

# Greg Ivey

## List of Publications by Year in descending order

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146  
papers

5,979  
citations

94381

37  
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82499

72  
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151  
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151  
docs citations

151  
times ranked

3398  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mean and Turbulent Characteristics of a Bottom Mixing Layer Forced by a Strong Surface Tide and Large Amplitude Internal Waves. <i>Journal of Geophysical Research: Oceans</i> , 2022, 127, .	1.0	6
2	Roles of Shear and Convection in Driving Mixing in the Ocean. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL089455.	1.5	7
3	The potential role of turbulence in modulating the migration of demersal zooplankton. <i>Limnology and Oceanography</i> , 2021, 66, 855-864.	1.6	9
4	Confronting Grand Challenges in environmental fluid mechanics. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	37
5	Directional decomposition of internal tides propagating from multiple generation sites. <i>Ocean Modelling</i> , 2021, 162, 101801.	1.0	10
6	A Seasonal Harmonic Model for Internal Tide Amplitude Prediction. <i>Journal of Geophysical Research: Oceans</i> , 2021, 126, e2021JC017570.	1.0	5
7	Investigating transport in a tidally driven coral atoll flow using Lagrangian coherent structures. <i>Limnology and Oceanography</i> , 2021, 66, 4017-4027.	1.6	4
8	Calibrated Suspended Sediment Observations Beneath Large Amplitude Nonlinear Internal Waves. <i>Journal of Geophysical Research: Oceans</i> , 2021, 126, e2021JC017538.	1.0	5
9	On predicting particle capture rates in aquatic ecosystems. <i>PLoS ONE</i> , 2021, 16, e0261400.	1.1	0
10	Mixing Driven by Breaking Nonlinear Internal Waves. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089591.	1.5	22
11	Uncovering Fine-Scale Wave-Driven Transport Features in a Fringing Coral Reef System via Lagrangian Coherent Structures. <i>Fluids</i> , 2020, 5, 190.	0.8	2
12	Observations of Enhanced Sediment Transport by Nonlinear Internal Waves. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088499.	1.5	25
13	Observations of Diurnal Coastal-Trapped Waves with a Thermocline-Intensified Velocity Field. <i>Journal of Physical Oceanography</i> , 2019, 49, 1973-1994.	0.7	7
14	Generation and Propagation of Near-Inertial Waves in a Baroclinic Current on the Tasmanian Shelf. <i>Journal of Physical Oceanography</i> , 2019, 49, 2653-2667.	0.7	7
15	Cylinder wakes in shallow oscillatory flow: the coastal island wake problem. <i>Journal of Fluid Mechanics</i> , 2019, 874, 158-184.	1.4	7
16	The Effects of Remote Internal Tides on Continental Slope Internal Tide Generation. <i>Journal of Physical Oceanography</i> , 2019, 49, 1651-1668.	0.7	9
17	Uncertainty Quantification of Density and Stratification Estimates with Implications for Predicting Ocean Dynamics. <i>Journal of Atmospheric and Oceanic Technology</i> , 2019, 36, 1313-1330.	0.5	4
18	Three-dimensionality of shallow island wakes. <i>Environmental Fluid Mechanics</i> , 2019, 19, 1393-1416.	0.7	4

