

# Monika Rhein

## List of Publications by Year in descending order

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103  
papers

3,911  
citations

101496

36  
h-index

138417

58  
g-index

121  
all docs

121  
docs citations

121  
times ranked

3374  
citing authors

#	ARTICLE	IF	CITATIONS
1	Surprisingly rapid spreading of newly formed intermediate waters across the North Atlantic Ocean. <i>Nature</i> , 1997, 386, 675-679.	13.7	191
2	Reduction of Deepwater Formation in the Greenland Sea During the 1980s: Evidence from Tracer Data. <i>Science</i> , 1991, 251, 1054-1056.	6.0	182
3	Labrador Sea Water: Pathways, CFC Inventory, and Formation Rates. <i>Journal of Physical Oceanography</i> , 2002, 32, 648-665.	0.7	173
4	The Bremen mass spectrometric facility for the measurement of helium isotopes, neon, and tritium in water. <i>Isotopes in Environmental and Health Studies</i> , 2009, 45, 83-95.	0.5	122
5	Atlantic Meridional Overturning Circulation: Observed Transport and Variability. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	120
6	Deep water formation, the subpolar gyre, and the meridional overturning circulation in the subpolar North Atlantic. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2011, 58, 1819-1832.	0.6	116
7	Recent advances in observing the physical oceanography of the western Mediterranean Sea. <i>Progress in Oceanography</i> , 1999, 44, 37-64.	1.5	112
8	The Atlantic Deep Western Boundary Current: Water masses and transports near the equator. <i>Journal of Geophysical Research</i> , 1995, 100, 2441.	3.3	109
9	Methane in the northern Atlantic controlled by microbial oxidation and atmospheric history. <i>Geophysical Research Letters</i> , 1999, 26, 587-590.	1.5	104
10	Deep water changes at the western boundary of the subpolar North Atlantic during 1996 to 2001. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2004, 51, 1033-1056.	0.6	93
11	Seasonal variation of diel vertical migration of zooplankton from ADCP backscatter time series data in the Lazarev Sea, Antarctica. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2010, 57, 78-94.	0.6	89
12	Changes in the CFC Inventories and Formation Rates of Upper Labrador Sea Water, 1997-2001. <i>Journal of Physical Oceanography</i> , 2006, 36, 64-86.	0.7	83
13	The zonal currents and transports at 35°W in the tropical Atlantic. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	81
14	Evidence of deep- and bottom-water formation in the western Weddell Sea. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2008, 55, 1098-1116.	0.6	77
15	Advection of North Atlantic Deep Water from the Labrador Sea to the southern hemisphere. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 2471-2487.	1.0	76
16	Ventilation rates of the Greenland and Norwegian Seas derived from distributions of the chlorofluoromethanes F11 and F12. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1991, 38, 485-503.	1.6	74
17	Changes in the pool of Labrador Sea Water in the subpolar North Atlantic. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	73
18	Monitoring the integrated deep meridional flow in the tropical North Atlantic: Long-term performance of a geostrophic array. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2006, 53, 528-546.	0.6	71

