Jonathan D Nash

List of Publications by Year
in descending order

108 papers	8,040 citations	36303 51 h-index	49909 87 g-index
110 all docs	110 docs citations	110 times ranked	4525 citing authors

#	Article	IF	Citations
1	The formation and fate of internal waves in the South China Sea. Nature, 2015, 521, 65-69.	27.8	487
2	Global Patterns of Diapycnal Mixing from Measurements of the Turbulent Dissipation Rate. Journal of Physical Oceanography, 2014, 44, 1854-1872.	1.7	392
3	From Tides to Mixing Along the Hawaiian Ridge. Science, 2003, 301, 355-357.	12.6	312
4	Near-Inertial Internal Gravity Waves in the Ocean. Annual Review of Marine Science, 2016, 8, 95-123.	11.6	277
5	Climate Process Team on Internal Waveâ€“Driven Ocean Mixing. Bulletin of the American Meteorological Society, 2017, 98, 2429-2454.	3.3	235
6	On the Future of Argo: A Global, Full-Depth, Multi-Disciplinary Array. Frontiers in Marine Science, 2019, 6, .	2.5	235
7	River plumes as a source of large-amplitude internal waves in the coastal ocean. Nature, 2005, 437, 400-403.	27.8	229
8	Internal Tide Reflection and Turbulent Mixing on the Continental Slope. Journal of Physical Oceanography, 2004, 34, 1117-1134.	1.7	223
9	Energy Flux and Dissipation in Luzon Strait: Two Tales of Two Ridges. Journal of Physical Oceanography, 2011, 41, 2211-2222.	1.7	222
10	Estimating Internal Wave Energy Fluxes in the Ocean. Journal of Atmospheric and Oceanic Technology, 2005, 22, 1551-1570.	1.3	220
11	An Estimate of Tidal Energy Lost to Turbulence at the Hawaiian Ridge. Journal of Physical Oceanography, 2006, 36, 1148-1164.	1.7	187
12	Shallow Water '06: A Joint Acoustic Propagation/Nonlinear Internal Wave Physics Experiment. Oceanography, 2007, 20, 156-167.	1.0	151
13	Observations of Boundary Mixing over the Continental Slope. Journal of Physical Oceanography, 2002, 32, 2113-2130.	1.7	145
14	Energy Transport by Nonlinear Internal Waves. Journal of Physical Oceanography, 2007, 37, 1968-1988.	1.7	144
15	Distributed subglacial discharge drives significant submarine melt at a Greenland tidewater glacier. Geophysical Research Letters, 2015, 42, 9328-9336.	4.0	140
16	River Influences on Shelf Ecosystems: Introduction and synthesis. Journal of Geophysical Research, 2010, 115, .	3.3	135
17	Internal hydraulic flows on the continental shelf: High drag states over a small bank. Journal of Geophysical Research, 2001, 106, 4593-4611.	3.3	129
18	Structure of the Baroclinic Tide Generated at Kaena Ridge, Hawaii. Journal of Physical Oceanography, 2006, 36, 1123-1135.	1.7	120

