A Mcc Hogg

List of Publications by Year
in descending order

126 papers	3,684 citations	126907 33 h-index	155660 55 g-index
158 all docs	158 docs citations	158 times ranked	3658 citing authors

#	Article	IF	Citations
1	Ventilation of the Southern Ocean Pycnocline. Annual Review of Marine Science, 2022, 14, 405-430.	11.6	21
2	Spatial and Subannual Variability of the Antarctic Slope Current in an Eddying Oceanâ€“Sea Ice Model. Journal of Physical Oceanography, 2022, 52, 347-361.	1.7	9
3	How Does Antarctic Bottom Water Cross the Southern Ocean?. Geophysical Research Letters, 2022, 49, .	4.0	28
4	Baroclinic Control of Southern Ocean Eddy Upwelling Near Topography. Geophysical Research Letters, 2022, 49, .	4.0	5
5	Circumpolar Variations in the Chaotic Nature of Southern Ocean Eddy Dynamics. Journal of Geophysical Research: Oceans, 2022, 127, .	2.6	5
6	Climatology, Seasonality, and Trends of Spatially Coherent Ocean Eddies. Journal of Geophysical Research: Oceans, 2022, 127, .	2.6	10
7	Sequential changes in ocean circulation and biological export productivity during the last glacialâ€“interglacial cycle: a modelâ€“data study. Climate of the Past, 2021, 17, 171-201.	3.4	2
8	Seasonal and Interannual Variability of the Subtropical Front in the New Zealand Region. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016412.	2.6	11
9	Transient Response of the Southern Ocean to Idealized Wind and Thermal Forcing across Different Model Resolutions. Journal of Climate, 2021, 34, 5477-5496.	3.2	4
10	Interbasin Differences in Ocean Ventilation in Response to Variations in the Southern Annular Mode. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016540.	2.6	2
11	Intrinsic Oceanic Decadal Variability of Upper-Ocean Heat Content. Journal of Climate, 2021, 34, 6175-6189.	3.2	7
12	Global changes in oceanic mesoscale currents over the satellite altimetry record. Nature Climate Change, 2021, 11, 397-403.	18.8	80
13	A simple technique for developing and visualising stratified fluid dynamics: the hot double-bucket. Experiments in Fluids, 2021, 62, 1.	2.4	2
14	Thank You to Our 2020 Peer Reviewers. Geophysical Research Letters, 2021, 48, e2021GL093126.	4.0	0
15	Super Residual Circulation: a new perspective on ocean vertical heat transport. Journal of Physical Oceanography, 2021, , .	1.7	0
16	The Impact of Abyssal Hill Roughness on the Benthic Tide. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002376.	3.8	1
17	Dissipating and reflecting internal waves. Journal of Physical Oceanography, 2021, , .	1.7	3
18	Drivers of Atmospheric and Oceanic Surface Temperature Variance: A Frequency Domain Approach. Journal of Climate, 2021, 34, 3975-3990.	3.2	3