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19	The formation rate of North Atlantic Deep Water and Eighteen Degree Water calculated from CFC-11 inventories observed during WOCE. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2008, 55, 891-910.	0.6	70
20	Inventory changes in anthropogenic carbon from 1997â€“2003 in the Atlantic Ocean between 20Â°S and 65Â°N. <i>Global Biogeochemical Cycles</i> , 2009, 23, .	1.9	69
21	The Deep Western Boundary Current: tracers and velocities. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1994, 41, 263-281.	0.6	66
22	Circulation and transports in the Newfoundland Basin, western subpolar North Atlantic. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 7772-7793.	1.0	62
23	The spreading of Antarctic bottom water in the tropical Atlantic. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1998, 45, 507-527.	0.6	59
24	Radiocarbon Calibration Data for the 6th to the 8th Millennia BC. <i>Radiocarbon</i> , 1986, 28, 954-960.	0.8	58
25	Decadal ventilation and mixing of Indian Ocean waters. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2008, 55, 20-37.	0.6	55
26	Upper ocean circulation in the western tropical Atlantic in boreal fall 2000. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2005, 52, 221-240.	0.6	54
27	Deep water formation in the western Mediterranean. <i>Journal of Geophysical Research</i> , 1995, 100, 6943.	3.3	48
28	Modification of Mediterranean Water in the Gulf of Cadiz, studied with hydrographic, nutrient and chlorofluoromethane data. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1993, 40, 267-291.	0.6	46
29	Intra-seasonal variability of the DWBC in the western subpolar North Atlantic. <i>Progress in Oceanography</i> , 2015, 132, 233-249.	1.5	46
30	Interbasin deep water exchange in the western Mediterranean. <i>Journal of Geophysical Research</i> , 1999, 104, 23495-23508.	3.3	45
31	Decline of deep and bottom water ventilation and slowing down of anthropogenic carbon storage in the Weddell Sea, 1984â€“2011. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2013, 76, 66-84.	0.6	45
32	Using a CFC effective age to estimate propagation and storage of climate anomalies in the deep western North Atlantic Ocean. <i>Geophysical Research Letters</i> , 2002, 29, 80-1-80-4.	1.5	44
33	Variability and propagation of Labrador Sea Water in the southern subpolar North Atlantic. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2009, 56, 1656-1674.	0.6	43
34	Importance of the Gulf of Aqaba for the formation of bottom water in the Red Sea. <i>Journal of Geophysical Research</i> , 2002, 107, 22-1.	3.3	42
35	Ventilation variability of Labrador Sea Water and its impact on oxygen and anthropogenic carbon: a review. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2017, 375, 20160321.	1.6	41
36	Sustainable Observations of the AMOC: Methodology and Technology. <i>Reviews of Geophysics</i> , 2020, 58, e2019RG000654.	9.0	39

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37	Long-term observations of North Atlantic Current transport at the gateway between western and eastern Atlantic. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 4003-4027.	1.0	36
38	On the spreading of South Atlantic Water into the Northern Hemisphere. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	35
39	Transport of South Atlantic water through the passages south of Guadeloupe and across 16°N, 2000–2004. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2005, 52, 2234-2249.	0.6	33
40	Mixing estimates from a large-scale hydrographic survey in the North Atlantic. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	32
41	Flux and dispersion of gases from the "Drachenschlund" hydrothermal vent at 8°18' S, 13°30' W on the Mid-Atlantic Ridge. <i>Earth and Planetary Science Letters</i> , 2008, 270, 338-348.	1.8	31
42	Anthropogenic CO <sub>2</sub> and CFCs in the North Atlantic Ocean - A comparison of man-made tracers. <i>Geophysical Research Letters</i> , 1999, 26, 2065-2068.	1.5	28
43	Convection in the Greenland Sea, 1982-1993. <i>Journal of Geophysical Research</i> , 1996, 101, 18183-18192.	3.3	27
44	Flow paths and variability of the North Atlantic Current: A comparison of observations and a high-resolution model. <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 2686-2708.	1.0	27
45	Modeling CFC inventories and formation rates of Labrador Sea Water. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	26
46	North Atlantic Deep Water Formation in the Labrador Sea, Recirculation Through the Subpolar Gyre, and Discharge to the Subtropics. , 2008, , 653-701.		26
47	Upwelling and associated heat flux in the equatorial Atlantic inferred from helium isotope disequilibrium. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	25
48	Deep water masses and transports in the Vema Fracture Zone. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1996, 43, 1067-1074.	0.6	24
49	<sup>3</sup> He in the Bransfield Strait waters: indication for local injection from back-arc rifting. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1988, 35, 1919-1935.	1.6	23
50	Methane and methane carbon isotope ratios in the Northeast Atlantic including the Mid-Atlantic Ridge (50°N). <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2005, 52, 1043-1070.	0.6	22
51	Spreading velocities and dilution of North Atlantic Deep Water in the tropical Atlantic based on CFC time series. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	21
52	Variability of the Overflow Water Transport in the Western Subpolar North Atlantic, 1950–97. <i>Journal of Physical Oceanography</i> , 2006, 36, 435-456.	0.7	21
53	A comprehensive global oceanic dataset of helium isotope and tritium measurements. <i>Earth System Science Data</i> , 2019, 11, 441-454.	3.7	21
54	Spreading of overflow water from the Greenland to the Labrador Sea. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	20