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19	Sea surface cooling at the Equator by subsurface mixing in tropical instability waves. Nature Geoscience, 2009, 2, 761-765.	12.9	111
20	Internalâ€tide generation and destruction by shoaling internal tides. Geophysical Research Letters, 2010, 37, .	4.0	110
21	Seasonal sea surface cooling in the equatorial Pacific cold tongue controlled by ocean mixing. Nature, 2013, 500, 64-67.	27.8	104
22	Hotspots of deep ocean mixing on the Oregon continental slope. Geophysical Research Letters, 2007, 34, .	4.0	103
23	Modeling Turbulent Subglacial Meltwater Plumes: Implications for Fjord-Scale Buoyancy-Driven Circulation. Journal of Physical Oceanography, 2015, 45, 2169-2185.	1.7	98
24	The impact of glacier geometry on meltwater plume structure and submarine melt in Greenland fjords. Geophysical Research Letters, 2016, 43, 9739-9748.	4.0	97
25	Mixing Measurements on an Equatorial Ocean Mooring. Journal of Atmospheric and Oceanic Technology, 2009, 26, 317-336.	1.3	95
26	Three-Dimensional Double-Ridge Internal Tide Resonance in Luzon Strait. Journal of Physical Oceanography, 2014, 44, 850-869.	1.7	92
27	Internal Tides and Turbulence along the 3000-m Isobath of the Hawaiian Ridge. Journal of Physical Oceanography, 2006, 36, 1165-1183.	1.7	91
28	Observations of Polarity Reversal in Shoaling Nonlinear Internal Waves. Journal of Physical Oceanography, 2009, 39, 691-701.	1.7	91
29	The Unpredictable Nature of Internal Tides on Continental Shelves. Journal of Physical Oceanography, 2012, 42, 1981-2000.	1.7	91
30	The LatMix Summer Campaign: Submesoscale Stirring in the Upper Ocean. Bulletin of the American Meteorological Society, 2015, 96, 1257-1279.	3.3	88
31	Geometric Controls on Tidewater Glacier Retreat in Central Western Greenland. Journal of Geophysical Research F: Earth Surface, 2018, 123, 2024-2038.	2.8	86
32	Structure and dynamics of the Columbia River tidal plume front. Journal of Geophysical Research, 2010, 115, .	3.3	84
33	Narrowband Oscillations in the Upper Equatorial Ocean. Part II: Properties of Shear Instabilities. Journal of Physical Oceanography, 2011, 41, 412-428.	1.7	83
34	Are Any Coastal Internal Tides Predictable?. Oceanography, 2012, 25, 80-95.	1.0	83
35	Topographically Induced Drag and Mixing at a Small Bank on the Continental Shelf. Journal of Physical Oceanography, 2000, 30, 2049-2054.	1.7	80
36	Microstructure Estimates of Turbulent Salinity Flux and the Dissipation Spectrum of Salinity. Journal of Physical Oceanography, 2002, 32, 2312-2333.	1.7	79

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37	Direct observations of submarine melt and subsurface geometry at a tidewater glacier. Science, 2019, 365, 369-374.	12.6	77
38	Inland thinning on the Greenland ice sheet controlled by outlet glacier geometry. Nature Geoscience, 2017, 10, 366-369.	12.9	74
39	Mode 2 waves on the continental shelf: Ephemeral components of the nonlinear internal wavefield. Journal of Geophysical Research, 2010, 115, .	3.3	70
40	ASIRI: An Oceanâ€"Atmosphere Initiative for Bay of Bengal. Bulletin of the American Meteorological Society, 2016, 97, 1859-1884.	3.3	69
41	Differential Diffusion in Breaking Kelvinâ€"Helmholtz Billows. Journal of Physical Oceanography, 2005, 35, 1004-1022.	1.7	68
42	The geography of semidiurnal modeâ€1 internalâ€tide energy loss. Geophysical Research Letters, 2013, 40, 4689-4693.	4.0	67
43	Energy transformations and dissipation of nonlinear internal waves over New Jersey's continental shelf. Nonlinear Processes in Geophysics, 2010, 17, 345-360.	1.3	64
44	Nearâ€glacier surveying of a subglacial discharge plume: Implications for plume parameterizations. Geophysical Research Letters, 2017, 44, 6886-6894.	4.0	63
45	Buoyant Surface Discharges into Water Bodies. I: Flow Classification and Prediction Methodology. Journal of Hydraulic Engineering, 2007, 133, 1010-1020.	1.5	62
46	Internalâ€tide energy over topography. Journal of Geophysical Research, 2010, 115, .	3.3	61
47	Nonlinear internal waves over New Jersey's continental shelf. Journal of Geophysical Research, 2011, 116, .	3.3	60
48	The Cascade of Tidal Energy from Low to High Modes on a Continental Slope. Journal of Physical Oceanography, 2012, 42, 1217-1232.	1.7	59
49	Structure and composition of a strongly stratified, tidally pulsed river plume. Journal of Geophysical Research, 2009, 114, .	3.3	58
50	Observations of Internal Tides on the Oregon Continental Slope. Journal of Physical Oceanography, 2011, 41, 1772-1794.	1.7	55
51	Subglacial dischargeâ€driven renewal of tidewater glacier fjords. Journal of Geophysical Research: Oceans, 2017, 122, 6611-6629.	2.6	55
52	Internal Tide Convergence and Mixing in a Submarine Canyon. Journal of Physical Oceanography, 2017, 47, 303-322.	1.7	52
53	Vertical heat flux and lateral mass transport in nonlinear internal waves. Geophysical Research Letters, 2010, 37, .	4.0	51
54	Narrowband Oscillations in the Upper Equatorial Ocean. Part I: Interpretation as Shear Instabilities. Journal of Physical Oceanography, 2011, 41, 397-411.	1.7	50

