

Christopher J Zappa

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7200830/publications.pdf>

Version: 2024-02-01

77
papers

3,421
citations

159585

30
h-index

149698

56
g-index

81
all docs

81
docs citations

81
times ranked

3965
citing authors

#	ARTICLE	IF	CITATIONS
1	Parsing the Kinetic Energy Budget of the Ocean Surface Mixed Layer. <i>Geophysical Research Letters</i> , 2022, 49, e2021GL095920.	4.0	6
2	Observations of submesoscale eddy-driven heat transport at an ice shelf calving front. <i>Communications Earth & Environment</i> , 2022, 3, .	6.8	11
3	Super Sites for Advancing Understanding of the Oceanic and Atmospheric Boundary Layers. <i>Marine Technology Society Journal</i> , 2021, 55, 144-145.	0.4	1
4	Salinity response to atmospheric forcing of the Terra Nova Bay polynya, Antarctica. <i>Antarctic Science</i> , 2021, 33, 318-331.	0.9	3
5	Co-production of knowledge reveals loss of Indigenous hunting opportunities in the face of accelerating Arctic climate change. <i>Environmental Research Letters</i> , 2021, 16, 095003.	5.2	28
6	Thin ice, deep snow and surface flooding in Kotzebue Sound: landfast ice mass balance during two anomalously warm winters and implications for marine mammals and subsistence hunting. <i>Journal of Glaciology</i> , 2021, 67, 1013-1027.	2.2	8
7	The Winter Heat Budget of Sea Ice in Kotzebue Sound: Residual Ocean Heat and the Seasonal Roles of River Outflow. <i>Journal of Geophysical Research: Oceans</i> , 2021, 126, e2020JC016784.	2.6	5
8	Sea Ice Freeboard in the Ross Sea from Airborne Altimetry IcePod 2016â€“2017 and a Comparison with IceBridge 2013 and ICESat 2003â€“2008. <i>Remote Sensing</i> , 2020, 12, 2226.	4.0	3
9	The Impact of Rain on Ocean Surface Waves and Currents. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087287.	4.0	13
10	Using Ship-Deployed High-Endurance Unmanned Aerial Vehicles for the Study of Ocean Surface and Atmospheric Boundary Layer Processes. <i>Frontiers in Marine Science</i> , 2020, 6, .	2.5	21
11	Observations of mean and wave orbital flows in the oceanâ€™s upper centimetres. <i>Journal of Fluid Mechanics</i> , 2020, 887, .	3.4	8
12	Inferences to Be Drawn from a Consideration of Power-Law Descriptions of Multiple Data Sets Each Comprised of Whitecap Coverage, WB, and 10-m Elevation Wind Speed Measurements (U10). , 2020, , 43-63.		2
13	Constraining Southern Ocean Air-Sea-Ice Fluxes Through Enhanced Observations. <i>Frontiers in Marine Science</i> , 2019, 6, .	2.5	31
14	The Impact of Wind Gusts on the Ocean Thermal Skin Layer. <i>Geophysical Research Letters</i> , 2019, 46, 11301-11309.	4.0	4
15	Anthropogenic inputs from a coastal megacity are linked to greenhouse gas concentrations in the surrounding estuary. <i>Limnology and Oceanography</i> , 2019, 64, 2497-2511.	3.1	21
16	The Ocean's Skin Layer in the Tropics. <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 59-74.	2.6	9
17	Bioindicators as a tool in environmental impact assessment: Cyanobacteria as a sentinel of pollution. <i>International Journal of Sustainable Development and Planning</i> , 2019, 14, 1-8.	0.7	4
18	Warming and Inhibition of Salinization at the Ocean's Surface by Cyanobacteria. <i>Geophysical Research Letters</i> , 2018, 45, 4230-4237.	4.0	25

