Simon P Neill

List of Publications by Year
in descending order

84 papers	3,824 citations	126858 33 h-index	133188 59 g-index
87 all docs	87 docs citations	87 times ranked	3352 citing authors

#	Article	IF	Citations
1	Second-generation environmental sequencing unmasks marine metazoan biodiversity. Nature Communications, 2010, 1, 98.	5.8	321
2	The impact of tidal stream turbines on large-scale sediment dynamics. Renewable Energy, 2009, 34, 2803-2812.	4.3	204
3	Resource assessment for future generations of tidal-stream energy arrays. Energy, 2015, 83, 403-415.	4.5	189
4	Impact of tidal energy converter (TEC) arrays on the dynamics of headland sand banks. Renewable Energy, 2012, 37, 387-397.	4.3	176
5	Impact of climate change on UK estuaries: A review of past trends and potential projections. Estuarine, Coastal and Shelf Science, 2016, 169, 119-135.	0.9	176
6	Tidal range energy resource and optimization â€“ Past perspectives and future challenges. Renewable Energy, 2018, 127, 763-778.	4.3	148
7	Wave power variability over the northwest European shelf seas. Applied Energy, 2013, 106, 31-46.	5.1	121
8	Environmental metabarcoding reveals heterogeneous drivers of microbial eukaryote diversity in contrasting estuarine ecosystems. ISME Journal, 2015, 9, 1208-1221.	4.4	120
9	The role of tidal asymmetry in characterizing the tidal energy resource of Orkney. Renewable Energy, 2014, 68, 337-350.	4.3	113
10	Characterising the spatial and temporal variability of the tidal-stream energy resource over the northwest European shelf seas. Applied Energy, 2015, 147, 510-522.	5.1	102
11	Metagenetic analysis of patterns of distribution and diversity of marine meiobenthic eukaryotes. Global Ecology and Biogeography, 2014, 23, 1293-1302.	2.7	96
12	Characteristics of the velocity profile at tidal-stream energy sites. Renewable Energy, 2017, 114, 258-272.	4.3	91
13	Physical and biological controls on larval dispersal and connectivity in a highly energetic shelf sea. Limnology and Oceanography, 2013, 58, 505-524.	1.6	88
14	Realistic wave conditions and their influence on quantifying the tidal stream energy resource. Applied Energy, 2014, 136, 495-508.	5.1	88
15	Impact of tidal-stream arrays in relation to the natural variability of sedimentary processes. Renewable Energy, 2014, 72, 311-321.	4.3	79
16	The wave and tidal resource of Scotland. Renewable Energy, 2017, 114, 3-17.	4.3	71
17	Power variability of tidal-stream energy and implications for electricity supply. Energy, 2019, 183, 1061-1074.	4.5	71
18	Effect of waves on the tidal energy resource at a planned tidal streamÂarray. Renewable Energy, 2015, 75, 626-639.	4.3	66

