Jim Thomson

List of Publications by Year
in descending order

111 papers	3,306 citations	147801 31 h-index	189892 50 g-index
125 all docs	125 docs citations	125 times ranked	2751 citing authors

#	Article	IF	Citations
1	On the Groupiness and Intermittency of Oceanic Whitecaps. Journal of Geophysical Research: Oceans, 2022, 127, .	2.6	5
2	Direct Observations of the Role of Lateral Advection of Sea Ice Meltwater in the Onset of Autumn Freeze Up. Journal of Geophysical Research: Oceans, 2022, 127, .	2.6	1
3	Variations in Wave Slope and Momentum Flux From Waveâ€Current Interactions in the Tropical Trade Winds. Journal of Geophysical Research: Oceans, 2022, 127, .	2.6	3
4	Waveâ€Driven Flow Along a Compact Marginal Ice Zone. Geophysical Research Letters, 2021, 48, e2020GL090735.	4.0	4
5	Spurious Rollover of Wave Attenuation Rates in Sea Ice Caused by Noise in Field Measurements. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016606.	2.6	25
6	Measurements from the RV <i>Ronald H. Brown</i> and related platforms as part of the Atlantic Tradewind Ocean-Atmosphere Mesoscale Interaction Campaign (ATOMIC). Earth System Science Data, 2021, 13, 1759-1790.	9.9	28
7	A warm jet in a cold ocean. Nature Communications, 2021, 12, 2418.	12.8	20
8	Comparing Observations and Parameterizations of Iceâ€Ocean Drag Through an Annual Cycle Across the Beaufort Sea. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016977.	2.6	18
9	Rapid deterministic wave prediction using a sparse array of buoys. Ocean Engineering, 2021, 228, 108871.	4.3	12
10	Warm and Cool Nearshore Plumes Connecting the Surf Zone to the Inner Shelf. Geophysical Research Letters, 2021, 48, e2020GL091675.	4.0	6
11	The Inner-Shelf Dynamics Experiment. Bulletin of the American Meteorological Society, 2021, 102, E1033-E1063.	3.3	15
12	Long-term observations of the group structure of surface waves in ice. Ocean Dynamics, 2021, 71, 343-356.	2.2	5
13	Landfast Ice and Coastal Wave Exposure in Northern Alaska. Geophysical Research Letters, 2021, 48, e2021GL095103.	4.0	11
14	Sparse Sampling of Intermittent Turbulence Generated by Breaking Surface Waves. Journal of Physical Oceanography, 2020, 50, 867-885.	1.7	4
15	Pancake sea ice kinematics and dynamics using shipboard stereo video. Annals of Glaciology, 2020, 61, 1-11.	1.4	16
16	A Unified Breaking Onset Criterion for Surface Gravity Water Waves in Arbitrary Depth. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015886.	2.6	25
17	Attenuation of Ocean Surface Waves in Pancake and Frazil Sea Ice Along the Coast of the Chukchi Sea. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016746.	2.6	14
18	The evolution of a shallow front in the Arctic marginal ice zone. Elementa, 2020, 8, .	3.2	10