#	ARTICLE	IF	CITATIONS
19	Air-Sea Interaction in the Southern Ocean: Exploring the Height of the Wave Boundary Layer at the Air-Sea Interface. <i>Boundary-Layer Meteorology</i> , 2018, 169, 461-482.	2.3	16
20	Blue pigmentation of neustonic copepods benefits exploitation of a prey-rich niche at the air-sea boundary. <i>Scientific Reports</i> , 2018, 8, 11510.	3.3	12
21	Basal channels drive active surface hydrology and transverse ice shelf fracture. <i>Science Advances</i> , 2018, 4, eaao7212.	10.3	50
22	Spectral Characteristics of Gravity-Capillary Waves, With Connections to Wave Growth and Microbreaking. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 4576-4592.	2.6	16
23	Environmental impact assessment: a multilevel, multi-parametric framework for coastal waters. <i>International Journal of Sustainable Development and Planning</i> , 2018, 13, 1041-1049.	0.7	10
24	Novel Methods for Optically Measuring Whitecaps under Natural Wave-Breaking Conditions in the Southern Ocean. <i>Journal of Atmospheric and Oceanic Technology</i> , 2017, 34, 533-554.	1.3	14
25	Antarctic ice shelf potentially stabilized by export of meltwater in surface river. <i>Nature</i> , 2017, 544, 344-348.	27.8	124
26	Whitecap Coverage Dependence on Wind and Wave Statistics as Observed during SO GasEx and HiWinGS. <i>Journal of Physical Oceanography</i> , 2017, 47, 2211-2235.	1.7	62
27	Wave-Related Reynolds Number Parameterizations of CO ₂ and DMS Transfer Velocities. <i>Geophysical Research Letters</i> , 2017, 44, 9865-9875.	4.0	40
28	Wind Speed and Sea State Dependencies of Air-Sea Gas Transfer: Results From the High Wind Speed Gas Exchange Study (HiWinGS). <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 8034-8062.	2.6	47
29	Shipboard Wave Measurements in the Southern Ocean. <i>Journal of Atmospheric and Oceanic Technology</i> , 2017, 34, 2113-2126.	1.3	12
30	Sea surface microlayer in a changing ocean – A perspective. <i>Elementa</i> , 2017, 5, .	3.2	73
31	Riverine skin temperature response to subsurface processes in low wind speeds. <i>Journal of Geophysical Research: Oceans</i> , 2016, 121, 1721-1735.	2.6	7
32	On the Variation of the Effective Breaking Strength in Oceanic Sea States. <i>Journal of Physical Oceanography</i> , 2016, 46, 2049-2061.	1.7	9
33	Substantial overnight reaeration by convective cooling discovered in pond ecosystems. <i>Geophysical Research Letters</i> , 2016, 43, 8044-8051.	4.0	19
34	Aircraft Observations of Dry Air, the ITCZ, Convective Cloud Systems, and Cold Pools in MJO during DYNAMO. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, 405-423.	3.3	43
35	Resilience Indicators and Monitoring: An Example of Climate Change Resiliency Indicators for Jamaica Bay. , 2016, , 141-165.		1
36	Water wave measurement from stereo images of specular reflections. <i>Measurement Science and Technology</i> , 2015, 26, 115401.	2.6	5

#	ARTICLE	IF	CITATIONS
37	The Gas Transfer through Polar Sea ice experiment: Insights into the rates and pathways that determine geochemical fluxes. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 8177-8194.	2.6	22
38	A parameter model of gas exchange for the seasonal sea ice zone. <i>Ocean Science</i> , 2014, 10, 17-28.	3.4	62
39	Air-Sea Interactions from Westerly Wind Bursts During the November 2011 MJO in the Indian Ocean. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 1185-1199.	3.3	100
40	A Note on the Phillips Spectral Framework for Ocean Whitecaps*. <i>Journal of Physical Oceanography</i> , 2014, 44, 1727-1734.	1.7	13
41	Optical measurements of small deeply penetrating bubble populations generated by breaking waves in the Southern Ocean. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 757-776.	2.6	29
42	Wave-induced light field fluctuations in measured irradiance depth profiles: A wavelet analysis. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 1344-1364.	2.6	14
43	Transfer Across the Air-Sea Interface. <i>Springer Earth System Sciences</i> , 2014, , 55-112.	0.2	69
44	Analyzing the footprints of near-surface aqueous turbulence: An image processing-based approach. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 1272-1286.	2.6	16
45	A Multisensor Comparison of Ocean Wave Frequency Spectra from a Research Vessel during the Southern Ocean Gas Exchange Experiment. <i>Journal of Atmospheric and Oceanic Technology</i> , 2013, 30, 2907-2925.	1.3	18
46	Wave breaking in developing and mature seas. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 4542-4552.	2.6	18
47	Statistics of surface divergence and their relation to air-water gas transfer velocity. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	8
48	An overview of sea state conditions and air-sea fluxes during RaDyO. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	47
49	Scaling the gas transfer velocity and hydraulic geometry in streams and small rivers. <i>Limnology & Oceanography Fluids & Environments</i> , 2012, 2, 41-53.	1.7	444
50	Introduction to special section on Recent Advances in the Study of Optical Variability in the Near-Surface and Upper Ocean. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	19
51	Sea surface $p\text{CO}_2$ and O_2 in the Southern Ocean during the austral fall, 2008. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	24
52	Direct measurements of CO_2 flux in the Greenland Sea. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	13
53	Direct covariance measurement of CO_2 gas transfer velocity during the 2008 Southern Ocean Gas Exchange Experiment: Wind speed dependency. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	67
54	Polarized light field under dynamic ocean surfaces: Numerical modeling compared with measurements. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	25

