Michael A Spall

List of Publications by Year
in descending order

105 papers	4,153 citations	94433 37 h-index	123424 61 g-index
111 all docs	111 docs citations	111 times ranked	2955 citing authors

#	Article	IF	Citations
1	Wind-forced variability of the zonal overturning circulation. Journal of Physical Oceanography, 2022, , .	1.7	0
2	Temporal Evolution of a Geostrophic Current under Sea Ice: Analytical and Numerical Solutions. Journal of Physical Oceanography, 2022, 52, 1191-1204.	1.7	3
3	Hidden Upwelling Systems Associated With Major Western Boundary Currents. Journal of Geophysical Research: Oceans, 2022, 127, .	2.6	5
4	Observationâ€Based Estimates of Eulerianâ€Mean Boundary Downwelling in the Western Subpolar North Atlantic. Geophysical Research Letters, 2022, 49, .	4.0	3
5	A Three-Dimensional Inertial Model for Coastal Upwelling along Western Boundaries. Journal of Physical Oceanography, 2022, 52, 2431-2444.	1.7	1
6	Origin and Fate of the Chukchi Slope Current Using a Numerical Model and Inâ€Situ Data. Journal of Geophysical Research: Oceans, 2021, 126, e2021JC017291.	2.6	14
7	Physical Controls on the Macrofaunal Benthic Biomass in Barrow Canyon, Chukchi Sea. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC017091.	2.6	4
8	Lateral redistribution of heat and salt in the Nordic Seas. Progress in Oceanography, 2021, 196, 102609.	3.2	9
9	Topographic Influences on the Wind-Driven Exchange between Marginal Seas and the Open Ocean. Journal of Physical Oceanography, 2021, 51, 3663-3678.	1.7	3
10	Wind-Forced Variability of the Remote Meridional Overturning Circulation. Journal of Physical Oceanography, 2020, 50, 455-469.	1.7	3
11	Observational and Modeling Evidence of Seasonal Trends in Sedimentâ€Derived Material Inputs to the Chukchi Sea. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC016007.	2.6	10
12	The Contrasting Dynamics of the Buoyancy-Forced Lofoten and Greenland Basins. Journal of Physical Oceanography, 2020, 50, 1227-1244.	1.7	1
13	Potential Vorticity Dynamics of the Arctic Halocline. Journal of Physical Oceanography, 2020, 50, 2491-2506.	1.7	9
14	Recent Contributions of Theory to Our Understanding of the Atlantic Meridional Overturning Circulation. Journal of Geophysical Research: Oceans, 2019, 124, 5376-5399.	2.6	71
15	Frontogenesis and Variability in Denmark Strait and Its Influence on Overflow Water. Journal of Physical Oceanography, 2019, 49, 1889-1904.	1.7	15
16	Circulation of the Chukchi Sea shelfbreak and slope from moored timeseries. Progress in Oceanography, 2019, 172, 14-33.	3.2	53
17	Structure and Variability of the North Icelandic Jet From Two Years of Mooring Data. Journal of Geophysical Research: Oceans, 2019, 124, 3987-4002.	2.6	8
18	The Iceland Greenland Seas Project. Bulletin of the American Meteorological Society, 2019, 100, 1795-1817.	3.3	21

