

John L Wilkin

List of Publications by Year in descending order

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100
papers

6,218
citations

76294

40
h-index

71651

76
g-index

103
all docs

103
docs citations

103
times ranked

6193
citing authors

#	ARTICLE	IF	CITATIONS
1	Ocean forecasting in terrain-following coordinates: Formulation and skill assessment of the Regional Ocean Modeling System. <i>Journal of Computational Physics</i> , 2008, 227, 3595-3624.	1.9	1,032
2	Ocean Interpolation by Four-Dimensional Weighted Least Squares—Application to the Waters around Australasia. <i>Journal of Atmospheric and Oceanic Technology</i> , 2002, 19, 1357-1375.	0.5	436
3	Nitrogen cycling in the Middle Atlantic Bight: Results from a three-dimensional model and implications for the North Atlantic nitrogen budget. <i>Global Biogeochemical Cycles</i> , 2006, 20, n/a-n/a.	1.9	378
4	US GODAE: Global Ocean Prediction with the HYbrid Coordinate Ocean Model (HYCOM). <i>Oceanography</i> , 2009, 22, 64-75.	0.5	374
5	A semi-spectral primitive equation ocean circulation model using vertical sigma and orthogonal curvilinear horizontal coordinates. <i>Journal of Computational Physics</i> , 1991, 94, 151-185.	1.9	248
6	The Coupled Boundary Layers and Air–Sea Transfer Experiment in Low Winds. <i>Bulletin of the American Meteorological Society</i> , 2007, 88, 341-356.	1.7	154
7	Denitrification effects on air–sea CO ₂ flux in the coastal ocean: Simulations for the northwest North Atlantic. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	153
8	The Effect of Wind on the Dispersal of the Hudson River Plume. <i>Journal of Physical Oceanography</i> , 2007, 37, 1878-1897.	0.7	140
9	A regional ocean modeling system for the Long-term Ecosystem Observatory. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	111
10	Extracting Multiyear Surface Currents from Sequential Thermal Imagery Using the Maximum Cross-Correlation Technique. <i>Journal of Atmospheric and Oceanic Technology</i> , 2002, 19, 1665-1676.	0.5	102
11	Chesapeake Bay nitrogen fluxes derived from a land–estuarine ocean biogeochemical modeling system: Model description, evaluation, and nitrogen budgets. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 1666-1695.	1.3	97
12	Requirements for a Coastal Hazards Observing System. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	92
13	Ocean currents and the larval phase of Australian western rock lobster, <i>Panulirus cygnus</i> . <i>Marine and Freshwater Research</i> , 2001, 52, 1187.	0.7	89
14	Modeling the Dynamics of Continental Shelf Carbon. <i>Annual Review of Marine Science</i> , 2011, 3, 93-122.	5.1	86
15	Variability and forcing of the East Australian Current. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	82
16	Toward the predictability of meteotsunamis in the Balearic Sea using regional nested atmosphere and ocean models. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	72
17	Seasonal evolution of hydrographic fields in the central Middle Atlantic Bight from glider observations. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	71
18	Scattering of Coastal-Trapped Waves by Irregularities in Coastline and Topography. <i>Journal of Physical Oceanography</i> , 1990, 20, 396-421.	0.7	70

