Molly Baringer

List of Publications by Year in descending order

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95 papers 8,815 citations

43 h-index 91 g-index

99 all docs 99 docs citations 99 times ranked 7659 citing authors

#	Article	IF	CITATIONS
1	Temporal Variability of the Atlantic Meridional Overturning Circulation at 26.5°N. Science, 2007, 317, 935-938.	12.6	718
2	Fifteen years of ocean observations with the global Argo array. Nature Climate Change, 2016, 6, 145-153.	18.8	380
3	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
4	Continuous, Array-Based Estimates of Atlantic Ocean Heat Transport at 26.5°N. Journal of Climate, 2011, 24, 2429-2449.	3.2	352
5	Outflows and deep water production by marginal seas. Progress in Oceanography, 1994, 33, 161-200.	3.2	351
6	Pacific origin of the abrupt increase in Indian Ocean heat content during the warming hiatus. Nature Geoscience, 2015, 8, 445-449.	12.9	327
7	Measuring the Atlantic Meridional Overturning Circulation at $26 \hat{A}^{\circ} N$. Progress in Oceanography, 2015, 130, 91-111.	3.2	314
8	Observed decline of the Atlantic meridional overturning circulation 2004–2012. Ocean Science, 2014, 10, 29-38.	3.4	293
9	Mixing and Spreading of the Mediterranean Outflow. Journal of Physical Oceanography, 1997, 27, 1654-1677.	1.7	278
10	Seasonal Variability of the Atlantic Meridional Overturning Circulation at 26.5°N. Journal of Climate, 2010, 23, 5678-5698.	3.2	270
11	The North Atlantic Ocean Is in a State of Reduced Overturning. Geophysical Research Letters, 2018, 45, 1527-1533.	4.0	263
12	On the Future of Argo: A Global, Full-Depth, Multi-Disciplinary Array. Frontiers in Marine Science, 2019, 6, .	2.5	235
13	Sixteen years of Florida Current Transport at 27° N. Geophysical Research Letters, 2001, 28, 3179-3182.	4.0	218
14	Observed interannual variability of the Atlantic meridional overturning circulation at 26.5 $\hat{A}^{\circ}N$. Geophysical Research Letters, 2012, 39, .	4.0	211
15	Observed Flow Compensation Associated with the MOC at $26.5 \hat{A}^{\circ} N$ in the Atlantic. Science, 2007, 317, 938-941.	12.6	205
16	Changes in Ocean Heat, Carbon Content, and Ventilation: A Review of the First Decade of GO-SHIP Global Repeat Hydrography. Annual Review of Marine Science, 2016, 8, 185-215.	11.6	183
17	State of the Climate in 2017. Bulletin of the American Meteorological Society, 2018, 99, Si-S310.	3.3	160
18	Mediterranean Outflow Mixing and Dynamics. Science, 1993, 259, 1277-1282.	12.6	159