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55	An examination of the radiative and dissipative properties of deep ocean internal tides. Deep-Sea Research Part II: Topical Studies in Oceanography, 2004, 51, 3029-3042.	1.4	49
56	Structure and Variability of Internal Tides in Luzon Strait. Journal of Physical Oceanography, 2015, 45, 1574-1594.	1.7	48
57	Adrift Upon a Salinity-Stratified Sea: A View of Upper-Ocean Processes in the Bay of Bengal During the Southwest Monsoon. Oceanography, 2016, 29, 134-145.	1.0	48
58	Self-organized criticality in geophysical turbulence. Scientific Reports, 2019, 9, 3747.	3.3	48
59	Contrasts in the response of adjacent fjords and glaciers to ice-sheet surface melt in West Greenland. Annals of Glaciology, 2016, 57, 25-38.	1.4	46
60	Meltwater Intrusions Reveal Mechanisms for Rapid Submarine Melt at a Tidewater Glacier. Geophysical Research Letters, 2020, 47, e2019GL085335.	4.0	44
61	Diagnosing a partly standing internal wave in Mamala Bay, Oahu. Geophysical Research Letters, 2007, 34, .	4.0	42
62	Submesoscale Processes at Shallow Salinity Fronts in the Bay of Bengal: Observations during the Winter Monsoon. Journal of Physical Oceanography, 2018, 48, 479-509.	1.7	42
63	The Interplay Between Submesoscale Instabilities and Turbulence in the Surface Layer of the Bay of Bengal. Oceanography, 2016, 29, 146-157.	1.0	39
64	Reflection of Linear Internal Tides from Realistic Topography: The Tasman Continental Slope. Journal of Physical Oceanography, 2016, 46, 3321-3337.	1.7	39
65	Reconciling Drivers of Seasonal Terminus Advance and Retreat at 13 Central West Greenland Tidewater Glaciers. Journal of Geophysical Research F: Earth Surface, 2018, 123, 1590-1607.	2.8	39
66	Seafloor Pressure Measurements of Nonlinear Internal Waves. Journal of Physical Oceanography, 2008, 38, 481-491.	1.7	38
67	Internal Bores and Breaking Internal Tides on the Oregon Continental Slope. Journal of Physical Oceanography, 2013, 43, 120-139.	1.7	36
68	A Tale of Two Spicy Seas. Oceanography, 2016, 29, 50-61.	1.0	35
69	Breaking Internal Tides Keep the Ocean in Balance. Eos, 2015, 96, .	0.1	35
70	The role of turbulence stress divergence in decelerating a river plume. Journal of Geophysical Research, 2012, 117, .	3.3	34
71	Mixing to Monsoons: Air-Sea Interactions in the Bay of Bengal. Eos, 2014, 95, 269-270.	0.1	33
72	Small-Scale Processes in the Coastal Ocean. Oceanography, 2008, 21, 22-33.	1.0	32