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19	Observations of Large-Amplitude Mode-2 Nonlinear Internal Waves on the Australian North West Shelf. <i>Journal of Physical Oceanography</i> , 2019, 49, 309-328.	0.7	31
20	Nutrient fluxes into an isolated coral reef atoll by tidally driven internal bores. <i>Limnology and Oceanography</i> , 2019, 64, 461-473.	1.6	23
21	Contrasting Heat Budget Dynamics During Two La Niña Marine Heat Wave Events Along Northwestern Australia. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 1563-1581.	1.0	11
22	Determining Near-Bottom Fluxes of Passive Tracers in Aquatic Environments. <i>Geophysical Research Letters</i> , 2018, 45, 2716-2725.	1.5	4
23	A Model for Mass Transport Across the Sediment-Water Interface. <i>Water Resources Research</i> , 2018, 54, 2799-2812.	1.7	39
24	Resolving high-frequency internal waves generated at an isolated coral atoll using an unstructured grid ocean model. <i>Ocean Modelling</i> , 2018, 122, 67-84.	1.0	20
25	Quantifying Diapycnal Mixing in an Energetic Ocean. <i>Journal of Geophysical Research: Oceans</i> , 2018, 123, 346-357.	1.0	37
26	The Hydrodynamic Response of the Sediment-Water Interface to Coherent Turbulent Motions. <i>Geophysical Research Letters</i> , 2018, 45, 10,520.	1.5	13
27	Wave-current interactions in the continental shelf bottom boundary layer of the Australian North West Shelf during tropical cyclone conditions. <i>Continental Shelf Research</i> , 2018, 165, 78-92.	0.9	11
28	Coexistence of order and chaos in C major. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	0
29	The effects of tropical cyclone characteristics on the surface wave fields in Australia's North West region. <i>Continental Shelf Research</i> , 2017, 139, 35-53.	0.9	29
30	Impact of windage on ocean surface Lagrangian coherent structures. <i>Environmental Fluid Mechanics</i> , 2017, 17, 473-483.	0.7	35
31	Quantifying Lake Water Quality Evolution: Coupled Geochemistry, Hydrodynamics, and Aquatic Ecology in an Acidic Pit Lake. <i>Environmental Science &amp; Technology</i> , 2017, 51, 9864-9875.	4.6	22
32	Determining Mixing Rates from Concurrent Temperature and Velocity Measurements. <i>Journal of Atmospheric and Oceanic Technology</i> , 2017, 34, 2283-2293.	0.5	29
33	The variation of flow and turbulence across the sediment-water interface. <i>Journal of Fluid Mechanics</i> , 2017, 824, 413-437.	1.4	64
34	Estimating Turbulent Dissipation from Microstructure Shear Measurements Using Maximum Likelihood Spectral Fitting over the Inertial and Viscous Subranges. <i>Journal of Atmospheric and Oceanic Technology</i> , 2016, 33, 713-722.	0.5	26
35	Acquiring Long-Term Turbulence Measurements from Moored Platforms Impacted by Motion. <i>Journal of Atmospheric and Oceanic Technology</i> , 2016, 33, 2535-2551.	0.5	9
36	The combined effect of transient wind-driven upwelling and eddies on vertical nutrient fluxes and phytoplankton dynamics along Ningaloo Reef, Western Australia. <i>Journal of Geophysical Research: Oceans</i> , 2016, 121, 4994-5016.	1.0	6

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37	Ocean Transport Pathways to a World Heritage Fringing Coral Reef: Ningaloo Reef, Western Australia. PLoS ONE, 2016, 11, e0145822.	1.1	10
38	Density-ratio effects on the capture of suspended particles in aquatic systems. Journal of Fluid Mechanics, 2015, 783, 191-210.	1.4	15
39	Near-inertial ocean response to tropical cyclone forcing on the Australian North-West Shelf. Journal of Geophysical Research: Oceans, 2015, 120, 7722-7751.	1.0	33
40	Observations of the shelf circulation dynamics along Ningaloo Reef, Western Australia during the austral spring and summer. Continental Shelf Research, 2015, 95, 54-73.	0.9	11
41	Internal-Tide Spectroscopy and Prediction in the Timor Sea. Journal of Physical Oceanography, 2015, 45, 64-83.	0.7	24
42	Modeling bed shear-stress fluctuations in a shallow tidal channel. Journal of Geophysical Research: Oceans, 2014, 119, 3185-3199.	1.0	10
43	Biophysical characteristics of a morphologically-complex macrotidal tropical coastal system during a dry season. Estuarine, Coastal and Shelf Science, 2014, 149, 96-108.	0.9	7
44	Development of a new risk-based framework to guide investment in water quality monitoring. Environmental Monitoring and Assessment, 2014, 186, 2455-2464.	1.3	10
45	Turbulent mixing efficiency at an energetic ocean site. Journal of Geophysical Research: Oceans, 2013, 118, 4662-4672.	1.0	45
46	Particle capture by a circular cylinder in the vortex-shedding regime. Journal of Fluid Mechanics, 2013, 733, 171-188.	1.4	20
47	Dynamics of the summer shelf circulation and transient upwelling off Ningaloo Reef, Western Australia. Journal of Geophysical Research: Oceans, 2013, 118, 1099-1125.	1.0	24
48	Shoaling internal solitary waves. Journal of Geophysical Research: Oceans, 2013, 118, 4111-4124.	1.0	67
49	Atmospheric forcing intensifies the effects of regional ocean warming on reef-scale temperature anomalies during a coral bleaching event. Journal of Geophysical Research: Oceans, 2013, 118, 4600-4616.	1.0	30
50	Examining shifts in zooplankton community variability following biological invasion. Limnology and Oceanography, 2013, 58, 399-408.	1.6	7
51	Cyanobacterial and microcystins dynamics following the application of hydrogen peroxide to waste stabilisation ponds. Hydrology and Earth System Sciences, 2013, 17, 2097-2105.	1.9	15
52	Particle capture and low-Reynolds-number flow around a circular cylinder. Journal of Fluid Mechanics, 2012, 710, 362-378.	1.4	28
53	The combined influence of hydrodynamic forcing and calcification on the spatial distribution of alkalinity in a coral reef system. Journal of Geophysical Research, 2012, 117, .	3.3	25
54	Temporal variability of the standing internal tide in the Browse Basin, Western Australia. Journal of Geophysical Research, 2012, 117, .	3.3	14

