

Nathaniel Bindoff

List of Publications by Year in descending order

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135
papers

8,039
citations

61984

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60623

81
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142
all docs

142
docs citations

142
times ranked

9693
citing authors

#	ARTICLE	IF	CITATIONS
1	Characteristics of Wind-Generated Near-Inertial Waves in the Southeast Indian Ocean. <i>Journal of Physical Oceanography</i> , 2022, 52, 557-578.	1.7	0
2	Dynamics of a Standing Meander of the Subantarctic Front Diagnosed from Satellite Altimetry and Along-Stream Anomalies of Temperature and Salinity. <i>Journal of Physical Oceanography</i> , 2022, 52, 1073-1089.	1.7	2
3	An Intercomparison of Antarctic NWP during the Austral Summer Special Observing Period for the Year of Polar Prediction. <i>Weather and Forecasting</i> , 2022, , .	1.4	0
4	Local Drivers of Extreme Upper Ocean Marine Heatwaves Assessed Using a Global Ocean Circulation Model. <i>Frontiers in Climate</i> , 2022, 4, .	2.8	7
5	Turbulent mixing variability in an energetic standing meander of the Southern Ocean. <i>Journal of Physical Oceanography</i> , 2022, , .	1.7	0
6	Anthropogenic Temperature and Salinity Changes in the Southern Ocean. <i>Journal of Climate</i> , 2021, 34, 215-228.	3.2	8
7	A Global, Multiproduct Analysis of Coastal Marine Heatwaves: Distribution, Characteristics, and Long-Term Trends. <i>Journal of Geophysical Research: Oceans</i> , 2021, 126, e2020JC016708.	2.6	45
8	Improving Australian Rainfall Prediction Using Sea Surface Salinity. <i>Journal of Climate</i> , 2021, 34, 2473-2490.	3.2	5
9	Observational estimates of turbulent mixing in the southeast Indian Ocean. <i>Journal of Physical Oceanography</i> , 2021, , .	1.7	2
10	Subpolar Southern Ocean Response to Changes in the Surface Momentum, Heat, and Freshwater Fluxes under 2xCO ₂ . <i>Journal of Climate</i> , 2021, 34, 8755-8775.	3.2	6
11	Slower Long-Term Coastal Warming Drives Dampened Trends in Coastal Marine Heatwave Exposure. <i>Journal of Geophysical Research: Oceans</i> , 2021, 126, e2021JC017930.	2.6	12
12	Antarctic Futures: An Assessment of Climate-Driven Changes in Ecosystem Structure, Function, and Service Provisioning in the Southern Ocean. <i>Annual Review of Marine Science</i> , 2020, 12, 87-120.	11.6	140
13	Near-Surface Salinity Reveals the Oceanic Sources of Moisture for Australian Precipitation through Atmospheric Moisture Transport. <i>Journal of Climate</i> , 2020, 33, 6707-6730.	3.2	8
14	Recent hemispheric asymmetry in global ocean warming induced by climate change and internal variability. <i>Nature Communications</i> , 2020, 11, 2008.	12.8	33
15	Southern Australia Current System based on a gridded hydrography and a high-resolution model. <i>Progress in Oceanography</i> , 2020, 181, 102254.	3.2	13
16	Antarctic Verification of the Australian Numerical Weather Prediction Model. <i>Weather and Forecasting</i> , 2019, 34, 1081-1096.	1.4	5
17	Seasonal Evolution of the Surface Layer Heat Balance in the Eastern Subtropical Indian Ocean. <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 6459-6477.	2.6	6
18	Ocean Climate Observing Requirements in Support of Climate Research and Climate Information. <i>Frontiers in Marine Science</i> , 2019, 6, .	2.5	12

