

# Donald R Webster

## List of Publications by Year in descending order

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51  
papers

1,348  
citations

279701

23  
h-index

345118

36  
g-index

51  
all docs

51  
docs citations

51  
times ranked

988  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chemosensory guidance cues in a turbulent chemical odor plume. <i>Limnology and Oceanography</i> , 2001, 46, 1034-1047.	1.6	139
2	Turbulence characteristics of a boundary layer over a two-dimensional bump. <i>Journal of Fluid Mechanics</i> , 1996, 320, 53.	1.4	81
3	Simultaneous DPTV/PLIF measurements of a turbulent jet. <i>Experiments in Fluids</i> , 2001, 30, 65-72.	1.1	79
4	Quantitative analysis of tethered and free-swimming copepodid flow fields. <i>Journal of Experimental Biology</i> , 2007, 210, 299-310.	0.8	70
5	Response of copepods to physical gradients associated with structure in the ocean. <i>Limnology and Oceanography</i> , 2005, 50, 1552-1564.	1.6	58
6	Bed roughness effects on boundary layer turbulence and consequences for odor tracking behavior of blue crabs ( <i>Callinectes sapidus</i> ). <i>Limnology and Oceanography</i> , 2007, 52, 1883-1897.	1.6	49
7	On the usefulness of bilateral comparison to tracking turbulent chemical odor plumes. <i>Limnology and Oceanography</i> , 2001, 46, 1048-1053.	1.6	48
8	Getting ahead: context-dependent responses to odorant filaments drive along-stream progress during odor tracking in blue crabs. <i>Journal of Experimental Biology</i> , 2011, 214, 1498-1512.	0.8	48
9	Analysis of the flow field of the krill, <i>Euphausia pacifica</i> . <i>Marine and Freshwater Behaviour and Physiology</i> , 2003, 36, 307-319.	0.4	47
10	The effect of bed roughness on scalar fluctuations in turbulent boundary layers. <i>Experiments in Fluids</i> , 2005, 38, 372-384.	1.1	47
11	Fluid mechanics produces conflicting constraints during olfactory navigation of blue crabs, <i>Callinectes sapidus</i> . <i>Journal of Experimental Biology</i> , 2003, 206, 171-180.	0.8	46
12	Metachronal swimming in Antarctic krill: gait kinematics and system design. <i>Marine Biology</i> , 2011, 158, 2541-2554.	0.7	46
13	Laser-Induced Fluorescence Measurements of a Turbulent Plume. <i>Journal of Engineering Mechanics - ASCE</i> , 2003, 129, 1130-1137.	1.6	45
14	Staying the course: chemical signal spatial properties and concentration mediate cross-stream motion in turbulent plumes. <i>Journal of Experimental Biology</i> , 2011, 214, 1513-1522.	0.8	42
15	The hydrodynamic disturbances of two species of krill: implications for aggregation structure. <i>Journal of Experimental Biology</i> , 2011, 214, 1845-1856.	0.8	40
16	A novel laboratory apparatus for simulating isotropic oceanic turbulence at low Reynolds number. <i>Limnology and Oceanography: Methods</i> , 2004, 2, 1-12.	1.0	38
17	The hydrodynamics of hovering in Antarctic krill. <i>Limnology &amp; Oceanography Fluids &amp; Environments</i> , 2013, 3, 240-255.	1.7	38
18	Jet pinch-off and drop formation in immiscible liquid-liquid systems. <i>Experiments in Fluids</i> , 2001, 30, 47-56.	1.1	36