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19	Frazil ice growth and production during katabatic wind events in the Ross Sea, Antarctica. Cryosphere, 2020, 14, 3329-3347.	3.9	30
20	Waves and Swells in High Wind and Extreme Fetches, Measurements in the Southern Ocean. Frontiers in Marine Science, 2019, 6, .	2.5	39
21	Wave Groups Observed in Pancake Sea Ice. Journal of Geophysical Research: Oceans, 2019, 124, 7400-7411.	2.6	13
22	A Conceptual Model of a River Plume in the Surf Zone. Journal of Geophysical Research: Oceans, 2019, 124, 8060-8078.	2.6	10
23	Breaking waves in deep water: measurements and modeling of energy dissipation. Ocean Dynamics, 2019, 69, 1165-1179.	2.2	4
24	Impact of swell on the wind-sea and resulting modulation of stress. Progress in Oceanography, 2019, 178, 102164.	3.2	17
25	Ocean Surface Turbulence in Newly Formed Marginal Ice Zones. Journal of Geophysical Research: Oceans, 2019, 124, 1382-1398.	2.6	22
26	Tidal current observations through Admiralty Inlet from ferry-mounted current profilers. Journal of Ocean Engineering and Marine Energy, 2019, 5, 159-172.	1.7	2
27	Wave Attenuation by Sea Ice Turbulence. Geophysical Research Letters, 2019, 46, 6796-6803.	4.0	42
28	Maximum wave heights from global model reanalysis. Progress in Oceanography, 2019, 175, 139-160.	3.2	24
29	Wake measurements from a hydrokinetic river turbine. Renewable Energy, 2019, 139, 483-495.	8.9	17
30	Kinematics and Statistics of Breaking Waves Observed Using SWIFT Buoys. IEEE Journal of Oceanic Engineering, 2019, 44, 1011-1023.	3.8	9
31	A new version of the SWIFT platform for waves, currents, and turbulence in the ocean surface layer. , 2019, , .		11
32	Hydrodynamic Coefficients of Heave Plates, With Application to Wave Energy Conversion. IEEE Journal of Oceanic Engineering, 2018, 43, 983-996.	3.8	22
33	Measurements of Directional Wave Spectra and Wind Stress from a Wave Glider Autonomous Surface Vehicle. Journal of Atmospheric and Oceanic Technology, 2018, 35, 347-363.	1.3	39
34	Turbulence from Breaking Surface Waves at a River Mouth. Journal of Physical Oceanography, 2018, 48, 435-453.	1.7	22
35	Overview of the Arctic Sea State and Boundary Layer Physics Program. Journal of Geophysical Research: Oceans, 2018, 123, 8674-8687.	2.6	96
36	Episodic Reversal of Autumn Ice Advance Caused by Release of Ocean Heat in the Beaufort Sea. Journal of Geophysical Research: Oceans, 2018, 123, 3164-3185.	2.6	41

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37	Predicting Deep Water Intrusions to Puget Sound, WA (USA), and the Seasonal Modulation of Dissolved Oxygen. Estuaries and Coasts, 2018, 41, 114-127.	2.2	9
38	Shipboard Observations of the Meteorology and Nearâ€Surface Environment During Autumn Freezeup in the Beaufort/Chukchi Seas. Journal of Geophysical Research: Oceans, 2018, 123, 4930-4969.	2.6	14
39	A surface kinematics buoy (SKIB) for waveâ€“current interaction studies. Ocean Science, 2018, 14, 1449-1460.	3.4	19
40	Arctic Sea Ice Drift Measured by Shipboard Marine Radar. Journal of Geophysical Research: Oceans, 2018, 123, 4298-4321.	2.6	30
41	The Influence of Wind and Waves on Spreading and Mixing in the Fraser River Plume. Journal of Geophysical Research: Oceans, 2018, 123, 6818-6840.	2.6	18
42	Wave Attenuation Through an Arctic Marginal Ice Zone on 12 October 2015: 1. Measurement of Wave Spectra and Ice Features From Sentinel 1A. Journal of Geophysical Research: Oceans, 2018, 123, 3619-3634.	2.6	32
43	Attenuation and Directional Spreading of Ocean Waves During a Storm Event in the Autumn Beaufort Sea Marginal Ice Zone. Journal of Geophysical Research: Oceans, 2018, 123, 5912-5932.	2.6	38
44	Wave Evolution in Offâ€Ice Wind Conditions. Journal of Geophysical Research: Oceans, 2018, 123, 5543-5556.	2.6	10
45	Wave Attenuation Through an Arctic Marginal Ice Zone on 12 October 2015: 2. Numerical Modeling of Waves and Associated Ice Breakup. Journal of Geophysical Research: Oceans, 2018, 123, 5652-5668.	2.6	29
46	Airborne LiDAR Measurements and Model Simulations of Tides, Waves, and Surface Slope at the Mouth of the Columbia River. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 7038-7048.	6.3	5
47	On the Ocean Wave Attenuation Rate in Greaseâ€Pancake Ice, a Comparison of Viscous Layer Propagation Models With Field Data. Journal of Geophysical Research: Oceans, 2018, 123, 5933-5948.	2.6	16
48	Doppler Correction of Wave Frequency Spectra Measured by Underway Vessels. Journal of Atmospheric and Oceanic Technology, 2017, 34, 429-436.	1.3	17
49	Observations of the shape and group dynamics of rogue waves. Geophysical Research Letters, 2017, 44, 1823-1830.	4.0	29
50	Tidal Energy Resource Measurements. , 2017, , 121-136.		0
51	Turbulence Measurements from Compliant Moorings. Part II: Motion Correction. Journal of Atmospheric and Oceanic Technology, 2017, 34, 1249-1266.	1.3	15
52	Turbulence Measurements from Five-Beam Acoustic Doppler Current Profilers. Journal of Atmospheric and Oceanic Technology, 2017, 34, 1267-1284.	1.3	70
53	Turbulence Measurements from Compliant Moorings. Part I: Motion Characterization. Journal of Atmospheric and Oceanic Technology, 2017, 34, 1235-1247.	1.3	10
54	Surface wave breaking over sheared currents: Observations from the <scp>M</scp>outh of the <scp>C</scp>olumbia <scp>R</scp>iver. Journal of Geophysical Research: Oceans, 2017, 122, 3311-3328.	2.6	34