#	ARTICLE	IF	CITATIONS
55	Observations of Antarctic Polynya With Unmanned Aircraft Systems. <i>Eos</i> , 2010, 91, 245-246.	0.1	37
56	Sea breeze forcing of estuary turbulence and air-water CO ₂ exchange. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	17
57	Rain impacts on CO ₂ exchange in the western equatorial Pacific Ocean. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	38
58	Tidal and atmospheric influences on near-surface turbulence in an estuary. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	15
59	Evidence for complete and partial surface renewal at an air-water interface. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	21
60	Rain-induced turbulence and air-sea gas transfer. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	53
61	Variations in Ocean Surface Temperature due to Near-Surface Flow: Straining the Cool Skin Layer. <i>Journal of Physical Oceanography</i> , 2009, 39, 2685-2710.	1.7	14
62	Retrieval of short ocean wave slope using polarimetric imaging. <i>Measurement Science and Technology</i> , 2008, 19, 055503.	2.6	89
63	The Coupled Boundary Layers and Air-Sea Transfer Experiment in Low Winds. <i>Bulletin of the American Meteorological Society</i> , 2007, 88, 341-356.	3.3	154
64	Environmental turbulent mixing controls on air-water gas exchange in marine and aquatic systems. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	253
65	Sea surface temperature signatures of oceanic internal waves in low winds. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	31
66	Air-Water Flux Reconciliation Between the Atmospheric CO ₂ Profile and Mass Balance Techniques. <i>Environmental Science and Engineering</i> , 2007, , 181-192.	0.2	7
67	High-Resolution Airborne Infrared Measurements of Ocean Skin Temperature. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2005, 2, 146-150.	3.1	26
68	Sea-to-air fluxes from measurements of the atmospheric gradient of dimethylsulfide and comparison with simultaneous relaxed eddy accumulation measurements. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	22
69	Influence of rain on air-sea gas exchange: Lessons from a model ocean. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	46
70	Microbreaking and the enhancement of air-water transfer velocity. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	89
71	Scalar flux profile relationships over the open ocean. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	63
72	Air-sea CO ₂ exchange in the equatorial Pacific. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	143

#	ARTICLE	IF	CITATIONS
73	Variation in surface turbulence and the gas transfer velocity over a tidal cycle in a macro-tidal estuary. <i>Estuaries and Coasts</i> , 2003, 26, 1401-1415.	1.7	141
74	Microscale wave breaking and air-water gas transfer. <i>Journal of Geophysical Research</i> , 2001, 106, 9385-9391.	3.3	87
75	Skin layer recovery of free-surface wakes: Relationship to surface renewal and dependence on heat flux and background turbulence. <i>Journal of Geophysical Research</i> , 1998, 103, 21711-21722.	3.3	33
76	Defining and quantifying microscale wave breaking with infrared imagery. <i>Journal of Geophysical Research</i> , 1997, 102, 23145-23153.	3.3	100
77	Infrared remote sensing of breaking waves. <i>Nature</i> , 1997, 385, 52-55.	27.8	168