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19	Ocean carbon and nitrogen isotopes in CSIRO Mk3L-COAL version 1.0: a tool for palaeoceanographic research. <i>Geoscientific Model Development</i> , 2019, 12, 1491-1523.	3.6	9
20	Marine nitrogen fixers mediate a low latitude pathway for atmospheric CO2 drawdown. <i>Nature Communications</i> , 2019, 10, 4611.	12.8	13
21	Dynamic Biological Functioning Important for Simulating and Stabilizing Ocean Biogeochemistry. <i>Global Biogeochemical Cycles</i> , 2018, 32, 565-593.	4.9	10
22	Anthropogenic and Natural Influences on Record 2016 Marine Heat waves. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, S44-S48.	3.3	35
23	Reduced oxygenation at intermediate depths of the southwest Pacific during the last glacial maximum. <i>Earth and Planetary Science Letters</i> , 2018, 491, 48-57.	4.4	12
24	Drivers of Antarctic Sea Ice Volume Change in CMIP5 Models. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 7914-7938.	2.6	11
25	Warming and freshening trends. <i>Nature Geoscience</i> , 2018, 11, 803-804.	12.9	0
26	Exploring the Future of Fuel Loads in Tasmania, Australia: Shifts in Vegetation in Response to Changing Fire Weather, Productivity, and Fire Frequency. <i>Forests</i> , 2018, 9, 210.	2.1	6
27	Strengthened Indonesian Throughflow Drives Decadal Warming in the Southern Indian Ocean. <i>Geophysical Research Letters</i> , 2018, 45, 6167-6175.	4.0	79
28	On the Leeuwin Current System and Its Linkage to Zonal Flows in the South Indian Ocean as Inferred from a Gridded Hydrography. <i>Journal of Physical Oceanography</i> , 2017, 47, 583-602.	1.7	35
29	Unusual suspects in the usual places: a phylo-climatic framework to identify potential future invasive species. <i>Biological Invasions</i> , 2017, 19, 577-596.	2.4	6
30	The unprecedented 2015/16 Tasman Sea marine heatwave. <i>Nature Communications</i> , 2017, 8, 16101.	12.8	374
31	Interactions between Antarctic sea ice and large-scale atmospheric modes in CMIP5 models. <i>Cryosphere</i> , 2017, 11, 789-803.	3.9	12
32	Simulating the Role of Surface Forcing on Observed Multidecadal Upper-Ocean Salinity Changes. <i>Journal of Climate</i> , 2016, 29, 5575-5588.	3.2	28
33	Climateâ€“vegetationâ€“fire interactions and feedbacks: trivial detail or major barrier to projecting the future of the Earth system?. <i>Wiley Interdisciplinary Reviews: Climate Change</i> , 2016, 7, 910-931.	8.1	76
34	Interannual variability of the South Indian Countercurrent. <i>Journal of Geophysical Research: Oceans</i> , 2016, 121, 3465-3487.	2.6	19
35	Sensitivity of Global Upper-Ocean Heat Content Estimates to Mapping Methods, XBT Bias Corrections, and Baseline Climatologies*. <i>Journal of Climate</i> , 2016, 29, 4817-4842.	3.2	83
36	Sea-ice-driven shallow overturning. <i>Nature Geoscience</i> , 2016, 9, 569-570.	12.9	1

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37	Atlanticâ€‘Pacific asymmetry of subsurface temperature change and frontal response of the Antarctic Circumpolar Current for the recent three decades. , 2016, , 157-170.		0
38	Mixing Variability in the Southern Ocean. Journal of Physical Oceanography, 2015, 45, 966-987.	1.7	39
39	New Perspectives on Observed and Simulated Antarctic Sea Ice Extent Trends Using Optimal Fingerprinting Techniques*. Journal of Climate, 2015, 28, 1543-1560.	3.2	42
40	Atlanticâ€‘Pacific asymmetry of subsurface temperature change and frontal response of the Antarctic Circumpolar Current for the recent three decades. Journal of Oceanography, 2015, 71, 623-636.	1.7	10
41	Detecting and Characterizing Ekman Currents in the Southern Ocean. Journal of Physical Oceanography, 2015, 45, 1205-1223.	1.7	13
42	Noahâ€™s Ark Conservation Will Not Preserve Threatened Ecological Communities under Climate Change. PLoS ONE, 2015, 10, e0124014.	2.5	10
43	Improving the Use of Species Distribution Models in Conservation Planning and Management under Climate Change. PLoS ONE, 2014, 9, e113749.	2.5	272
44	Future fire danger climatology for Tasmania, Australia, using a dynamically downscaled regional climate model. International Journal of Wildland Fire, 2014, 23, 309.	2.4	71
45	State of the Climate in 2013. Bulletin of the American Meteorological Society, 2014, 95, S1-S279.	3.3	138
46	Antarctic Circumpolar Current transport and barotropic transition at Macquarie Ridge. Geophysical Research Letters, 2014, 41, 7254-7261.	4.0	26
47	Changes to the drivers of fire weather with a warming climate â€‘ a case study of southeast Tasmania. Climatic Change, 2014, 124, 255-269.	3.6	29
48	Climate projections for ecologists. Wiley Interdisciplinary Reviews: Climate Change, 2014, 5, 621-637.	8.1	132
49	Climate change and Southern Ocean ecosystems I: how changes in physical habitats directly affect marine biota. Global Change Biology, 2014, 20, 3004-3025.	9.5	448
50	Performance of an empirical biasâ€‘correction of a highâ€‘resolution climate dataset. International Journal of Climatology, 2014, 34, 2189-2204.	3.5	63
51	Dynamics of the Leeuwin Current: Part 2. Impacts of mixing, friction, and advection on a buoyancy-driven eastern boundary current over a shelf. Dynamics of Atmospheres and Oceans, 2014, 65, 39-63.	1.8	27
52	Near-term Climate Change: Projections and Predictability. , 2014, , 953-1028.		196
53	Detection and Attribution of Climate Change: from Global to Regional. , 2014, , 867-952.		144
54	On the nonequivalent barotropic structure of the <sc>A</sc>ntarctic <sc>C</sc>ircumpolar <sc>C</sc>urrent: An observational perspective. Journal of Geophysical Research: Oceans, 2014, 119, 5221-5243.	2.6	29

