.	4.3	24
14	A PIV investigation of OWC operation in regular, polychromatic and irregular waves. Renewable Energy, 2017, 103, 143-155.	8.9	21
15	Nonlinear hydrodynamic effects on a generic spherical wave energy converter. Renewable Energy, 2018, 118, 56-70.	8.9	21
16	Model testing of a series of bi-directional tidal turbine rotors. Energy, 2014, 67, 397-410.	8.8	18
17	Experimental flow field comparison for a series of scale model oscillating water column wave energy converters. Marine Structures, 2017, 52, 108-125.	3.8	17
18	Improving OWC performance prediction using polychromatic waves. Energy, 2015, 93, 1943-1952.	8.8	13

#	Article	IF	Citations
19	In-situ orifice calibration for reversing oscillating flow and improved performance prediction for oscillating water column model test experiments. International Journal of Marine Energy, 2017, 17, 147-155.	1.8	13
20	Novel experimental modelling of the hydrodynamic interactions of arrays of wave energy converters. International Journal of Marine Energy, 2017, 20, 109-124.	1.8	13
21	Performance analysis of a floating breakwater integrated with multiple oscillating water column wave energy converters in regular and irregular seas. Applied Ocean Research, 2020, 99, 102147.	4.1	11
22	Phase Averaged Flow Analysis in an Oscillating Water Column Wave Energy Converter. Journal of Offshore Mechanics and Arctic Engineering, 2013, 135, .	1.2	9
23	Model testing and performance comparison of plastic and metal tidal turbine rotors. Applied Ocean Research, 2015, 53, 116-124.	4.1	7
24	PIV investigation of 3-dimensional flow within an oscillating water column. International Journal of Marine Energy, 2015, 11, 120-131.	1.8	6
25	Phase Averaged Flow Analysis in an Oscillating Water Column Wave Energy Converter. , 2011, , .		4
26	A Novel Method for Generating Continuously Surfable Wavesâ€"Comparison of Predictions With Experimental Results. Journal of Offshore Mechanics and Arctic Engineering, 2013, 135, .	1.2	4
27	A Novel Method for Generating Continuously Surfable Waves. Marine Technology Society Journal, 2010, 44, 7-12.	0.4	3
28	Phase averaging of the velocity fields in an oscillating water column using splines. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2012, 226, 335-345.	0.5	2
29	Wave Wake: Focus on Vessel Operations within Sheltered Waterways. Journal of Ship Production and Design, 2014, 30, 109-125.	0.4	2
30	Preliminary investigation on the use of tank wall reflections to model WEC array effects. Ocean Engineering, 2018, 164, 388-401.	4.3	2
31	Marine Vessel Wave Wake: Transient Effects When Accelerating or Decelerating. Journal of Waterway, Port, Coastal and Ocean Engineering, 2019, 145, 04018027.	1.2	2
32	Spectrogram analysis of surface elevation signals due to accelerating ships. Physical Review Fluids, 2021, 6, .	2.5	2
33	Application of photogrammetry for spatial free surface elevation and velocity measurement in wave flumes. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2019, 233, 905-917.	0.5	1
34	A Novel Method for Generating Continuously Surfable Waves: Comparison of Predictions With Experimental Results. , 2011, , .		1
35	The Design Limitations of a Circular Wave Pool. , 2014, , .		0
36	Limitations on the Creation of Continuously Surfable Waves Generated by a Pressure Source Moving in a Circular Path. , 2013, , .		0

#	Article	IF	Citations
37	Effect of RANSbased Turbulence Models on Nonlinear Wave Generation in a TwoPhase Numerical Wave Tank. Progress in Computational Fluid Dynamics, 2016, 1, 1.	0.2	0