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19	Dynamics and Thermodynamics of the Mean Transpolar Drift and Ice Thickness in the Arctic Ocean. Journal of Climate, 2019, 32, 8449-8463.	3.2	10
20	Characteristics and dynamics of wind-driven upwelling in the Alaskan Beaufort Sea based on six years of mooring data. Deep-Sea Research Part II: Topical Studies in Oceanography, 2019, 162, 79-92.	1.4	35
21	Ocean convection linked to the recent ice edge retreat along east Greenland. Nature Communications, 2018, 9, 1287.	12.8	48
22	Large Changes in Sea Ice Triggered by Small Changes in Atlantic Water Temperature. Journal of Climate, 2018, 31, 4847-4863.	3.2	10
23	Shelfâ€“Open Ocean Exchange Forced by Wind Jets. Journal of Physical Oceanography, 2018, 48, 163-174.	1.7	3
24	Transport of Pacific Water Into the Canada Basin and the Formation of the Chukchi Slope Current. Journal of Geophysical Research: Oceans, 2018, 123, 7453-7471.	2.6	50
25	Propagation of North Atlantic Deep Water Anomalies. Journal of Physical Oceanography, 2018, 48, 1831-1848.	1.7	3
26	Overturning the Mediterranean Thermohaline Circulation. Geophysical Research Letters, 2018, 45, 8407-8415.	4.0	38
27	Structure and Forcing of Observed Exchanges across the Greenlandâ€“Scotland Ridge. Journal of Climate, 2018, 31, 9881-9901.	3.2	37
28	On the Dynamics and Water Mass Transformation of a Boundary Current Connecting Alpha and Beta Oceans. Journal of Physical Oceanography, 2018, 48, 2457-2475.	1.7	5
29	Sinking of Dense North Atlantic Waters in a Global Ocean Model: Location and Controls. Journal of Geophysical Research: Oceans, 2018, 123, 3563-3576.	2.6	41
30	Eddy Memory Mode of Multidecadal Variability in Residual-Mean Ocean Circulations with Application to the Beaufort Gyre. Journal of Physical Oceanography, 2017, 47, 855-866.	1.7	28
31	Katabatic Windâ€Driven Exchange in Fjords. Journal of Geophysical Research: Oceans, 2017, 122, 8246-8262.	2.6	39
32	Global Ocean Vertical Velocity From a Dynamically Consistent Ocean State Estimate. Journal of Geophysical Research: Oceans, 2017, 122, 8208-8224.	2.6	44
33	Circulation Induced by Isolated Dense Water Formation over Closed Topographic Contours. Journal of Physical Oceanography, 2017, 47, 2251-2265.	1.7	4
34	The North Icelandic Jet and its relationship to the North Icelandic Irminger Current. Journal of Marine Research, 2017, 75, 605-639.	0.3	22
35	Windâ€driven freshwater buildup and release in the Beaufort Gyre constrained by mesoscale eddies. Geophysical Research Letters, 2016, 43, 273-282.	4.0	72
36	Coupled Oceanâ€“Atmosphere Offshore Decay Scale of Cold SST Signals along Upwelling Eastern Boundaries. Journal of Climate, 2016, 29, 8317-8331.	3.2	7

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37	Downfront Winds over Buoyant Coastal Plumes. Journal of Physical Oceanography, 2016, 46, 3139-3154.	1.7	8
38	A Theory of the Wind-Driven Beaufort Gyre Variability. Journal of Physical Oceanography, 2016, 46, 3263-3278.	1.7	44
39	Reply to â€œComments on â€˜The Interaction of an Eastward-Flowing Current and an Island: Sub- and Supercritical Flowâ€™â€•. Journal of Physical Oceanography, 2016, 46, 2267-2268.	1.7	0
40	Thermally Forced Transients in the Thermohaline Circulation. Journal of Physical Oceanography, 2015, 45, 2820-2835.	1.7	4
41	The Interaction of an Eastward-Flowing Current and an Island: Sub- and Supercritical Flow. Journal of Physical Oceanography, 2015, 45, 2806-2819.	1.7	5
42	Influences of Time-Dependent Precipitation on Water Mass Transformation, Heat Fluxes, and Deep Convection in Marginal Seas. Journal of Physical Oceanography, 2015, 45, 1822-1842.	1.7	3
43	Role of shelfbreak upwelling in the formation of a massive under-ice bloom in the Chukchi Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2014, 105, 17-29.	1.4	49
44	Revised circulation scheme north of the Denmark Strait. Deep-Sea Research Part I: Oceanographic Research Papers, 2013, 79, 20-39.	1.4	98
45	On the Circulation of Atlantic Water in the Arctic Ocean. Journal of Physical Oceanography, 2013, 43, 2352-2371.	1.7	49
46	Nonlinear Radiating Instability of a Barotropic Eastern Boundary Current. Journal of Physical Oceanography, 2013, 43, 1439-1452.	1.7	12
47	Interaction of Ekman Layers and Islands. Journal of Physical Oceanography, 2013, 43, 1028-1041.	1.7	9
48	Dynamics of upwelling in the Alaskan Beaufort Sea and associated shelfâ€“basin fluxes. Deep-Sea Research Part I: Oceanographic Research Papers, 2013, 76, 35-51.	1.4	80
49	Dense water formation around islands. Journal of Geophysical Research: Oceans, 2013, 118, 2507-2519.	2.6	11
50	Influences of Precipitation on Water Mass Transformation and Deep Convection. Journal of Physical Oceanography, 2012, 42, 1684-1700.	1.7	21
51	A new mechanism for the generation of quasiâ€zonal jets in the ocean. Geophysical Research Letters, 2012, 39, .	4.0	22
52	The two-layer skirted island. Journal of Marine Research, 2011, 69, 347-382.	0.3	2
53	Upwelling in the Alaskan Beaufort Sea: Atmospheric forcing and local versus non-local response. Progress in Oceanography, 2011, 88, 78-100.	3.2	82
54	Significant role of the North Icelandic Jet in the formation of Denmark Strait overflow water. Nature Geoscience, 2011, 4, 723-727.	12.9	99