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55	Measuring ocean waves in sea ice using SAR imagery: A quasi-deterministic approach evaluated with Sentinel-1 and in situ data. Remote Sensing of Environment, 2017, 189, 211-222.	11.0	50
56	On the shape and likelihood of oceanic rogue waves. Scientific Reports, 2017, 7, 8276.	3.3	39
57	Tidal energy resource characterization in Chacao Channel, Chile. International Journal of Marine Energy, 2017, 20, 1-16.	1.8	34
58	Sharp-Crested Breaking Surface Waves Observed from a Ship-Based Stereo Video System. Journal of Physical Oceanography, 2017, 47, 775-792.	1.7	27
59	Calibrating a Viscoelastic Sea Ice Model for Wave Propagation in the Arctic Fall Marginal Ice Zone. Journal of Geophysical Research: Oceans, 2017, 122, 8770-8793.	2.6	73
60	An Autonomous Approach to Observing the Seasonal Ice Zone in the Western Arctic. Oceanography, 2017, 30, 56-68.	1.0	38
61	The Balance of Ice, Waves, and Winds in the Arctic Autumn. Eos, 2017, , .	0.1	4
62	Wind and wave influences on sea ice floe size and leads in the <scp>B</scp>eaufort and <scp>C</scp>hukchi <scp>S</scp>eas during the summerâ€fall transition 2014. Journal of Geophysical Research: Oceans, 2016, 121, 1502-1525.	2.6	27
63	Emerging trends in the sea state of the Beaufort and Chukchi seas. Ocean Modelling, 2016, 105, 1-12.	2.4	78
64	Spatial characteristics of ocean surface waves. Ocean Dynamics, 2016, 66, 1025-1035.	2.2	16
65	Performance characterization of a cross-flow hydrokinetic turbine in sheared inflow. International Journal of Marine Energy, 2016, 16, 150-161.	1.8	9
66	Dissipation of wind waves by pancake and frazil ice in the autumn Beaufort Sea. Journal of Geophysical Research: Oceans, 2016, 121, 7991-8007.	2.6	96
67	An analysis of error in surface current mapping by an along-track interferometric FMCW SAR. , 2016, , .		3
68	Wave-Breaking Turbulence in the Ocean Surface Layer. Journal of Physical Oceanography, 2016, 46, 1857-1870.	1.7	47
69	On the modeling of wave-enhanced turbulence nearshore. Ocean Modelling, 2016, 103, 118-132.	2.4	14
70	Air-sea interactions in the marginal ice zone. Elementa, 2016, 4, .	3.2	28
71	Scaling observations of surface waves in the Beaufort Sea. Elementa, 2016, 4, .	3.2	14
72	Biofouling Effects on the Response of a Wave Measurement Buoy in Deep Water. Journal of Atmospheric and Oceanic Technology, 2015, 32, 1281-1286.	1.3	23