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19	The impact of lee waves on the Southern Ocean circulation. Journal of Physical Oceanography, 2021, , .	1.7	5
20	The Geography of Numerical Mixing in a Suite of Global Ocean Models. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002333.	3.8	13
21	The Ekman Streamfunction and the Eulerian and Residual Overturning Circulations of the Southern Ocean. Geophysical Research Letters, 2021, 48, e2021GL093438.	4.0	2
22	Highâ€Frequency Fluctuations in Antarctic Bottom Water Transport Driven by Southern Ocean Winds. Geophysical Research Letters, 2021, 48, e2021GL094569.	4.0	5
23	A New Open Source Implementation of Lagrangian Filtering: A Method to Identify Internal Waves in Highâ€Resolution Simulations. Journal of Advances in Modeling Earth Systems, 2021, 13, e2021MS002616.	3.8	10
24	Seasonal and Interannual Variability of the Weddell Gyre From a Highâ€Resolution Global Oceanâ€Sea Ice Simulation During 1958â€“2018. Journal of Geophysical Research: Oceans, 2021, 126, e2021JC017662.	2.6	10
25	Ice Algae Model Intercomparison Project phase 2 (IAMIP2). Geoscientific Model Development, 2021, 14, 6847-6861.	3.6	4
26	Frequency-Domain Analysis of the Energy Budget in an Idealized Coupled Oceanâ€“Atmosphere Model. Journal of Climate, 2020, 33, 707-726.	3.2	6
27	Asymmetric Internal Tide Generation in the Presence of a Steady Flow. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016503.	2.6	4
28	On Energy Cascades in General Flows: A Lagrangian Application. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002090.	3.8	2
29	Ocean Gyres Driven by Surface Buoyancy Forcing. Geophysical Research Letters, 2020, 47, e2020GL088539.	4.0	15
30	The Sensitivity of the Antarctic Ice Sheet to a Changing Climate: Past, Present, and Future. Reviews of Geophysics, 2020, 58, e2019RG000663.	23.0	49
31	Thank You to Our 2019 Peer Reviewers. Geophysical Research Letters, 2020, 47, e2020GL088048.	4.0	0
32	Warm Circumpolar Deep Water transport toward Antarctica driven by local dense water export in canyons. Science Advances, 2020, 6, eaav2516.	10.3	68
33	ACCESS-OM2 v1.0: a global oceanâ€“sea ice model at three resolutions. Geoscientific Model Development, 2020, 13, 401-442.	3.6	91
34	Multidecadal variability in the climate system: phenomena and mechanisms. European Physical Journal Plus, 2020, 135, 1.	2.6	6
35	JRA55-do-based repeat year forcing datasets for driving oceanâ€“sea-ice models. Ocean Modelling, 2020, 147, 101557.	2.4	40
36	Response of the Southern Ocean Overturning Circulation to Extreme Southern Annular Mode Conditions. Geophysical Research Letters, 2020, 47, e2020GL091103.	4.0	3

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37	Thermal Responses to Antarctic Ice Shelf Melt in an Eddy-Rich Global Oceanâ€“Sea Ice Model. Journal of Climate, 2020, 33, 6599-6620.	3.2	53
38	The Drag on the Barotropic Tide due to the Generation of Baroclinic Motion. Journal of Physical Oceanography, 2020, 50, 3467-3481.	1.7	5
39	The Dynamics of Mixed Layer Deepening during Open-Ocean Convection. Journal of Physical Oceanography, 2020, 50, 1625-1641.	1.7	4
40	SEASTAR: A Mission to Study Ocean Submesoscale Dynamics and Small-Scale Atmosphere-Ocean Processes in Coastal, Shelf and Polar Seas. Frontiers in Marine Science, 2019, 6, .	2.5	37
41	On the Momentum Flux of Internal Tides. Journal of Physical Oceanography, 2019, 49, 993-1013.	1.7	18
42	Eddy Saturation of the Southern Ocean: A Baroclinic Versus Barotropic Perspective. Geophysical Research Letters, 2019, 46, 12202-12212.	4.0	15
43	Thank You to Our 2018 Peer Reviewers. Geophysical Research Letters, 2019, 46, 12608-12636.	4.0	0
44	Kinetic Energy of Eddyâ€Like Features From Sea Surface Altimetry. Journal of Advances in Modeling Earth Systems, 2019, 11, 3090-3105.	3.8	23
45	Southern Ocean heat and momentum uptake are sensitive to the vertical resolution at the ocean surface. Ocean Modelling, 2019, 143, 101456.	2.4	8
46	Response of Southern Ocean Ventilation to Changes in Midlatitude Westerly Winds. Journal of Climate, 2019, 32, 5345-5361.	3.2	23
47	The [simple carbon project] model v1.0. Geoscientific Model Development, 2019, 12, 1541-1572.	3.6	5
48	The Impact of Turbulence and Convection on Transport in the Southern Ocean. Journal of Geophysical Research: Oceans, 2019, 124, 4208-4221.	2.6	9
49	Sensitivity of Marine Heatwave Metrics to Ocean Model Resolution. Geophysical Research Letters, 2019, 46, 14604-14612.	4.0	41
50	Change in Dense Shelf Water and AdÃ©lie Land Bottom Water Precipitated by Iceberg Calving. Geophysical Research Letters, 2018, 45, 2380-2387.	4.0	22
51	The Life Cycle of Spontaneously Generated Internal Waves. Journal of Physical Oceanography, 2018, 48, 343-359.	1.7	16
52	Convection Enhances Mixing in the Southern Ocean. Geophysical Research Letters, 2018, 45, 4198-4207.	4.0	15
53	Energy Loss from Transient Eddies due to Lee Wave Generation in the Southern Ocean. Journal of Physical Oceanography, 2018, 48, 2867-2885.	1.7	30
54	Appreciation of 2017 GRL Peer Reviewers. Geophysical Research Letters, 2018, 45, 4494-4528.	4.0	0