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55	Seasonal circulation and temperature variability near the North West Cape of Australia. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	27
56	The dynamics of internal wave resonance in periodically forced narrow basins. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	16
57	A numerical study of the dynamics of the wave-driven circulation within a fringing reef system. <i>Ocean Dynamics</i> , 2012, 62, 585-602.	0.9	27
58	Internal tide dynamics in a topographically complex region: Browse Basin, Australian North West Shelf. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	35
59	Nearshore circulation in a tropical fringing reef system. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	80
60	Environmental Factors and the Application of Hydrogen Peroxide for the Removal of Toxic Cyanobacteria from Waste Stabilization Ponds. <i>Journal of Environmental Engineering, ASCE</i> , 2011, 137, 952-960.	0.7	32
61	Dynamics of a tidally-forced stratified shear flow on the continental slope. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	14
62	Estimating turbulent kinetic energy dissipation using the inertial subrange method in environmental flows. <i>Limnology and Oceanography: Methods</i> , 2011, 9, 302-321.	1.0	71
63	A numerical model of wave- and current-driven nutrient uptake by coral reef communities. <i>Ecological Modelling</i> , 2011, 222, 1456-1470.	1.2	25
64	Tides and Internal Waves on the Continental Shelf. , 2011, , 225-235.		1
65	Experiments on the generation of internal waves over continental shelf topography. <i>Journal of Fluid Mechanics</i> , 2010, 663, 385-400.	1.4	26
66	Dying to find the source – the use of rhodamine WT as a proxy for soluble point source pollutants in closed pipe surface drainage networks. <i>Hydrology and Earth System Sciences</i> , 2009, 13, 2169-2178.	1.9	6
67	The variability of the large-amplitude internal wave field on the Australian North West Shelf. <i>Continental Shelf Research</i> , 2009, 29, 1373-1383.	0.9	43
68	Flow separation and resuspension beneath shoaling nonlinear internal waves. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	93
69	The generation of internal waves by tidal flow over continental shelf/slope topography. <i>Environmental Fluid Mechanics</i> , 2008, 8, 511-526.	0.7	11
70	Estimating net transport and mixing using a time-dependent inverse method. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	1
71	Assessing internal and external controls on lake water quality: Limitations on organic carbon-driven alkalinity generation in acidic pit lakes. <i>Water Resources Research</i> , 2008, 44, .	1.7	14
72	Density Stratification, Turbulence, but How Much Mixing?. <i>Annual Review of Fluid Mechanics</i> , 2008, 40, 169-184.	10.8	324