#	ARTICLE	IF	CITATIONS
19	Bioinspired algorithm for autonomous sensor-driven guidance in turbulent chemical plumes. <i>Bioinspiration and Biomimetics</i> , 2012, 7, 036023.	1.5	35
20	Turbulence characteristics of a boundary layer over a swept bump. <i>Journal of Fluid Mechanics</i> , 1996, 323, 1-22.	1.4	34
21	Underwater flight by the planktonic sea butterfly. <i>Journal of Experimental Biology</i> , 2016, 219, 535-543.	0.8	34
22	Experiments on Lagrangian transport in steady vortex-breakdown bubbles in a confined swirling flow. <i>Journal of Fluid Mechanics</i> , 2002, 466, 215-248.	1.4	32
23	The prevalence and implications of copepod behavioral responses to oceanographic gradients and biological patchiness. <i>Integrative and Comparative Biology</i> , 2007, 47, 831-846.	0.9	28
24	Sensory-Motor Systems of Copepods involved in their Escape from Suction Feeding. <i>Integrative and Comparative Biology</i> , 2015, 55, 121-133.	0.9	21
25	Three-dimensional odorant concentration measurements around actively tracking blue crabs. <i>Limnology and Oceanography: Methods</i> , 2009, 7, 96-108.	1.0	17
26	Portable tomographic PIV measurements of swimming shelled Antarctic pteropods. <i>Experiments in Fluids</i> , 2016, 57, 1.	1.1	17
27	The Three Dimensional Spatial Structure of Antarctic Krill Schools in the Laboratory. <i>Scientific Reports</i> , 2019, 9, 381.	1.6	13
28	Characterization of hop-and-sink daphniid locomotion. <i>Journal of Plankton Research</i> , 2019, 41, 142-153.	0.8	13
29	The geometric properties of high-Schmidt-number passive scalar iso-surfaces in turbulent boundary layers. <i>Journal of Fluid Mechanics</i> , 2007, 588, 253-277.	1.4	12
30	Characteristics of swimming shelled Antarctic pteropods ( <i>Limacina helicina antarctica</i> ) at intermediate Reynolds number regime. <i>Physical Review Fluids</i> , 2019, 4, .	1.0	12
31	Spatial and temporal variation in the hydrodynamic landscape in intertidal salt marsh systems. <i>Limnology &amp; Oceanography Fluids &amp; Environments</i> , 2013, 3, 156-172.	1.7	11
32	Virtual Plume. <i>Electroanalysis</i> , 2000, 12, 974-979.	1.5	9
33	Copepods's Response to Burgers' Vortex: Deconstructing Interactions of Copepods with Turbulence. <i>Integrative and Comparative Biology</i> , 2015, 55, 706-718.	0.9	9
34	A laboratory realization of the Burgers' vortex cartoon of turbulence-plankton interactions. <i>Limnology and Oceanography: Methods</i> , 2015, 13, 92-102.	1.0	8
35	The effect of fluid viscosity, habitat temperature, and body size on the flow disturbance of <i>Euchaeta</i> . <i>Limnology &amp; Oceanography Fluids &amp; Environments</i> , 2012, 2, 80-92.	1.7	6
36	A bio-inspired plume tracking algorithm for mobile sensing swarms in turbulent flow. , 2013, , .		6

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37	Copepod avoidance of thin chemical layers of harmful algal compounds. <i>Limnology and Oceanography</i> , 2018, 63, 1041-1055.	1.6	6
38	Multipoint correlations of concentration fluctuations in a turbulent passive scalar field. <i>Experiments in Fluids</i> , 2008, 44, 719-732.	1.1	5
39	The hydrodynamics of surface tidal flow exchange in saltmarshes. <i>Estuarine, Coastal and Shelf Science</i> , 2016, 172, 128-137.	0.9	4
40	Dual Phase-Shifted Ipsilateral Metachrony in <i>Americamysis bahia</i> . <i>Integrative and Comparative Biology</i> , 2021, 61, 1644-1657.	0.9	4
41	Copepod Behavior Responses Around Internal Waves. <i>Frontiers in Marine Science</i> , 2020, 7, .	1.2	3
42	The response of the copepod <i>Acartia tonsa</i> to the hydrodynamic cues of small-scale, dissipative eddies in turbulence. <i>Journal of Experimental Biology</i> , 2021, 224, .	0.8	3
43	Structure and mixing of a meandering turbulent chemical plume: turbulent mixing and eddy diffusivity. <i>Experiments in Fluids</i> , 2022, 63, 1.	1.1	2
44	Copepod interaction with small-scale, dissipative eddies in turbulence: Comparison among three marine species. <i>Limnology and Oceanography</i> , 2022, 67, 1820-1835.	1.6	2
45	Trends in Stroke Kinematics, Reynolds Number, and Swimming Mode in Shrimp-Like Organisms. <i>Integrative and Comparative Biology</i> , 0, , .	0.9	2
46	The effect of three-dimensional on a laminarizing boundary layer. <i>Physics of Fluids</i> , 1995, 7, 1782-1784.	1.6	1
47	Scalar power spectra and turbulent scalar length scales of high-Schmidt-number passive scalar fields in turbulent boundary layers. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	1
48	Structure and mixing of a meandering turbulent chemical plume: concentration and velocity fields. <i>Experiments in Fluids</i> , 2021, 62, 1.	1.1	1
49	Characteristics of Turbulent Plumes Using PLIF Technique. , 2000, , 1.		0
50	Structure of Turbulent Chemical Plumes. , 2006, , 109-129.		0
51	Assessment of single-instrument techniques for removing wave bias from Reynolds stress estimates. <i>Limnology and Oceanography: Methods</i> , 2018, 16, 35-50.	1.0	0