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73	Estimating wave energy dissipation in the surf zone using thermal infrared imagery. Journal of Geophysical Research: Oceans, 2015, 120, 3937-3957.	2.6	30
74	Observations of whitecap coverage and the relation to wind stress, wave slope, and turbulent dissipation. Journal of Geophysical Research: Oceans, 2015, 120, 8346-8363.	2.6	44
75	Wave and turbulence measurements at a tidal energy site. , 2015, , .		6
76	Turbulence measurements from moving platforms. , 2015, , .		6
77	A Horizon-Tracking Method for Shipboard Video Stabilization and Rectification. Journal of Atmospheric and Oceanic Technology, 2015, 32, 164-176.	1.3	29
78	Wave breaking and turbulence at a tidal inlet. Journal of Geophysical Research: Oceans, 2015, 120, 1016-1031.	2.6	22
79	Characterization of turbulence anisotropy, coherence, and intermittency at a prospective tidal energy site: Observational data analysis. Renewable Energy, 2015, 76, 441-453.	8.9	49
80	Wave breaking turbulence at the offshore front of the Columbia River Plume. Geophysical Research Letters, 2014, 41, 8987-8993.	4.0	21
81	Flow-noise and turbulence in two tidal channels. Journal of the Acoustical Society of America, 2014, 135, 1764-1774.	1.1	40
82	Video recognition of breaking waves. , 2014, , .		1
83	Swell and sea in the emerging Arctic Ocean. Geophysical Research Letters, 2014, 41, 3136-3140.	4.0	225
84	Quantifying upper ocean turbulence driven by surface waves. Geophysical Research Letters, 2014, 41, 102-107.	4.0	98
85	Noise correction of turbulent spectra obtained from acoustic doppler velocimeters. Flow Measurement and Instrumentation, 2014, 37, 29-41.	2.0	33
86	Wave Breaking Dissipation in a Young Wind Sea. Journal of Physical Oceanography, 2014, 44, 104-127.	1.7	47
87	Waves and the equilibrium range at Ocean Weather Station P. Journal of Geophysical Research: Oceans, 2013, 118, 5951-5962.	2.6	55
88	Resource Mapping at Tidal Energy Sites. IEEE Journal of Oceanic Engineering, 2013, 38, 433-446.	3.8	21
89	Method for identification of Doppler noise levels in turbulent flow measurements dedicated to tidal energy. International Journal of Marine Energy, 2013, 3-4, 52-64.	1.8	23
90	Thermal observations of drainage from a mud flat. Continental Shelf Research, 2013, 60, S125-S135.	1.8	5

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91	Inference of turbulence parameters from a ROMS simulation using the k-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si17.gif" overflow="scroll"><mml:mrow><mml:mi>Îµ</mml:mi></mml:mrow></mml:math> closure scheme. Ocean Modelling, 2013, 72, 104-118.	2.4	13
92	Tidal energy resource characterization: methodology and field study in Admiralty Inlet, Puget Sound, WA (USA). Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2013, 227, 352-367.	1.4	51
93	Sedimentâ€generated noise and bed stress in a tidal channel. Journal of Geophysical Research: Oceans, 2013, 118, 2249-2265.	2.6	30
94	Resonances in an Evolving Hole in the Swash Zone. Journal of Waterway, Port, Coastal and Ocean Engineering, 2012, 138, 299-302.	1.2	3
95	Measurements of Turbulence at Two Tidal Energy Sites in Puget Sound, WA. IEEE Journal of Oceanic Engineering, 2012, 37, 363-374.	3.8	190
96	A vessel noise budget for Admiralty Inlet, Puget Sound, Washington (USA). Journal of the Acoustical Society of America, 2012, 132, 3706-3719.	1.1	59
97	Wave Breaking Dissipation Observed with â€œSWIFTâ€•Drifters. Journal of Atmospheric and Oceanic Technology, 2012, 29, 1866-1882.	1.3	140
98	Underwater noise measurements of a 1/7th scale wave energy converter. , 2011, , .		5
99	Observations of thermal diffusivity and a relation to the porosity of tidal flat sediments. Journal of Geophysical Research, 2010, 115, .	3.3	20
100	Characteristics of underwater ambient noise at a proposed tidal energy site in puget sound. , 2010, , .		10
101	Limits to the predictability of tidal current energy. , 2010, , .		18
102	Quantifying turbulence for tidal power applications. , 2010, , .		29
103	Shipboard acoustic doppler current profiler surveys to assess tidal current resources. , 2010, , .		6
104	Site characterization for tidal power. , 2009, , .		21
105	A Fourier-Based Method for the Distribution of Breaking Crests from Video Observations. Journal of Atmospheric and Oceanic Technology, 2009, 26, 1663-1671.	1.3	22
106	Energy dissipation and the spectral distribution of whitecaps. Geophysical Research Letters, 2009, 36, .	4.0	41
107	Refraction and reflection of infragravity waves near submarine canyons. Journal of Geophysical Research, 2007, 112, .	3.3	27
108	Tidal modulation of infragravity waves via nonlinear energy losses in the surfzone. Geophysical Research Letters, 2006, 33, .	4.0	90

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109	Predicting lightning-driven quasi-electrostatic fields at sprite altitudes using in situ measurements and a numerical model. Geophysical Research Letters, 2005, 32, .	4.0	14
110	Reflection and tunneling of ocean waves observed at a submarine canyon. Geophysical Research Letters, 2005, 32, .	4.0	18
111	Baroclinic instability of time-dependent currents. Journal of Fluid Mechanics, 2003, 490, 189-215.	3.4	36