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55	Antarcticaâ€™s ecological isolation will be broken by storm-driven dispersal and warming. Nature Climate Change, 2018, 8, 704-708.	18.8	220
56	Understanding variability of the Southern Ocean overturning circulation in CORE-II models. Ocean Modelling, 2018, 123, 98-109.	2.4	6
57	Spontaneous Surface Generation and Interior Amplification of Internal Waves in a Regional-Scale Ocean Model. Journal of Physical Oceanography, 2017, 47, 811-826.	1.7	39
58	The Energetics of Southern Ocean Upwelling. Journal of Physical Oceanography, 2017, 47, 135-153.	1.7	31
59	Jetâ€“Topography Interactions Affect Energy Pathways to the Deep Southern Ocean. Journal of Physical Oceanography, 2017, 47, 1799-1816.	1.7	23
60	Vertical resolution of baroclinic modes in global ocean models. Ocean Modelling, 2017, 113, 50-65.	2.4	71
61	The viscous lee wave problem and its implications for ocean modelling. Ocean Modelling, 2017, 113, 22-29.	2.4	19
62	Attribution of horizontal and vertical contributions to spurious mixing in an Arbitrary Lagrangianâ€“Eulerian ocean model. Ocean Modelling, 2017, 119, 45-56.	2.4	12
63	Localized rapid warming of West Antarctic subsurface waters by remote winds. Nature Climate Change, 2017, 7, 595-603.	18.8	91
64	Reshaping the Antarctic Circumpolar Current via Antarctic Bottom Water Export. Journal of Physical Oceanography, 2017, 47, 2577-2601.	1.7	21
65	On Cabbeling and Thermobaricity in the Surface Mixed Layer. Journal of Physical Oceanography, 2017, 47, 1775-1787.	1.7	10
66	Climateâ€driven changes to ocean circulation and their inferred impacts on marine dispersal patterns. Global Ecology and Biogeography, 2016, 25, 923-939.	5.8	49
67	Vigorous deep-sea currents cause global anomaly in sediment accumulation in the Southern Ocean. Geology, 2016, 44, 663-666.	4.4	16
68	Adjustment of the Meridional Overturning Circulation and Its Dependence on Depth of Mixing. Journal of Physical Oceanography, 2016, 46, 731-747.	1.7	4
69	Quantifying the influence of sub-mesoscale dynamics on the supply of iron to Southern Ocean phytoplankton blooms. Deep-Sea Research Part I: Oceanographic Research Papers, 2016, 115, 199-209.	1.4	18
70	Controls on circulation, crossâ€shelf exchange, and dense water formation in an Antarctic polynya. Geophysical Research Letters, 2016, 43, 7089-7096.	4.0	20
71	The wineglass effect shapes particle export to the deep ocean in mesoscale eddies. Geophysical Research Letters, 2016, 43, 9791-9800.	4.0	34
72	Eddy Cancellation of the Ekman Cell in Subtropical Gyres. Journal of Physical Oceanography, 2016, 46, 2995-3010.	1.7	14