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19	Tidal energy leasing and tidal phasing. Renewable Energy, 2016, 85, 580-587.	4.3	64
20	Inter-annual and inter-seasonal variability of the Orkney wave power resource. Applied Energy, 2014, 132, 339-348.	5.1	63
21	Using an artificial neural network to model seasonal changes in beach profiles. Ocean Engineering, 2010, 37, 1345-1356.	1.9	55
22	Identification of genetically and oceanographically distinct blooms of jellyfish. Journal of the Royal Society Interface, 2013, 10, 20120920.	1.5	54
23	The influence of waves on the tidal kinetic energy resource at a tidal stream energy site. Applied Energy, 2016, 180, 402-415.	5.1	54
24	Wave-tide interaction modulates nearshore wave height. Ocean Dynamics, 2019, 69, 367-384.	0.9	52
25	Evolution of bed shear stress distribution over the northwest European shelf seas during the last 12,000 years. Ocean Dynamics, 2010, 60, 1139-1156.	0.9	51
26	Sensitivity of palaeotidal models of the northwest European shelf seas to glacial isostatic adjustment since the Last Glacial Maximum. Quaternary Science Reviews, 2016, 151, 198-211.	1.4	51
27	Tidal energy extraction in three-dimensional ocean models. Renewable Energy, 2017, 114, 244-257.	4.3	48
28	Context dependency of relationships between biodiversity and ecosystem functioning is different for multiple ecosystem functions. Oikos, 2009, 118, 1892-1900.	1.2	44
29	Characterising the tidal stream power resource around France using a high-resolution harmonic database. Renewable Energy, 2018, 123, 706-718.	4.3	43
30	Optimal phasing of the European tidal stream resource using the greedy algorithm with penalty function. Energy, 2014, 73, 997-1006.	4.5	42
31	Comparison of ADCP observations and 3D model simulations of turbulence at a tidal energy site. Renewable Energy, 2017, 114, 273-282.	4.3	41
32	Research priorities for assessing potential impacts of emerging marine renewable energy technologies: Insights from developments in Wales (UK). Renewable Energy, 2016, 99, 1327-1341.	4.3	39
33	Classifying seabed sediment type using simulated tidal-induced bed shear stress. Marine Geology, 2015, 367, 94-104.	0.9	36
34	Ocean Modelling for Resource Characterization. , 2018, , 193-235.		36
35	The role of tides in shelf-scale simulations of the wave energy resource. Renewable Energy, 2014, 69, 300-310.	4.3	34
36	Influence of storm surge on tidal range energy. Energy, 2017, 122, 25-36.	4.5	32

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37	The formation of headland/island sandbanks. Continental Shelf Research, 2009, 29, 2167-2177.	0.9	31
38	A new Holocene relative sea-level curve for western Brittany (France): Insights on isostatic dynamics along the Atlantic coasts of north-western Europe. Quaternary Science Reviews, 2015, 129, 341-365.	1.4	31
39	Tidal stream resource assessment uncertainty due to flow asymmetry and turbine yaw misalignment. Renewable Energy, 2017, 114, 1363-1375.	4.3	31
40	A coupled tide-wave model for the NW European shelf seas. Geophysical and Astrophysical Fluid Dynamics, 2015, 109, 234-253.	0.4	27
41	Tidal-stream energy resource characterization for the Gulf of California, MÃ©xico. Energy, 2018, 156, 481-491.	4.5	24
42	Tidal stream resource characterisation in progressive versus standing wave systems. Applied Energy, 2018, 220, 274-285.	5.1	24
43	A review of the UK and British Channel Islands practical tidal stream energy resource. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20210469.	1.0	24
44	Tidal range resource of Australia. Renewable Energy, 2021, 170, 683-692.	4.3	23
45	Numerical modelling of the mild slope equation using localised differential quadrature method. Ocean Engineering, 2012, 47, 88-103.	1.9	22
46	A standardised tidal-stream power curve, optimised for the global resource. Renewable Energy, 2021, 170, 1308-1323.	4.3	22
47	An enhanced depth-averaged tidal model for morphological studies in the presence of rotary currents. Continental Shelf Research, 2007, 27, 82-102.	0.9	21
48	Tidal and surge modelling using differential quadrature: A case study in the Bristol Channel. Coastal Engineering, 2008, 55, 811-819.	1.7	21
49	A numerical study of marine larval dispersal in the presence of an axial convergent front. Estuarine, Coastal and Shelf Science, 2012, 100, 172-185.	0.9	21
50	A model of inter-annual variability in beach levels. Continental Shelf Research, 2008, 28, 1769-1781.	0.9	20
51	The impacts of tidal energy development and sea-level rise in the Gulf of Maine. Energy, 2019, 187, 115942.	4.5	20
52	A review of tidal energyâ€"Resource, feedbacks, and environmental interactions. Journal of Renewable and Sustainable Energy, 2021, 13, .	0.8	20
53	The role of Coriolis in sandbank formation due to a headland/island system. Estuarine, Coastal and Shelf Science, 2008, 79, 419-428.	0.9	18
54	A simplified method to estimate tidal current effects on the ocean wave power resource. Renewable Energy, 2016, 96, 257-269.	4.3	18