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55	Evaluation of Climate Models. , 2014, , 741-866.		458
56	South Indian Countercurrent and associated fronts. Journal of Geophysical Research: Oceans, 2014, 119, 6763-6791.	2.6	57
57	Summary for Policymakers. , 2014, , 45-64.		1
58	To Be Or Not to Be? Variable selection can change the projected fate of a threatened species under future climate. Ecological Management and Restoration, 2013, 14, 230-234.	1.5	21
59	On regional dynamical downscaling for the assessment and projection of temperature and precipitation extremes across Tasmania, Australia. Climate Dynamics, 2013, 41, 3145-3165.	3.8	45
60	A regional response in mean westerly circulation and rainfall to projected climate warming over Tasmania, Australia. Climate Dynamics, 2013, 40, 2035-2048.	3.8	16
61	A review of global ocean temperature observations: Implications for ocean heat content estimates and climate change. Reviews of Geophysics, 2013, 51, 450-483.	23.0	367
62	Deep ocean freshening. Nature Climate Change, 2013, 3, 864-865.	18.8	13
63	Dynamics of the Leeuwin Current: Part 1. Coastal flows in an inviscid, variable-density, layer model. Dynamics of Atmospheres and Oceans, 2013, 63, 24-59.	1.8	42
64	Salinity dominance on the Indian Ocean Eastern Gyral current. Geophysical Research Letters, 2013, 40, 5716-5721.	4.0	40
65	Detection and Attribution of Observed Changes in Northern Hemisphere Spring Snow Cover. Journal of Climate, 2013, 26, 6904-6914.	3.2	65
66	Performance of downscaled regional climate simulations using a variable-resolution regional climate model: Tasmania as a test case. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,936.	3.3	35
67	State of the Climate in 2012. Bulletin of the American Meteorological Society, 2013, 94, S1-S258.	3.3	129
68	Detecting an external influence on recent changes in oceanic oxygen using an optimal fingerprinting method. Biogeosciences, 2013, 10, 1799-1813.	3.3	36
69	High-resolution projections of surface water availability for Tasmania, Australia. Hydrology and Earth System Sciences, 2012, 16, 1287-1303.	4.9	30
70	The simulation of cutoff lows in a regional climate model: reliability and future trends. Climate Dynamics, 2012, 39, 445-459.	3.8	38
71	Frontal movements and property fluxes: Contributions to heat and freshwater trends in the Southern Ocean. Journal of Geophysical Research, 2011, 116, .	3.3	33
72	Observed decreases in oxygen content of the global ocean. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	227