#	Article	IF	Citations
19	A review of the physical oceanography of the Mediterranean outflow. Marine Geology, 1999, 155, 63-82.	2.1	157
20	Florida Current transport variability: An analysis of annual and longer-period signals. Deep-Sea Research Part I: Oceanographic Research Papers, 2010, 57, 835-846.	1.4	156
21	Past, Present, and Future Changes in the Atlantic Meridional Overturning Circulation. Bulletin of the American Meteorological Society, 2012, 93, 1663-1676.	3.3	153
22	State of the Climate in 2015. Bulletin of the American Meteorological Society, 2016, 97, Si-S275.	3.3	142
23	Monitoring the Atlantic meridional overturning circulation. Deep-Sea Research Part II: Topical Studies in Oceanography, 2011, 58, 1744-1753.	1.4	135
24	State of the Climate in 2010. Bulletin of the American Meteorological Society, 2011, 92, S1-S236.	3.3	135
25	State of the Climate in 2012. Bulletin of the American Meteorological Society, 2013, 94, S1-S258.	3.3	129
26	State of the Climate in 2009. Bulletin of the American Meteorological Society, 2010, 91, s1-s222.	3.3	121
27	State of the Climate in 2011. Bulletin of the American Meteorological Society, 2012, 93, S1-S282.	3.3	121
28	Argo Data 1999–2019: Two Million Temperature-Salinity Profiles and Subsurface Velocity Observations From a Global Array of Profiling Floats. Frontiers in Marine Science, 2020, 7, .	2.5	117
29	Ocean acidification along the Gulf Coast and East Coast of the USA. Continental Shelf Research, 2015, 98, 54-71.	1.8	96
30	Advection and diffusion of Indonesian Throughflow Water within the Indian Ocean South Equatorial Current. Geophysical Research Letters, 1997, 24, 2573-2576.	4.0	95
31	Variability of Shallow and Deep Western Boundary Currents off the Bahamas during 2004–05: Results from the 26°N RAPID–MOC Array. Journal of Physical Oceanography, 2008, 38, 605-623.	1.7	93
32	Momentum and Energy Balance of the Mediterranean Outflow. Journal of Physical Oceanography, 1997, 27, 1678-1692.	1.7	91
33	South Atlantic meridional fluxes. Deep-Sea Research Part I: Oceanographic Research Papers, 2013, 71, 21-32.	1.4	84
34	State of the Climate in 2008. Bulletin of the American Meteorological Society, 2009, 90, S1-S196.	3.3	74
35	Temporal variability of the meridional overturning circulation at 34.5°S: Results from two pilot boundary arrays in the South Atlantic. Journal of Geophysical Research: Oceans, 2013, 118, 6461-6478.	2.6	70
36	Interannual variations in the Atlantic meridional overturning circulation and its relationship with the net northward heat transport in the South Atlantic. Geophysical Research Letters, 2009, 36, .	4.0	67

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37	What Caused the Accelerated Sea Level Changes Along the U.S. East Coast During 2010–2015?. Geophysical Research Letters, 2018, 45, 13,367.	4.0	65
38	Pending recovery in the strength of the meridional overturning circulation at 26° N. Ocean Science, 2020, 16, 863-874.	3.4	65
39	What caused the significant increase in Atlantic Ocean heat content since the mid-20th century?. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	62
40	Stress on the Mediterranean Outflow Plume: Part I. Velocity and Water Property Measurements. Journal of Physical Oceanography, 1994, 24, 2072-2083.	1.7	56
41	Observed Interannual Variability of the Florida Current: Wind Forcing and the North Atlantic Oscillation. Journal of Physical Oceanography, 2009, 39, 721-736.	1.7	56
42	Propagation pathways of classical Labrador Sea water from its source region to $26 \hat{A}^\circ N$. Journal of Geophysical Research, 2011, 116, .	3.3	54
43	Continuous Estimate of Atlantic Oceanic Freshwater Flux at 26.5°N. Journal of Climate, 2015, 28, 8888-8906.	3.2	50
44	A 1998–1992 comparison of inorganic carbon and its transport across 24.5°N in the Atlantic. Deep-Sea Research Part II: Topical Studies in Oceanography, 2003, 50, 3041-3064.	1.4	42
45	Transport variability of the Deep Western Boundary Current and the Antilles Current off Abaco Island, Bahamas. Deep-Sea Research Part I: Oceanographic Research Papers, 2004, 51, 1397-1415.	1.4	40
46	Meridional heat transport determined with expandable bathythermographs—Part II: South Atlantic transport. Deep-Sea Research Part I: Oceanographic Research Papers, 2007, 54, 1402-1420.	1.4	39
47	Global Perspectives on Observing Ocean Boundary Current Systems. Frontiers in Marine Science, 2019, 6, .	2.5	39
48	Meridional heat transport determined with expendable bathythermographsâ€"Part I: Error estimates from model and hydrographic data. Deep-Sea Research Part I: Oceanographic Research Papers, 2007, 54, 1390-1401.	1.4	38
49	An assessment of the seasonal mixed layer salinity budget in the Southern Ocean. Journal of Geophysical Research, 2009, 114, .	3.3	38
50	The Role of Interocean Exchanges on Decadal Variations of the Meridional Heat Transport in the South Atlantic. Journal of Physical Oceanography, 2011, 41, 1498-1511.	1.7	38
51	Compensation between meridional flow components of the Atlantic MOC at 26° N. Ocean Science, 2016, 12, 481-493.	3.4	38
52	Slow Down of the Gulf Stream during 1993–2016. Scientific Reports, 2019, 9, 6672.	3.3	37
53	Basinâ€Wide Oceanographic Array Bridges the South Atlantic. Eos, 2014, 95, 53-54.	0.1	36
54	Metabolic poise in the North Atlantic Ocean diagnosed from organic matter transports. Limnology and Oceanography, 2004, 49, 1084-1094.	3.1	35