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19	Towards an integrated observation and modeling system in the New York Bight using variational methods. Part I: 4DVAR data assimilation. <i>Ocean Modelling</i> , 2010, 35, 119-133.	1.0	68
20	Oyster mortality in Delaware Bay: Impacts and recovery from Hurricane Irene and Tropical Storm Lee. <i>Estuarine, Coastal and Shelf Science</i> , 2013, 135, 209-219.	0.9	68
21	Simulation of Water Age and Residence Time in New York Bight. <i>Journal of Physical Oceanography</i> , 2010, 40, 965-982.	0.7	67
22	The Summertime Heat Budget and Circulation of Southeast New England Shelf Waters. <i>Journal of Physical Oceanography</i> , 2006, 36, 1997-2011.	0.7	66
23	Use of satellite observations for operational oceanography: recent achievements and future prospects. <i>Journal of Operational Oceanography</i> , 2015, 8, s12-s27.	0.6	64
24	Why Does the Indonesian Throughflow Appear to Originate from the North Pacific?. <i>Journal of Physical Oceanography</i> , 1993, 23, 1087-1098.	0.7	61
25	Trans-Tasman Sea larval transport: Is Australia a source for New Zealand rock lobsters?. <i>Marine Ecology - Progress Series</i> , 2003, 247, 173-182.	0.9	59
26	Quantifying biological carbon export for the northwest North Atlantic continental shelves. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	58
27	An assessment of the skill of real-time models of Mid-Atlantic Bight continental shelf circulation. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 2919-2933.	1.0	57
28	Data assimilation with a local Ensemble Kalman Filter applied to a three-dimensional biological model of the Middle Atlantic Bight. <i>Journal of Marine Systems</i> , 2012, 94, 145-156.	0.9	54
29	What We Have Learned From the Framework for Ocean Observing: Evolution of the Global Ocean Observing System. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	54
30	Eastern US Continental Shelf Carbon Budget: Integrating Models, Data Assimilation, and Analysis. <i>Oceanography</i> , 2008, 21, 86-104.	0.5	52
31	Modeling the dynamics and export of dissolved organic matter in the Northeastern U.S. continental shelf. <i>Estuarine, Coastal and Shelf Science</i> , 2010, 88, 488-507.	0.9	52
32	Eddy kinetic energy and momentum flux in the Southern Ocean: Comparison of a global eddy-resolving model with altimeter, drifter, and current-meter data. <i>Journal of Geophysical Research</i> , 1994, 99, 7903.	3.3	51
33	Modeling the Pathways and Mean Dynamics of River Plume Dispersal in the New York Bight. <i>Journal of Physical Oceanography</i> , 2009, 39, 1167-1183.	0.7	50
34	Abyssal circulation around New Zealand—a comparison between observations and a global circulation model. <i>Marine Geology</i> , 1999, 159, 221-239.	0.9	49
35	Linking Capacity Development to GOOS Monitoring Networks to Achieve Sustained Ocean Observation. <i>Frontiers in Marine Science</i> , 2018, 5, .	1.2	49
36	Characterizing wave- and current- induced bottom shear stress: U.S. middle Atlantic continental shelf. <i>Continental Shelf Research</i> , 2013, 52, 73-86.	0.9	48

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37	Scattering of Continental Shelf Waves at a Discontinuity in Shelf Width. <i>Journal of Physical Oceanography</i> , 1987, 17, 713-724.	0.7	45
38	Mapping mesoscale currents by optimal interpolation of satellite radiometer and altimeter data. <i>Ocean Dynamics</i> , 2002, 52, 95-103.	0.9	45
39	Coastal Ocean Forecasting: system integration and evaluation. <i>Journal of Operational Oceanography</i> , 2015, 8, s127-s146.	0.6	44
40	Dispersal of the Hudson River Plume in the New York Bight: Synthesis of Observational and Numerical Studies During LaTTE. <i>Oceanography</i> , 2008, 21, 148-161.	0.5	43
41	Climatological Mean Circulation at the New England Shelf Break. <i>Journal of Physical Oceanography</i> , 2011, 41, 1874-1893.	0.7	43
42	High-frequency forcing and subtidal response of the Hudson River plume. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	42
43	Recent progress in performance evaluations and near real-time assessment of operational ocean products. <i>Journal of Operational Oceanography</i> , 2015, 8, s221-s238.	0.6	41
44	Interannual variability of the surface summertime eastward jet in the <sc>S</sc>outh <sc>C</sc>hina <sc>S</sc>ea. <i>Journal of Geophysical Research: Oceans</i> , 2014, 119, 7205-7228.	1.0	40
45	Suspended-Sediment Impacts on Light-Limited Productivity in the Delaware Estuary. <i>Estuaries and Coasts</i> , 2017, 40, 977-993.	1.0	40
46	Modes of mesoscale sea surface height and temperature variability in the East Australian Current. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	39
47	Dynamics of turbid buoyant plumes and the feedbacks on near-shore biogeochemistry and physics. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	39
48	Understanding How Disease and Environment Combine to Structure Resistance in Estuarine Bivalve Populations. <i>Oceanography</i> , 2009, 22, 212-231.	0.5	39
49	Modeling the dispersal of eastern oyster (<i>Crassostrea virginica</i>) larvae in Delaware Bay. <i>Journal of Marine Research</i> , 2012, 70, 381-409.	0.3	39
50	Global Perspectives on Observing Ocean Boundary Current Systems. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	39
51	SEASTAR: A Mission to Study Ocean Submesoscale Dynamics and Small-Scale Atmosphere-Ocean Processes in Coastal, Shelf and Polar Seas. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	37
52	Barotropic tides on the southeast New England shelf: A view from a hybrid data assimilative modeling approach. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	36
53	Interannual variability in atmospheric CO ₂ uptake on the northeast U.S. continental shelf. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	34
54	Dissolved organic carbon fluxes in the Middle Atlantic Bight: An integrated approach based on satellite data and ocean model products. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 312-336.	1.3	32