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55	Observations and numerical modelling of a non-buoyant front in the Tay Estuary, Scotland. Estuarine, Coastal and Shelf Science, 2004, 59, 173-184.	0.9	14
56	Other Aspects of Ocean Renewable Energy. , 2018, , 271-309.		13
57	Numerical modelling of hydrodynamics and tidal energy extraction in the Alderney Race: a review. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190498.	1.6	13
58	Global riverine theoretical hydrokinetic resource assessment. Renewable Energy, 2021, 174, 654-665.	4.3	13
59	Measuring and Observing the Ocean Renewable Energy Resource. , 2022, , 149-175.		13
60	Three-dimensional modelling of turbine wake interactions at a tidal stream energy site. Applied Ocean Research, 2020, 95, 102009.	1.8	12
61	The challenges of constraining shelf sea tidal models using seabed sediment grain size as a proxy for tidal currents. Continental Shelf Research, 2020, 205, 104165.	0.9	12
62	The role of wind in controlling the connectivity of blue mussels (Mytilus edulis L.) populations. Movement Ecology, 2022, 10, 3.	1.3	12
63	In situ measurements of springâ€“neap variations to unsteady island wake development in the Firth of Forth, Scotland. Estuarine, Coastal and Shelf Science, 2004, 60, 229-239.	0.9	11
64	Some numerical aspects of modelling flow around hydraulic structures using incompressible SPH. Computers and Mathematics With Applications, 2015, 69, 1470-1483.	1.4	11
65	Characterizing the Great Lakes hydrokinetic renewable energy resource: Lake Erie wave, surge and seiche characteristics. Energy, 2017, 128, 661-675.	4.5	11
66	Comparison of 4- and 5-beam acoustic Doppler current profiler configurations for measurement of turbulent kinetic energy. Energy Procedia, 2017, 125, 260-267.	1.8	11
67	Tidal range energy resource assessment of the Gulf of California, Mexico. Renewable Energy, 2020, 155, 469-483.	4.3	11
68	Drone-based large-scale particle image velocimetry applied to tidal stream energy resource assessment. Renewable Energy, 2022, 196, 839-855.	4.3	10
69	A numerical study of lateral grain size sorting by an estuarine front. Estuarine, Coastal and Shelf Science, 2009, 81, 345-352.	0.9	9
70	Environmental drivers of small scale spatial variation in the reproductive schedule of a commercially important bivalve mollusc. Marine Environmental Research, 2013, 92, 144-153.	1.1	9
71	Spatio-temporal variability of tidal-stream energy in north-western Europe. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190493.	1.6	8
72	The influence of wind gustiness on estimating the wave power resource. International Journal of Marine Energy, 2013, 3-4, e1-e10.	1.8	6

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73	The Influence of Intra-Array Wake Dynamics on Depth-Averaged Kinetic Tidal Turbine Energy Extraction Simulations. Energies, 2018, 11, 2852.	1.6	6
74	Wave Energy. , 2018, , 107-140.		6
75	The Impact of Marine Renewable Energy Extraction on Sediment Dynamics. , 2017, , 279-304.		5
76	In Situ and Remote Methods for Resource Characterization. , 2018, , 157-191.		5
77	Tidal Energy. , 2018, , 47-81.		5
78	Environmental Issues for Offshore Renewable Energy. , 2021, , .		4
79	Salinity Gradient Power. , 2022, , 50-79.		3
80	Sensitivity assessment of bathymetry and choice of tidal constituents on tidal-stream energy resource characterisation in the Gulf of California, Mexico. Applied Ocean Research, 2020, 102, 102281.	1.8	1
81	Ocean Renewable Energy Test Centers. , 2022, , 123-148.		1
82	Introduction to Ocean Renewable Energy. , 2021, , .		1
83	Impact of Tidal Stream Turbines on Sand Bank Dynamics. , 2011, , .		1
84	Hydrokinetic energy conversion: A global riverine perspective. Journal of Renewable and Sustainable Energy, 2022, 14, .	0.8	1