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55	226Ra and Ba in northeast Atlantic deep water. Deep-sea Research Part A, Oceanographic Research Papers, 1987, 34, 1541-1564.	1.6	19
56	The velocity and mixing time scale of the Arctic Ocean Boundary Current estimated with transient tracers. Journal of Geophysical Research, 2010, 115, .	3.3	19
57	The Mediterranean water tongue and its chlorofluoromethane signal in the Iberian Basin in early summer 1989. Journal of Geophysical Research, 1993, 98, 8405-8412.	3.3	18
58	NADW transformation at the western boundary between and. Deep-Sea Research Part I: Oceanographic Research Papers, 2007, 54, 835-855.	0.6	18
59	Ventilation of the Upper Labrador Sea Water, 2003â€“2005. Geophysical Research Letters, 2007, 34, .	1.5	18
60	On the propagation and decay of North Brazil Current rings. Journal of Geophysical Research, 2010, 115, .	3.3	18
61	Coastal upwelling off Peru and Mauritania inferred from helium isotope disequilibrium. Biogeosciences, 2015, 12, 7519-7533.	1.3	18
62	Interannual to decadal oxygen variability in the mid-depth water masses of the eastern North Atlantic. Deep-Sea Research Part I: Oceanographic Research Papers, 2015, 95, 85-98.	0.6	18
63	CFC time series in the deep water masses of the western tropical Atlantic, 1990â€“1999. Deep-Sea Research Part I: Oceanographic Research Papers, 2002, 49, 281-304.	0.6	17
64	Rapid dispersal of a hydrothermal plume by turbulent mixing. Deep-Sea Research Part I: Oceanographic Research Papers, 2010, 57, 931-945.	0.6	17
65	Is Bottom Boundary Layer Mixing Slowly Ventilating Greenland Sea Deep Water*. Journal of Physical Oceanography, 2000, 30, 215-224.	0.7	16
66	Radium-266 and barium sources in the deep east atlantic. Deep-sea Research Part A, Oceanographic Research Papers, 1988, 35, 1499-1510.	1.6	15
67	Mixing estimates from hydrographic measurements in the Deep Western Boundary Current of the North Atlantic. Deep-Sea Research Part I: Oceanographic Research Papers, 2008, 55, 721-736.	0.6	15
68	Greenland Submarine Melt Water Observed in the Labrador and Irminger Sea. Geophysical Research Letters, 2018, 45, 10,570.	1.5	15
69	Basal Melt and Freezing Rates From First Noble Gas Samples Beneath an Ice Shelf. Geophysical Research Letters, 2018, 45, 8455-8461.	1.5	15
70	Observed and modeled meridional overturning circulation related flow into the Caribbean. Journal of Geophysical Research, 2008, 113, .	3.3	13
71	Evaluation of Labrador Sea Water formation in a global Finite-Element Sea-Ice Ocean Model setup, based on a comparison with observational data. Journal of Geophysical Research: Oceans, 2014, 119, 1644-1667.	1.0	13
72	A high resolution salinity time series 1993â€“2012 in the North Atlantic from Argo and Altimeter data. Journal of Geophysical Research: Oceans, 2016, 121, 2523-2551.	1.0	13