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55	On the Role of Eddies and Surface Forcing in the Heat Transport and Overturning Circulation in Marginal Seas. Journal of Climate, 2011, 24, 4844-4858.	3.2	42
56	Onset of time-dependence in a double-gyre circulation: Barotropic basin modes versus classical baroclinic modes. Journal of Marine Research, 2010, 68, 215-236.	0.3	1
57	Dynamics of Downwelling in an Eddy-Resolving Convective Basin. Journal of Physical Oceanography, 2010, 40, 2341-2347.	1.7	52
58	Non-local topographic influences on deep convection: An idealized model for the Nordic Seas. Ocean Modelling, 2010, 32, 72-85.	2.4	41
59	Response to a Steady Poleward Outflow. Part I: The Linear, Quasigeostrophic Problem. Journal of Physical Oceanography, 2009, 39, 1541-1550.	1.7	1
60	Response to a Steady Poleward Outflow. Part II: Oscillations and Eddies. Journal of Physical Oceanography, 2009, 39, 1551-1573.	1.7	1
61	Mechanisms of variability in a convective basin. Journal of Marine Research, 2009, 67, 273-303.	0.3	12
62	Western Arctic Shelfbreak Eddies: Formation and Transport. Journal of Physical Oceanography, 2008, 38, 1644-1668.	1.7	184
63	Lowâ€frequency interaction between horizontal and overturning gyres in the ocean. Geophysical Research Letters, 2008, 35, .	4.0	9
64	Circulation and Exchange in Choked Marginal Seas. Journal of Physical Oceanography, 2008, 38, 2639-2661.	1.7	15
65	Lateral Coupling in Baroclinically Unstable Flows. Journal of Physical Oceanography, 2008, 38, 1267-1277.	1.7	10
66	Radiating Instability of a Meridional Boundary Current. Journal of Physical Oceanography, 2008, 38, 2294-2307.	1.7	32
67	Buoyancy-Forced Downwelling in Boundary Currents. Journal of Physical Oceanography, 2008, 38, 2704-2721.	1.7	19
68	On the effect of a sill on dense water formation in a marginal sea. Journal of Marine Research, 2008, 66, 325-345.	0.3	21
69	Impact of Labrador Sea Convection on the North Atlantic Meridional Overturning Circulation. Journal of Physical Oceanography, 2007, 37, 2207-2227.	1.7	147
70	Midlatitude Wind Stressâ€“Sea Surface Temperature Coupling in the Vicinity of Oceanic Fronts. Journal of Climate, 2007, 20, 3785-3801.	3.2	94
71	Effect of Sea Surface Temperatureâ€“Wind Stress Coupling on Baroclinic Instability in the Ocean. Journal of Physical Oceanography, 2007, 37, 1092-1097.	1.7	33
72	Circulation and water mass transformation in a model of the Chukchi Sea. Journal of Geophysical Research, 2007, 112, .	3.3	103