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55	Energetics of swimming to shore in the puerulus stage of a spiny lobster: Can a postlarval lobster afford the cost of crossing the continental shelf?. <i>Limnology & Oceanography Fluids & Environments</i> , 2011, 1, 163-175.	1.7	28
56	Breaking Surface Wave Effects on River Plume Dynamics during Upwelling-Favorable Winds. <i>Journal of Physical Oceanography</i> , 2013, 43, 1959-1980.	0.7	28
57	Satellite Altimetry in Coastal Regions. , 2017, , 343-380.		28
58	Optimal averaging of NOAA/NASA Pathfinder satellite sea surface temperature data. <i>Journal of Geophysical Research</i> , 1998, 103, 12869-12883.	3.3	26
59	Circulation and behavior controls on dispersal of eastern oyster (<i>Crassostrea virginica</i>) larvae in Delaware Bay. <i>Journal of Marine Research</i> , 2012, 70, 411-440.	0.3	26
60	Autonomous and Lagrangian Ocean Observations for Atlantic Tropical Cyclone Studies and Forecasts. <i>Oceanography</i> , 2017, 30, 92-103.	0.5	25
61	Doppio " a ROMS (v3.6)-based circulation model for the Mid-Atlantic Bight and Gulf of Maine: configuration and comparison to integrated coastal observing network observations. <i>Geoscientific Model Development</i> , 2020, 13, 3709-3729.	1.3	25
62	Gulf of Maine salinity variation and its correlation with upstream Scotian Shelf currents at seasonal and interannual time scales. <i>Journal of Geophysical Research: Oceans</i> , 2016, 121, 8585-8607.	1.0	24
63	The formation of a cold-core eddy in the East Australian Current. <i>Continental Shelf Research</i> , 2016, 114, 72-84.	0.9	24
64	An Adjoint Sensitivity Study of Buoyancy- and Wind-Driven Circulation on the New Jersey Inner Shelf. <i>Journal of Physical Oceanography</i> , 2009, 39, 1652-1668.	0.7	23
65	Role of wind in regulating phytoplankton blooms on the Mid-Atlantic Bight. <i>Continental Shelf Research</i> , 2013, 63, S26-S35.	0.9	23
66	Pacific Ocean Heat Transport at 24°N in a High-Resolution Global Model. <i>Journal of Physical Oceanography</i> , 1995, 25, 2204-2214.	0.7	22
67	Variability in the South Pacific Deep Western Boundary Current from current meter observations and a high-resolution global model. <i>Journal of Geophysical Research</i> , 1998, 103, 5439-5457.	3.3	22
68	Circulation and water properties and their relationship to the oyster disease MSX in Delaware Bay. <i>Journal of Marine Research</i> , 2012, 70, 279-308.	0.3	22
69	Impacts of Atmospheric Nitrogen Deposition on Surface Waters of the Western North Atlantic Mitigated by Multiple Feedbacks. <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 8406-8426.	1.0	22
70	Mean circulation of the Mid-Atlantic Bight from a climatological data assimilative model. <i>Ocean Modelling</i> , 2018, 128, 1-14.	1.0	22
71	Predictability of Mesoscale Variability in the East Australian Current Given Strong-Constraint Data Assimilation. <i>Journal of Physical Oceanography</i> , 2012, 42, 1402-1420.	0.7	21
72	The impact of remote sensing observations on cross-shelf transport estimates from 4D-Var analyses of the Mid-Atlantic Bight. <i>Advances in Space Research</i> , 2021, 68, 553-570.	1.2	21