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73	Observed Transport Decline at 47°N, Western Atlantic. <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 4875-4890.	1.0	13
74	Tracer signals of the intermediate layer of the Arabian Sea. <i>Geophysical Research Letters</i> , 1997, 24, 2561-2564.	1.5	12
75	Temporal evolution of the tracer signal in the Deep Western Boundary Current, tropical Atlantic. <i>Journal of Geophysical Research</i> , 1998, 103, 15869-15883.	3.3	12
76	Variability in the Deep Western Boundary Current in the equatorial Atlantic at 44°W. <i>Geophysical Research Letters</i> , 2001, 28, 1623-1626.	1.5	12
77	Meteorology and oceanography of the Atlantic sector of the Southern Ocean—a review of German achievements from the last decade. <i>Ocean Dynamics</i> , 2016, 66, 1379-1413.	0.9	12
78	Observations of the Low-Mode Internal Tide and Its Interaction With Mesoscale Flow South of the Azores. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2019JC015879.	1.0	12
79	Submarine Meltwater From Nioghalvfjærdsbræi (79 North Glacier), Northeast Greenland. <i>Journal of Geophysical Research: Oceans</i> , 2021, 126, e2021JC017224.	1.0	12
80	Atlantic CFC data in CARINA. <i>Earth System Science Data</i> , 2010, 2, 1-15.	3.7	12
81	High-precision measurement of oceanic <sup>226</sup> Ra. <i>Marine Chemistry</i> , 1984, 15, 203-216.	0.9	11
82	Drifters reveal deep circulation. <i>Nature</i> , 2000, 407, 30-31.	13.7	11
83	The circulation of North Atlantic Deep Water at 16°N, 2000–2003. <i>Geophysical Research Letters</i> , 2004, 31, .	1.5	10
84	Equatorial upwelling rates inferred from helium isotope data: A novel approach. <i>Geophysical Research Letters</i> , 2004, 31, .	1.5	10
85	Seasonal variability in the Deep Western Boundary Current around the Eastern tip of Brazil. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2005, 52, 1414-1428.	0.6	10
86	Separation of <sup>3</sup> He and CH <sub>4</sub> signals on the Mid-Atlantic Ridge at 5°N and 51°N. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 5766-5778.	1.6	10
87	Variability of <sup>13</sup> C <sub>org</sub> and <sup>34</sup> S <sub>org</sub> in water transported through Flemish Pass during 1993–2013. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 5514-5533.	1.0	10
88	Modulation of the inflow into the Caribbean Sea by North Brazil Current rings. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2009, 56, 1057-1076.	0.6	9
89	Deepwater Formation. <i>International Geophysics</i> , 2013, 103, 227-253.	0.6	9
90	The Deep Water Regime in the Equatorial Atlantic. , 1996, , 261-271.		8

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91	Strength and variability of the deep limb of the North Atlantic meridional overturning circulation from chlorofluorocarbon inventories. <i>Geophysical Monograph Series</i> , 2007, , 119-130.	0.1	7
92	Variability in the Internal Wave Field Induced by the Atlantic Deep Western Boundary Current at 16°N. <i>Journal of Physical Oceanography</i> , 2014, 44, 492-516.	0.7	7
93	Energy Flux Observations in an Internal Tide Beam in the Eastern North Atlantic. <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 5747-5764.	1.0	7
94	The North Atlantic Current and its Volume and Freshwater Transports in the Subpolar North Atlantic, Time Period 1993–2016. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2020JC016065.	1.0	7
95	Taking a close look at ocean circulation. <i>Science</i> , 2019, 363, 456-457.	6.0	6
96	Pollutants from the Gulf War serve as water mass tracer in the Arabian Sea. <i>Geophysical Research Letters</i> , 1999, 26, 71-74.	1.5	5
97	Volume Transport Time Series and Variability of the North Atlantic Eastern Boundary Current at Goban Spur. <i>Journal of Geophysical Research: Oceans</i> , 2021, 126, e2021JC017393.	1.0	5
98	Measured and modeled CFC distribution of lower North Atlantic Deep Water in the Guiana Basin. <i>Journal of Geophysical Research</i> , 1998, 103, 2831-2847.	3.3	4
99	Trends and Transport Variability of the Circulation in the Subpolar Eastern North Atlantic. <i>Journal of Geophysical Research: Oceans</i> , 2021, 126, e2020JC016693.	1.0	4
100	On the origin and the spreading of the shallow Mediterranean water core in the Iberian basin. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1993, 40, 2167-2177.	0.6	3
101	Time Series of Near-Inertial Gravity Wave Energy Fluxes: The Effect of a Strong Wind Event. <i>Journal of Geophysical Research: Oceans</i> , 2021, 126, e2021JC017472.	1.0	3
102	4.3.2 Available tracers. , 0, , 59-61.		1
103	Observations and Models of Low-Mode Internal Waves in the Ocean. <i>Mathematics of Planet Earth</i> , 2019, , 127-143.	0.1	0