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73	A numerical study of the eddy characteristics of the Leeuwin Current System. Deep-Sea Research Part I: Oceanographic Research Papers, 2008, 55, 261-276.	0.6	16
74	Near-Surface Wind-Induced Mixing in a Mine Lake. Journal of Hydraulic Engineering, 2008, 134, 1464-1472.	0.7	16
75	Numerical modelling of the mean flow characteristics of the Leeuwin Current System. Deep-Sea Research Part II: Topical Studies in Oceanography, 2007, 54, 837-858.	0.6	38
76	Numerical simulation of the summer wake of Rottnest Island, Western Australia. Dynamics of Atmospheres and Oceans, 2007, 43, 171-198.	0.7	11
77	Experimental study on resonantly forced interfacial waves in a stratified circular cylindrical basin. Journal of Fluid Mechanics, 2007, 582, 203-222.	1.4	10
78	Observations of bottom intensification of temperature and velocity fluctuations induced by oblique tidal interactions with a slope. Marine and Freshwater Research, 2006, 57, 255.	0.7	2
79	Effect of Long Internal Waves on the Quality of Water Withdrawn from a Stratified Reservoir. Journal of Hydraulic Engineering, 2006, 132, 1134-1145.	0.7	26
80	Processes controlling the position of frontal systems in Shark Bay, Western Australia. Estuarine, Coastal and Shelf Science, 2005, 65, 463-474.	0.9	43
81	The degeneration of internal waves in lakes with sloping topography. Limnology and Oceanography, 2005, 50, 1620-1637.	1.6	182
82	Parameterization of turbulent fluxes and scales using homogeneous sheared stably stratified turbulence simulations. Journal of Fluid Mechanics, 2005, 525, 193-214.	1.4	311
83	The temporal evolution of a geostrophic flow in a rotating stratified basin. Dynamics of Atmospheres and Oceans, 2005, 39, 189-210.	0.7	2
84	The energetics of large-scale internal wave degeneration in lakes. Journal of Fluid Mechanics, 2005, 531, 159-180.	1.4	79
85	The temporal evolution of baroclinic basin-scale waves in a rotating circular basin. Journal of Fluid Mechanics, 2005, 523, 367-392.	1.4	14
86	Disaggregation of <i>Microcystis aeruginosa</i> colonies under turbulent mixing: laboratory experiments in a grid-stirred tank. Hydrobiologia, 2004, 519, 143-152.	1.0	88
87	Secondary circulation induced by flow curvature and Coriolis effects around headlands and islands. Ocean Dynamics, 2004, 54, 27-38.	0.9	43
88	Baroclinic geostrophic adjustment in a rotating circular basin. Journal of Fluid Mechanics, 2004, 515, 63-86.	1.4	13
89	Stratification and mixing in sea straits. Deep-Sea Research Part II: Topical Studies in Oceanography, 2004, 51, 441-453.	0.6	19
90	Estimation of a characteristic friction velocity in stirred benthic chambers. Marine Ecology - Progress Series, 2004, 279, 291-295.	0.9	4