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73	Boundary Intensification of Vertical Velocity in a Î²-Plane Basin. Journal of Physical Oceanography, 2005, 35, 2487-2500.	1.7	33
74	Reflection and Transmission of Equatorial Rossby Waves*. Journal of Physical Oceanography, 2005, 35, 363-373.	1.7	21
75	Buoyancy-forced circulations in shallow marginal seas. Journal of Marine Research, 2005, 63, 729-752.	0.3	13
76	Boundary Currents and Watermass Transformation in Marginal Seas*. Journal of Physical Oceanography, 2004, 34, 1197-1213.	1.7	145
77	Boundary Current Eddies and Their Role in the Restratification of the Labrador Sea*. Journal of Physical Oceanography, 2004, 34, 1967-1983.	1.7	104
78	Deep convection in the Irminger Sea forced by the Greenland tip jet. Nature, 2003, 424, 152-156.	27.8	226
79	Wind-Driven Recirculations and Exchange in the Labrador and Irminger Seas*. Journal of Physical Oceanography, 2003, 33, 1829-1845.	1.7	57
80	Islands in Zonal Flow*. Journal of Physical Oceanography, 2003, 33, 2689-2701.	1.7	13
81	On the thermohaline circulation in flat bottom marginal seas. Journal of Marine Research, 2003, 61, 1-25.	0.3	39
82	Wind- and buoyancy-forced upper ocean circulation in two-strait marginal seas with application to the Japan/East Sea. Journal of Geophysical Research, 2002, 107, 6-1.	3.3	12
83	Where Does Dense Water Sink? A Subpolar Gyre Example*. Journal of Physical Oceanography, 2001, 31, 810-826.	1.7	112
84	Large-Scale Circulations Forced by Localized Mixing over a Sloping Bottom*. Journal of Physical Oceanography, 2001, 31, 2369-2384.	1.7	33
85	Buoyancy-forced circulations around islands and ridges. Journal of Marine Research, 2000, 58, 957-982.	0.3	34
86	Generation of strong mesoscale eddies by weak ocean gyres. Journal of Marine Research, 2000, 58, 97-116.	0.3	64
87	A simple model of the large-scale circulation of Mediterranean Water and Labrador Sea Water. Deep-Sea Research Part II: Topical Studies in Oceanography, 1999, 46, 181-204.	1.4	8
88	Rossby Normal Modes in Basins with Barriers*. Journal of Physical Oceanography, 1999, 29, 2332-2349.	1.7	30
89	Mesoscale Variability in Denmark Strait: The PV Outflow Hypothesis*. Journal of Physical Oceanography, 1998, 28, 1598-1623.	1.7	121
90	On the Efficiency of Baroclinic Eddy Heat Transport across Narrow Fronts*. Journal of Physical Oceanography, 1998, 28, 2275-2287.	1.7	59

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91	Mid-depth ventilation in the western boundary current system of the sub-polar gyre. Deep-Sea Research Part I: Oceanographic Research Papers, 1997, 44, 1025-1054.	1.4	78
92	Circulation around islands and ridges. Journal of Marine Research, 1997, 55, 1199-1251.	0.3	101
93	Does Stommel's Mixed Layer â€œDemonâ€•Work?. Journal of Physical Oceanography, 1995, 25, 3089-3102.	1.7	119
94	Frontogenesis, subduction, and cross-front exchange at upper ocean fronts. Journal of Geophysical Research, 1995, 100, 2543.	3.3	172
95	Wave-induced abyssal recirculations. Journal of Marine Research, 1994, 52, 1051-1080.	0.3	30
96	Mechanism for low-frequency variability and salt flux in the Mediterranean salt tongue. Journal of Geophysical Research, 1994, 99, 10121.	3.3	25
97	The coherent structures of shallowâ€•water turbulence: Deformationâ€•radius effects, cyclone/anticyclone asymmetry and gravityâ€•wave generation. Chaos, 1994, 4, 177-186.	2.5	117
98	Variability of sea surface salinity in stochastically forced systems. Climate Dynamics, 1993, 8, 151-160.	3.8	13
99	Rotational and gravitational influences on the degree of balance in the shallow-water equations. Geophysical and Astrophysical Fluid Dynamics, 1992, 64, 1-29.	1.2	19
100	A new open ocean, hybrid coordinate primitive equation model. Mathematics and Computers in Simulation, 1989, 31, 241-269.	4.4	44
101	Regional primitive equation modeling and analysis of the polymode data set. Dynamics of Atmospheres and Oceans, 1989, 14, 125-174.	1.8	8
102	Forecasting Gulf Stream meanders and rings. Eos, 1989, 70, 1464.	0.1	24
103	Data assimilation and dynamical interpolation in GULFCAST experiments. Dynamics of Atmospheres and Oceans, 1989, 13, 301-316.	1.8	45
104	Gulf Stream Simulations and the Dynamics of Ring and Meander Processes. Journal of Physical Oceanography, 1988, 18, 1811-1854.	1.7	86
105	Buoyancy-forced circulation and downwelling in marginal seas. , 0, , 118-163.		0