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55	Variability of the Deep Western Boundary Current at 26.5°N during 2004–2009. Deep-Sea Research Part II: Topical Studies in Oceanography, 2013, 85, 154-168.	1.4	31
56	More Than 50 Years of Successful Continuous Temperature Section Measurements by the Global Expendable Bathythermograph Network, Its Integrability, Societal Benefits, and Future. Frontiers in Marine Science, 2019, 6, .	2.5	31
57	Transition regions and their role in the relationship between sea surface height and subsurface temperature structure in the Atlantic Ocean. Geophysical Research Letters, 2001, 28, 3943-3946.	4.0	29
58	Preliminary results from WOCE hydrographic sections at 80°E and 32°S in the central Indian Ocean. Geophysical Research Letters, 1997, 24, 2789-2792.	4.0	28
59	Seasonal variations in the South Atlantic Meridional Overturning Circulation from observations and numerical models. Geophysical Research Letters, 2014, 41, 4611-4618.	4.0	28
60	A prototype system for observing the Atlantic Meridional Overturning Circulation $\hat{a} \in \text{``scientific basis,}$ measurement and risk mitigation strategies, and first results. Journal of Operational Oceanography, 2008, 1, 19-28.	1.2	27
61	Contrasting patterns of phytoplankton pigments and chemotaxonomic groups along 30°S in the subtropical South Atlantic Ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 2017, 120, 112-121.	1.4	27
62	Teleconnection between the Atlantic Meridional Overturning Circulation and Sea Level in the Mediterranean Sea. Journal of Climate, 2019, 32, 935-955.	3.2	26
63	Remote sources for yearâ€ŧoâ€year changes in the seasonality of the <scp>F</scp> lorida <scp>C</scp> urrent transport. Journal of Geophysical Research: Oceans, 2016, 121, 7547-7559.	2.6	25
64	Cross validating ocean prediction and monitoring systems. Eos, 2005, 86, 269.	0.1	24
65	Structure, transport and potential vorticity of the Gulf Stream at $68\hat{A}^{\circ}W$: Revisiting older data sets with new techniques. Deep-Sea Research Part I: Oceanographic Research Papers, 2009, 56, 41-60.	1.4	24
66	An Integrated All-Atlantic Ocean Observing System in 2030. Frontiers in Marine Science, 2019, 6, .	2.5	23
67	The upper, deep, abyssal and overturning circulation in the Atlantic Ocean at 30°S in 2003 and 2011. Progress in Oceanography, 2019, 176, 102136.	3.2	21
68	Historical variability in Atlantic meridional baroclinic transport at 26.5°N from boundary dynamic height observations. Deep-Sea Research Part II: Topical Studies in Oceanography, 2011, 58, 1754-1767.	1.4	19
69	An assessment of the Brazil Current baroclinic structure and variability near 22° S in Distinct Ocean Forecasting and Analysis Systems. Ocean Dynamics, 2016, 66, 893-916.	2.2	19
70	Global Meridional Overturning Circulation Inferred From a Dataâ€Constrained Ocean & Seaâ€lce Model. Geophysical Research Letters, 2019, 46, 1521-1530.	4.0	19
71	Variability in Deep Western Boundary Current transports: Preliminary results from 26.5 \hat{A}° N in the Atlantic. Geophysical Research Letters, 2006, 33, .	4.0	17
72	Deep upwelling and diffusivity in the southern central Indian Basin. Geophysical Research Letters, 1997, 24, 2801-2804.	4.0	16