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73	Estimating the Four-Dimensional Structure of the Southern Ocean Using Satellite Altimetry. Journal of Atmospheric and Oceanic Technology, 2011, 28, 548-568.	1.3	65
74	State of the Climate in 2010. Bulletin of the American Meteorological Society, 2011, 92, S1-S236.	3.3	135
75	Assessing rainfall trends and remote drivers in regional climate change projections: The demanding test case of Tasmania. IOP Conference Series: Earth and Environmental Science, 2010, 11, 012038.	0.3	0
76	Improved regional climate modelling through dynamical downscaling. IOP Conference Series: Earth and Environmental Science, 2010, 11, 012026.	0.3	2
77	Changes in the Subduction of Southern Ocean Water Masses at the End of the Twenty-First Century in Eight IPCC Models. Journal of Climate, 2010, 23, 6526-6541.	3.2	48
78	Antarctic Bottom Water from the AdÃ©lie and George V Land coast, East Antarctica (140â€°-149â€°E). Journal of Geophysical Research, 2010, 115, .	3.3	98
79	Changes in the global hydrologicalâ€™cycle inferred from ocean salinity. Geophysical Research Letters, 2010, 37, .	4.0	144
80	The circulation and water masses of the Antarctic shelf and continental slope between 30 and. Deep-Sea Research Part II: Topical Studies in Oceanography, 2010, 57, 723-737.	1.4	86
81	Surface oceanography of BROKE-West, along the Antarctic margin of the south-west Indian Ocean (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0039.gif") Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 504 Oceanography, 2010, 57, 738-757.	1.4	67
82	Capabilities of Global Ocean Programmes to Inform Climate Services. Procedia Environmental Sciences, 2010, 1, 342-353.	1.4	1
83	Intergovernmental Panel for Climate Change (IPCC) and Attribution and Prediction of Climate: Progress since the Fourth Assessment. , 2010, , .		1
84	Impacts of Climate Change on the Subduction of Mode and Intermediate Water Masses in the Southern Ocean. Journal of Climate, 2009, 22, 3289-3302.	3.2	49
85	Lessons Learned from IPCC AR4: Scientific Developments Needed to Understand, Predict, and Respond to Climate Change. Bulletin of the American Meteorological Society, 2009, 90, 497-514.	3.3	47
86	The sea ice dynamics of Terra Nova Bay and Ross Ice Shelf Polynyas during a spring and winter simulation. Journal of Geophysical Research, 2008, 113, .	3.3	41
87	Formation and export of dense shelf water from the AdÃ©lie Depression, East Antarctica. Journal of Geophysical Research, 2008, 113, .	3.3	114
88	The Impacts of the Oceans on Climate Change. , 2008, , .		1
89	Modeling Decadal Changes on the Indian Ocean Section I5 at 32Â°S. Journal of Climate, 2007, 20, 3106-3130.	3.2	4
90	On the Total, Mean, and Eddy Heat and Freshwater Transports in the Southern Hemisphere of a â€¦â€™ Ã— â€¦â€™ Global Ocean Model. Journal of Physical Oceanography, 2007, 37, 277-295.	1.7	48

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91	Climate with care. <i>New Scientist</i> , 2007, 193, 27.	0.0	0
92	Antarctic coastal polynya response to climate change. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	30
93	Variations in behavior and condition of a Southern Ocean top predator in relation to <i>in situ</i> oceanographic conditions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 13705-13710.	7.1	291
94	Climate Change Detection and Attribution: Beyond Mean Temperature Signals. <i>Journal of Climate</i> , 2006, 19, 5058-5077.	3.2	79
95	Pole relocation for an orthogonal grid: An analytic method. <i>Ocean Modelling</i> , 2006, 12, 16-31.	2.4	5
96	Interdecadal water mass changes in the Southern Ocean between 30°E and 160°E. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	4.0	56
97	Freshening of the Adélie Land Bottom Water near 140°E. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	111
98	OCEAN SCIENCE: Warming the World's Oceans. <i>Science</i> , 2005, 309, 254-255.	12.6	29
99	Modeling water mass formation in the Mertz Glacier Polynya and Adélie Depression, East Antarctica. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	79
100	An anomalous late-season change in the regional sea ice regime in the vicinity of the Mertz Glacier Polynya, East Antarctica. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	19
101	Data on bottom water in Prydz Bay, Antarctica, revised. <i>Eos</i> , 2003, 84, 200.	0.1	1
102	Recent investigations of the Mertz Polynya and George Vth Land continental margin, East Antarctica. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2003, 50, 1335-1336.	1.4	1
103	Wintertime oceanography of the Adélie Depression. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2003, 50, 1373-1392.	1.4	67
104	Mitochondria and the heart. <i>European Heart Journal</i> , 2003, 24, 221-224.	2.2	23
105	Comparison of Observed Temperature and Salinity Changes in the Indo-Pacific with Results from the Coupled Climate Model HadCM3: Processes and Mechanisms*. <i>Journal of Climate</i> , 2003, 16, 156-166.	3.2	34
106	On the zonal and meridional circulation and ocean transports between Tasmania and Antarctica. <i>Journal of Geophysical Research</i> , 2001, 106, 2795-2814.	3.3	37
107	Chapter 7.3 The world during WOCE. <i>International Geophysics</i> , 2001, 77, 557-583.	0.6	7
108	Freshwater and Heat Changes in the North and South Pacific Oceans between the 1960s and 1985-94. <i>Journal of Climate</i> , 2001, 14, 1613-1633.	3.2	54