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73	Experiments with mixing in stratified flow over a topographic ridge. Journal of Geophysical Research: Oceans, 2016, 121, 6961-6977.	2.6	18
74	The Transient Response of Southern Ocean Circulation to Geothermal Heating in a Global Climate Model. Journal of Climate, 2016, 29, 5689-5708.	3.2	6
75	Sensitivity of Antarctic Bottom Water to Changes in Surface Buoyancy Fluxes. Journal of Climate, 2016, 29, 313-330.	3.2	29
76	Interhemispheric Asymmetry of Warming in an Eddy-Permitting Coupled Sector Model. Journal of Climate, 2015, 28, 7385-7406.	3.2	3
77	Recent trends in the <scp>S</scp>outhern <scp>O</scp>cean eddy field. Journal of Geophysical Research: Oceans, 2015, 120, 257-267.	2.6	120
78	Topographic influence on submesoscale dynamics in the Southern Ocean. Geophysical Research Letters, 2015, 42, 1139-1147.	4.0	61
79	The Injection of Zonal Momentum by Buoyancy Forcing in a Southern Ocean Model. Journal of Physical Oceanography, 2015, 45, 259-271.	1.7	24
80	Response of Southern Ocean Convection and Abyssal Overturning to Surface Buoyancy Perturbations. Journal of Climate, 2015, 28, 4263-4278.	3.2	17
81	The Dynamics of Southern Ocean Storm Tracks. Journal of Physical Oceanography, 2015, 45, 884-903.	1.7	33
82	Sensitivity of abyssal water masses to overflow parameterisations. Ocean Modelling, 2015, 89, 84-103.	2.4	23
83	Control of the glacial carbon budget by topographically induced mixing. Geophysical Research Letters, 2014, 41, 4277-4284.	4.0	19
84	Effect of topographic barriers on the rates of available potential energy conversion of the oceans. Ocean Modelling, 2014, 76, 31-42.	2.4	11
85	Energetics of Multidecadal Atlantic Ocean Variability. Journal of Climate, 2014, 27, 7874-7889.	3.2	5
86	Rapid subsurface warming and circulation changes of Antarctic coastal waters by poleward shifting winds. Geophysical Research Letters, 2014, 41, 4601-4610.	4.0	165
87	Does the sensitivity of Southern Ocean circulation depend upon bathymetric details?. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130050.	3.4	12
88	Vertical transport in the ocean due to sub-mesoscale structures: Impacts in the Kerguelen region. Ocean Modelling, 2014, 80, 10-23.	2.4	62
89	The Energetics of a Collapsing Meridional Overturning Circulation. Journal of Physical Oceanography, 2013, 43, 1512-1524.	1.7	13
90	Sea level changes forced by Southern Ocean winds. Geophysical Research Letters, 2013, 40, 5710-5715.	4.0	41