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73	A continuous record of Florida Current temperature transport at $27\hat{A}^{\circ}N$. Geophysical Research Letters, 2005, 32, .	4.0	16
74	Importance of the assimilation of Argo float measurements on the Meridional Overturning Circulation in the South Atlantic. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	16
75	Circulation-driven variability of Atlantic anthropogenic carbon transports and uptake. Nature Geoscience, 2021, 14, 571-577.	12.9	15
76	State of the Climate in 2006. Bulletin of the American Meteorological Society, 2007, 88, 929-932.	3.3	14
77	An Updated Estimate of Salinity for the Atlantic Ocean Sector Using Temperature–Salinity Relationships. Journal of Atmospheric and Oceanic Technology, 2018, 35, 1771-1784.	1.3	14
78	Ocean Heat Transport. International Geophysics, 2013, , 759-785.	0.6	13
79	Global Oceans. Bulletin of the American Meteorological Society, 2020, 101, S129-S184.	3.3	12
80	The impact of historical biases on the XBTâ€derived meridional overturning circulation estimates at 34°S. Geophysical Research Letters, 2015, 42, 1848-1855.	4.0	11
81	OSSE Assessment of Underwater Glider Arrays to Improve Ocean Model Initialization for Tropical Cyclone Prediction. Journal of Atmospheric and Oceanic Technology, 2020, 37, 467-487.	1.3	11
82	Global Oceans. Bulletin of the American Meteorological Society, 2021, 102, S143-S198.	3.3	11
83	An estimate of diapycnal nutrient fluxes to the euphotic zone in the Florida Straits. Scientific Reports, 2017, 7, 16098.	3.3	9
84	Surface currents in the tropical Atlantic across high density XBT line AX08. Geophysical Research Letters, 2002, 29, 71-1-71-4.	4.0	8
85	Inferring Florida Current Volume Transport From Satellite Altimetry. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016763.	2.6	8
86	Measuring the Atlantic Meridional Overturning Circulation. Marine Technology Society Journal, 2015, 49, 167-177.	0.4	8
87	Synergy of In Situ and Satellite Ocean Observations in Determining Meridional Heat Transport in the Atlantic Ocean. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC017073.	2.6	6
88	The Complementary Value of XBT and Argo Observations to Monitor Ocean Boundary Currents and Meridional Heat and Volume Transports: A Case Study in the Atlantic Ocean. Journal of Atmospheric and Oceanic Technology, 2020, 37, 2267-2282.	1.3	6
89	Treading Water: Tools to Help US Coastal Communities Plan for Sea Level Rise Impacts. Frontiers in Marine Science, 2019, 6, .	2.5	4
90	Interannual Variability of the South Atlantic Ocean Heat Content in a Highâ€Resolution Versus a Lowâ€Resolution General Circulation Model. Geophysical Research Letters, 2020, 47, e2020GL089908.	4.0	4

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91	Remote Impact of the Equatorial Pacific on Florida Current Transport. Geophysical Research Letters, 2022, 49, .	4.0	4
92	Dissipation processes in the Tongue of the Ocean. Journal of Geophysical Research: Oceans, 2016, 121, 3159-3170.	2.6	2
93	What Caused the Largeâ€Scale Heat Deficit in the Subtropical South Atlantic Ocean During 2009–2012?. Geophysical Research Letters, 2020, 47, e2020GL088206.	4.0	2
94	Transport Structure of the South Atlantic Ocean Derived From a High-Resolution Numerical Model and Observations. Frontiers in Marine Science, 2022, 9, .	2.5	2
95	Comparison of hydrographic and altimeter based estimates of sea level height variability in the Atlantic Ocean. Elsevier Oceanography Series, 2003, , 23-48.	0.1	1