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73	A Coupled Model for Laplace's Tidal Equations in a Fluid with One Horizontal Dimension and Variable Depth. Journal of Physical Oceanography, 2013, 43, 1780-1797.	1.7	32
74	Ocean Turbulence and Mixing Around Sri Lanka and in Adjacent Waters of the Northern Bay of Bengal. Oceanography, 2016, 29, 170-179.	1.0	30
75	Tidally Driven Processes Leading to Near-Field Turbulence in a Channel at the Crest of the Mendocino Escarpment. Journal of Physical Oceanography, 2016, 46, 1137-1155.	1.7	29
76	The Direct Breaking of Internal Waves at Steep Topography. Oceanography, 2012, 25, 150-159.	1.0	28
77	Pollutant Transport and Mixing Zone Simulation of Sediment Density Currents. Journal of Hydraulic Engineering, 2004, 130, 349-359.	1.5	25
78	The Influence of Subinertial Internal Tides on Near-Topographic Turbulence at the Mendocino Ridge: Observations and Modeling. Journal of Physical Oceanography, 2017, 47, 2139-2154.	1.7	25
79	Energy and Momentum Lost to Wake Eddies and Lee Waves Generated by the North Equatorial Current and Tidal Flows at Peleliu, Palau. Oceanography, 2019, 32, 110-125.	1.0	24
80	Large scale planar laser induced fluorescence in turbulent density-stratified flows. Experiments in Fluids, 1995, 19, 297-304.	2.4	22
81	Measurement of Tidal Form Drag Using Seafloor Pressure Sensors. Journal of Physical Oceanography, 2013, 43, 1150-1172.	1.7	22
82	Particle resuspension in the Columbia River plume near field. Journal of Geophysical Research, 2009, 114, .	3.3	21
83	Rapid sediment removal from the Columbia River plume near field. Continental Shelf Research, 2012, 35, 16-28.	1.8	20
84	Frequency Shift of Near-Inertial Waves in the South China Sea. Journal of Physical Oceanography, 2020, 50, 1121-1135.	1.7	20
85	Buoyant surface discharges into unsteady ambient flows. Dynamics of Atmospheres and Oceans, 1996, 24, 75-84.	1.8	18
86	Distinct Frontal Ablation Processes Drive Heterogeneous Submarine Terminus Morphology. Geophysical Research Letters, 2019, 46, 12083-12091.	4.0	18
87	Topographic Form Drag on Tides and Low-Frequency Flow: Observations of Nonlinear Lee Waves over a Tall Submarine Ridge near Palau. Journal of Physical Oceanography, 2020, 50, 1489-1507.	1.7	18
88	Controls on Turbulent Mixing in a Strongly Stratified and Sheared Tidal River Plume. Journal of Physical Oceanography, 2016, 46, 2373-2388.	1.7	17
89	Ocean front detection and tracking using a team of heterogeneous marine vehicles. Journal of Field Robotics, 2021, 38, 854-881.	6.0	16
90	Observations of the Tasman Sea Internal Tide Beam. Journal of Physical Oceanography, 2018, 48, 1283-1297.	1.7	15

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91	Tracking icebergs with time-lapse photography and sparse optical flow, LeConte Bay, Alaska, 2016â€“2017. Journal of Glaciology, 2019, 65, 195-211.	2.2	15
92	Subannual and Seasonal Variability of Atlanticâ€Origin Waters in Two Adjacent West Greenland Fjords. Journal of Geophysical Research: Oceans, 2018, 123, 6670-6687.	2.6	14
93	Turbulence and highâ€frequency variability in a deep gravity current outflow. Geophysical Research Letters, 2012, 39, .	4.0	13
94	Autonomous CTD Profiling from the Robotic Oceanographic Surface Sampler. Oceanography, 2017, 30, 110-112.	1.0	12
95	How Spice is Stirred in the Bay of Bengal. Journal of Physical Oceanography, 2020, 50, 2669-2688.	1.7	12
96	Formation, flow and break-up of ephemeral ice mÃ©lange at LeConte Glacier and Bay, Alaska. Journal of Glaciology, 2020, 66, 577-590.	2.2	11
97	Subglacial Discharge Reflux and Buoyancy Forcing Drive Seasonality in a Silled Glacial Fjord. Journal of Geophysical Research: Oceans, 2022, 127, .	2.6	11
98	Topographic control on the nascent Mediterranean outflow. Geo-Marine Letters, 2011, 31, 301-314.	1.1	10
99	Stratification and mixing regimes in biological thin layers over the Mid-Atlantic Bight. Limnology and Oceanography, 2014, 59, 1349-1363.	3.1	10
100	Eddies, Topography, and the Abyssal Flow by the Kyushu-Palau Ridge Near Velasco Reef. Oceanography, 2019, 32, 46-55.	1.0	10
101	The role of turbulence and internal waves in the structure and evolution of a near-field river plume. Ocean Science, 2020, 16, 799-815.	3.4	9
102	Multi-platform observations of small-scale lateral mixed layer variability in the northern Bay of Bengal. Deep-Sea Research Part II: Topical Studies in Oceanography, 2019, 168, 104629.	1.4	7
103	New technological frontiers in ocean mixing. , 2022, , 345-361.		4
104	Measuring Ocean Turbulence. Springer Oceanography, 2018, , 99-122.	0.3	3
105	Abyssal Heat Budget in the Southwest Pacific Basin. Journal of Physical Oceanography, 2021, , .	1.7	3
106	Reply to comment by T. Gerkema on â€œInternal-tide energy over topographyâ€. Journal of Geophysical Research, 2011, 116, .	3.3	2
107	Mechanisms of Lateral Spreading in a Near-Field Buoyant River Plume Entering a Fjord. Frontiers in Marine Science, 2021, 8, .	2.5	0
108	Local winds and encroaching currents drive summertime subsurface blooms over a narrow shelf. Limnology and Oceanography, 0, , .	3.1	0