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91	The role of vertical eddy flux in Southern Ocean heat uptake. Geophysical Research Letters, 2013, 40, 5445-5450.	4.0	54
92	Interhemispheric asymmetry in transient global warming: The role of Drake Passage. Geophysical Research Letters, 2013, 40, 1587-1593.	4.0	13
93	Jet Jumping: Low-Frequency Variability in the Southern Ocean. Journal of Physical Oceanography, 2013, 43, 990-1003.	1.7	5
94	Southern Ocean Circulation and Eddy Compensation in CMIP5 Models. Journal of Climate, 2013, 26, 7198-7220.	3.2	60
95	On the Relationship between Southern Ocean Overturning and ACC Transport. Journal of Physical Oceanography, 2013, 43, 140-148.	1.7	123
96	Available potential energy gain from mixing due to the nonlinearity of the equation of state in a global ocean model. Geophysical Research Letters, 2013, 40, 2224-2228.	4.0	9
97	Sensitivity of the Overturning Circulation in the Southern Ocean to Decadal Changes in Wind Forcing. Journal of Climate, 2012, 25, 99-110.	3.2	115
98	An Analytical Model of the Response of the Meridional Overturning Circulation to Changes in Wind and Buoyancy Forcing. Journal of Physical Oceanography, 2012, 42, 1270-1287.	1.7	45
99	Mechanical power input from buoyancy and wind to the circulation in an ocean model. Geophysical Research Letters, 2012, 39, .	4.0	25
100	SUSTAINED MONITORING OF THE SOUTHERN OCEAN AT DRAKE PASSAGE: PAST ACHIEVEMENTS AND FUTURE PRIORITIES. Reviews of Geophysics, 2011, 49, .	23.0	121
101	Sensitivity of the Southern Ocean overturning circulation to surface buoyancy forcing. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	38
102	On the application of no-slip lateral boundary conditions to â€˜coarselyâ€™ resolved ocean models. Ocean Modelling, 2011, 39, 411-415.	2.4	9
103	Establishment of momentum balance by form stress in a wind-driven channel. Ocean Modelling, 2011, 40, 133-146.	2.4	30
104	On the mechanisms of late 20th century seaâ€surface temperature trends over the Antarctic Circumpolar Current. Journal of Geophysical Research, 2011, 116, .	3.3	2
105	Submesoscale generation by boundaries. Journal of Marine Research, 2011, 69, 501-522.	0.3	17
106	Kelvin wave hydraulic control induced by interactions between vortices and topography. Journal of Fluid Mechanics, 2011, 687, 194-208.	3.4	22
107	Viscous effects in two-layer, unidirectional hydraulic flow. Journal of Fluid Mechanics, 2010, 644, 371-394.	3.4	0
108	Eddy response to Southern Ocean climate modes. Journal of Geophysical Research, 2010, 115, .	3.3	35

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109	An Antarctic Circumpolar Current driven by surface buoyancy forcing. Geophysical Research Letters, 2010, 37, .	4.0	55
110	Topographic inviscid dissipation of balanced flow. Ocean Modelling, 2010, 32, 1-13.	2.4	47
111	A coupled oceanâ€“atmosphere laboratory model of the Antarctic Circumpolar Current. Ocean Modelling, 2010, 35, 54-66.	2.4	4
112	Available Potential Energy and Irreversible Mixing in the Meridional Overturning Circulation. Journal of Physical Oceanography, 2009, 39, 3130-3146.	1.7	85
113	Effects of topography on the cumulative mixing efficiency in exchange flows. Journal of Geophysical Research, 2009, 114, .	3.3	13
114	Glacial cycles and carbon dioxide: A conceptual model. Geophysical Research Letters, 2008, 35, .	4.0	21
115	Open boundary conditions for nonlinear channel flow. Ocean Modelling, 2008, 24, 108-121.	2.4	17
116	Mixing efficiency in controlled exchange flows. Journal of Fluid Mechanics, 2008, 600, 235-244.	3.4	19
117	Tidal modulation of two-layer hydraulic exchange flows. Ocean Science, 2007, 3, 179-188.	3.4	5
118	LOW FREQUENCY OCEAN VARIABILITY: FEEDBACKS BETWEEN EDDIES AND THE MEAN FLOW. , 2007, , .		2
119	Circumpolar response of Southern Ocean eddy activity to a change in the Southern Annular Mode. Geophysical Research Letters, 2006, 33, .	4.0	277
120	Shear flow and viscosity in single-layer hydraulics. Journal of Fluid Mechanics, 2006, 548, 431.	3.4	4
121	Unidirectional stratified flow through a non-rectangular channel. Journal of Fluid Mechanics, 2004, 509, 83-92.	3.4	7
122	Continuously stratified exchange flow through a contraction in a channel. Journal of Fluid Mechanics, 2004, 499, 257-276.	3.4	5
123	The Kelvinâ€“Helmholtz to Holmboe instability transition in stratified exchange flows. Journal of Fluid Mechanics, 2003, 477, .	3.4	64
124	Linear internal waves and the control of stratified exchange flows. Journal of Fluid Mechanics, 2001, 447, 357-375.	3.4	38
125	Hydraulics and mixing in controlled exchange flows. Journal of Geophysical Research, 2001, 106, 959-972.	3.3	72
126	Topographic Hotspots of Southern Ocean Eddy Upwelling. Frontiers in Marine Science, 0, 9, .	2.5	5