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109	Sea-ice growth and water-mass modification in the Mertz Glacier polynya, East Antarctica, during winter. <i>Annals of Glaciology</i> , 2001, 33, 399-406.	1.4	56
110	A Statistically Efficient Mapping Technique for Four-Dimensional Ocean Temperature Data. <i>Journal of Atmospheric and Oceanic Technology</i> , 2000, 17, 831-846.	1.3	9
111	Decadal Changes along an Indian Ocean Section at 32°S and Their Interpretation. <i>Journal of Physical Oceanography</i> , 2000, 30, 1207-1222.	1.7	125
112	Ocean circulation off east Antarctica affects ecosystem structure and sea-ice extent. <i>Nature</i> , 2000, 406, 504-507.	27.8	264
113	Primary productivity off the coast of East Antarctica (80°–150°E): January to March 1996. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2000, 47, 2327-2362.	1.4	49
114	On the circulation and water masses over the Antarctic continental slope and rise between 80 and 150°E. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2000, 47, 2299-2326.	1.4	189
115	Wintertime heat flux to the underside of East Antarctic pack ice. <i>Journal of Geophysical Research</i> , 2000, 105, 28759-28769.	3.3	22
116	Large-scale freshening of intermediate waters in the Pacific and Indian oceans. <i>Nature</i> , 1999, 400, 440-443.	27.8	245
117	Seasonal Temperature Variability in the Upper Southwest Pacific Ocean. <i>Journal of Physical Oceanography</i> , 1999, 29, 366-381.	1.7	23
118	Interannual and Decadal Temperature Variability in the Southwest Pacific Ocean between 1955 and 1988. <i>Journal of Climate</i> , 1997, 10, 1035-1049.	3.2	73
119	Winter ocean/sea ice interactions studied in the East Antarctic. <i>Eos</i> , 1996, 77, 453.	0.1	26
120	Diagnosing Climate Change and Ocean Ventilation Using Hydrographic Data. <i>Journal of Physical Oceanography</i> , 1994, 24, 1137-1152.	1.7	229
121	Comparison of Synoptic and Climatologically Mapped Sections in the South Pacific Ocean. <i>Journal of Climate</i> , 1992, 5, 631-645.	3.2	18
122	Warming of the water column in the southwest Pacific Ocean. <i>Nature</i> , 1992, 357, 59-62.	27.8	96
123	The Tasman Project of Seafloor Magnetotelluric Exploration: experiment and observations. <i>Physics of the Earth and Planetary Interiors</i> , 1989, 53, 405-421.	1.9	23
124	The Tamar conductivity anomaly. <i>Physics of the Earth and Planetary Interiors</i> , 1988, 52, 8-22.	1.9	18
125	Comparisons between surface, barotropic and abyssal flows during the passage of a warm-core ring. <i>Marine and Freshwater Research</i> , 1988, 39, 697.	1.3	8
126	A separation of ionospheric and oceanic tidal components in magnetic fluctuation data.. <i>Journal of Geomagnetism and Geoelectricity</i> , 1988, 40, 1445-1467.	0.9	10

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127	Vertical electric field fluctuations at the floor of the Tasman Abyssal Plain. Deep-sea Research Part A, Oceanographic Research Papers, 1986, 33, 587-600.	1.5	19
128	Abyssal currents during the formation and passage of a warm-core ring in the East Australian Current. Deep-sea Research Part A, Oceanographic Research Papers, 1986, 33, 1563-1576.	1.5	30
129	Barotropic flow of a warm-core ring from seafloor electric measurements. Journal of Geophysical Research, 1986, 91, 12979-12984.	3.3	26
130	Oceanographic effects on the geomagnetic field. Exploration Geophysics, 1986, 17, 30-30.	1.1	0
131	Pressure fluctuations on the open-ocean floor: Mid-Tasman Sea at 38°30'S., 162°38'E., near the Lord Howe rise. Marine and Freshwater Research, 1986, 37, 27.	1.3	7
132	The Tasman project of seafloor magnetotelluric exploration. Exploration Geophysics, 1985, 16, 221-224.	1.1	17
133	A seafloor magnetotelluric sounding in the Tasman Sea. Geophysical Research Letters, 1985, 12, 545-548.	4.0	22
134	Technical Summary. , 0, , 27-158.		0
135	Ocean-Ice Shelf Interaction and Possible Bottom Water Formation in Prydz Bay, Antarctica. Antarctic Research Series, 0, , 173-187.	0.2	37