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73	Multiscale multiphysics data-informed modeling for three-dimensional ocean acoustic simulation and prediction. <i>Journal of the Acoustical Society of America</i> , 2019, 146, 1996-2015.	0.5	20
74	Towards an integrated observation and modeling system in the New York Bight using variational methods. Part II: Representer-based observing strategy evaluation. <i>Ocean Modelling</i> , 2010, 35, 134-145.	1.0	19
75	Advancing coastal ocean modelling, analysis, and prediction for the US Integrated Ocean Observing System. <i>Journal of Operational Oceanography</i> , 2017, 10, 115-126.	0.6	18
76	Interannual and seasonal variabilities in air-sea CO ₂ fluxes along the U.S. eastern continental shelf and their sensitivity to increasing air temperatures and variable winds. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 295-311.	1.3	17
77	A numerical modeling study of the East Australian Current encircling and overwashing a warm-core eddy. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 301-315.	1.0	16
78	Air-Sea-Land Forcing in the Gulf of Tonkin: Assessing Seasonal Variability Using Modern Tools. <i>Oceanography</i> , 2019, 32, 150-161.	0.5	14
79	Estuarine Dissolved Organic Carbon Flux From Space: With Application to Chesapeake and Delaware Bays. <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 3755-3778.	1.0	14
80	Ocean Circulation Causes Strong Variability in the Mid-Atlantic Bight Nitrogen Budget. <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 113-134.	1.0	14
81	A Coastal Ocean Forecast System for U.S. Mid-Atlantic Bight and Gulf of Maine. , 0, , .		12
82	Evolving the Physical Global Ocean Observing System for Research and Application Services Through International Coordination. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	11
83	Observation impacts on the Mid-Atlantic Bight front and cross-shelf transport in 4D-Var ocean state estimates: Part I – Multiplatform analysis. <i>Ocean Modelling</i> , 2020, 156, 101721.	1.0	10
84	An application of the capacitance matrix method to accommodate masked land areas and island circulations in a primitive equation ocean model. <i>International Journal for Numerical Methods in Fluids</i> , 1995, 20, 649-662.	0.9	9
85	Examining the Accuracy of GlobCurrent Upper Ocean Velocity Data Products on the Northwestern Atlantic Shelf. <i>Remote Sensing</i> , 2018, 10, 1205.	1.8	9
86	Observation impacts on the Mid-Atlantic Bight front and cross-shelf transport in 4D-Var ocean state estimates: Part II – The Pioneer Array. <i>Ocean Modelling</i> , 2021, 157, 101731.	1.0	9
87	Issues and progress in the prediction of ocean submesoscale features and internal waves. , 2014, , .		8
88	The Impact of Wind Forcing on the Thermal Wind Shear of A River Plume. <i>Journal of Geophysical Research: Oceans</i> , 2019, 124, 7908-7925.	1.0	8
89	Integrating Coastal Models and Observations for Studies of Ocean Dynamics, Observing Systems and Forecasting. , 2011, , 487-512.		7
90	ROMSPath v1.0: offline particle tracking for the Regional Ocean Modeling System (ROMS). <i>Geoscientific Model Development</i> , 2022, 15, 4297-4311.	1.3	6

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91	Process-driven improvements to hurricane intensity and storm surge forecasts in the mid-atlantic bight: Lessons learned from hurricanes irene and sandy. , 2013, , .		5
92	Data assimilation in coastal oceanography. , 2014, , 555-576.		5
93	Estuarine retention of larvae: Contrasting effects of behavioral responses to turbulence and waves. Limnology and Oceanography, 2022, 67, 992-1005.	1.6	5
94	An Integral View of the Gulf of Tonkin Seasonal Dynamics. Journal of Geophysical Research: Oceans, 2022, 127, .	1.0	5
95	Four-Dimensional Variational Assimilation of Satellite Temperature and Sea Level Data in the Coastal Ocean and Adjacent Deep Sea. , 2008, , .		3
96	Evaluating the Extent of North Atlantic Deep Water and the Mean Atlantic $\hat{1}$ 3 C From Statistical Reconstructions. Paleoceanography and Paleoclimatology, 2019, 34, 1022-1036.	1.3	2
97	Corrigendum to: Ocean currents and the larval phase of Australian western rock lobster, <i>Panulirus cygnus</i> . Marine and Freshwater Research, 2002, 53, 731.	0.7	2
98	Assessing the performance of an ocean observing, analysis and forecast System for the Mid-Atlantic Bight using array modes. Ocean Modelling, 2021, 164, 101821.	1.0	1
99	Ocean Forecast and Analysis Models for Coastal Observatories. , 2006, , 549-572.		1
100	Comment on "The Scattering of a Continental Shelf Wave by a Long Thin Barrier Lying Parallel to the Coast. Journal of Physical Oceanography, 1988, 18, 389-393.	0.7	0