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91	Estimation of the rate of dissipation of turbulent kinetic energy and turbulent lengthscales in grid-generated turbulence. <i>Experiments in Fluids</i> , 2003, 34, 607-615.	1.1	1
92	The tidal regime of Shark Bay, Western Australia. <i>Estuarine, Coastal and Shelf Science</i> , 2003, 57, 725-735.	0.9	49
93	The Kelvin-Helmholtz to Holmboe instability transition in stratified exchange flows. <i>Journal of Fluid Mechanics</i> , 2003, 477, .	1.4	64
94	High-frequency internal waves in large stratified lakes. <i>Limnology and Oceanography</i> , 2003, 48, 895-919.	1.6	135
95	Simple mixing criteria for the growth of negatively buoyant phytoplankton. <i>Limnology and Oceanography</i> , 2003, 48, 1326-1337.	1.6	35
96	Hydrodynamic modelling of snapper <i>Pagrus auratus</i> egg and larval dispersal in Shark Bay, Western Australia: reproductive isolation at a fine spatial scale. <i>Marine Ecology - Progress Series</i> , 2003, 265, 213-226.	0.9	37
97	A weakly nonlinear model of long internal waves in closed basins. <i>Journal of Fluid Mechanics</i> , 2002, 467, 269-287.	1.4	34
98	Linear internal waves and the control of stratified exchange flows. <i>Journal of Fluid Mechanics</i> , 2001, 447, 357-375.	1.4	38
99	Measurements of diapycnal diffusivities in stratified fluids. <i>Journal of Fluid Mechanics</i> , 2001, 442, 267-291.	1.4	103
100	The degeneration of large-scale interfacial gravity waves in lakes. <i>Journal of Fluid Mechanics</i> , 2001, 434, 181-207.	1.4	178
101	Hydraulics and mixing in controlled exchange flows. <i>Journal of Geophysical Research</i> , 2001, 106, 959-972.	3.3	72
102	Response Characteristics of a Buoyancy-Driven Sea. <i>Journal of Physical Oceanography</i> , 2001, 31, 2721-2736.	0.7	14
103	Convectively driven exchange flow in a stratified sill-enclosed basin. <i>Journal of Fluid Mechanics</i> , 2000, 418, 313-338.	1.4	14
104	Internal wave evolution in a space-time varying field. <i>Journal of Fluid Mechanics</i> , 2000, 424, 279-301.	1.4	25
105	Turbulent mixing in a sloping benthic boundary layer energized by internal waves. <i>Journal of Fluid Mechanics</i> , 2000, 418, 59-76.	1.4	78
106	The effects of a surface stress-driven ambient circulation on open ocean convection. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 1999, 91, 199-222.	0.4	1
107	Steady convective exchange flows down slopes. <i>Aquatic Sciences</i> , 1999, 61, 260.	0.6	55
108	Rosby number regimes for isolated convection in a homogeneous, rotating fluid. <i>Dynamics of Atmospheres and Oceans</i> , 1999, 30, 149-171.	0.7	8

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109	Upwelling on the south-west coast of Australia—source of the Capes Current?. Continental Shelf Research, 1999, 19, 363-400.	0.9	80
110	Convectively driven exchange in a shallow coastal embayment. Continental Shelf Research, 1999, 19, 1599-1616.	0.9	34
111	Experiments on mixing due to internal solitary waves breaking on uniform slopes. Journal of Geophysical Research, 1999, 104, 13467-13477.	3.3	210
112	Submaximal exchange between a convectively forced basin and a large reservoir. Journal of Fluid Mechanics, 1999, 378, 357-378.	1.4	19
113	On continental shelf convection: The influence of an ideal coast. Journal of Geophysical Research, 1998, 103, 15643-15656.	3.3	1
114	Buoyancy fluxes in a stratified fluid. Coastal and Estuarine Studies, 1998, , 377-388.	0.4	14
115	Breaking of super-critically incident internal waves at a sloping bed. Coastal and Estuarine Studies, 1998, , 475-484.	0.4	5
116	Unsteady convective exchange flows in cavities. Journal of Fluid Mechanics, 1998, 368, 127-153.	1.4	19
117	The influence of rotation on shelf convection. Journal of Fluid Mechanics, 1998, 369, 23-48.	1.4	24
118	A laboratory investigation into shear-generated mixing in a salt wedge estuary. Geophysical and Astrophysical Fluid Dynamics, 1997, 85, 65-95.	0.4	9
119	Localized mixing due to a breaking internal wave ray at a sloping bottom. Journal of Fluid Mechanics, 1997, 350, 1-27.	1.4	79
120	Laboratory study of the interaction between two internal wave rays. Journal of Fluid Mechanics, 1997, 336, 91-122.	1.4	65
121	On convective turbulence and the influence of rotation. Dynamics of Atmospheres and Oceans, 1997, 25, 217-232.	0.7	15
122	Convection in a long box driven by heating and cooling on the horizontal boundaries. Journal of Fluid Mechanics, 1996, 310, 61-87.	1.4	11
123	Dynamics of Turbidity Current with Reversing Buoyancy. Journal of Hydraulic Engineering, 1996, 122, 230-236.	0.7	26
124	Unsteady, Turbulent Convection into a Rotating, Linearly Stratified Fluid: Modeling Deep Ocean Convection. Journal of Physical Oceanography, 1995, 25, 3032-3050.	0.7	30
125	Convectively driven mixed layer growth in a rotating, stratified fluid. Deep-Sea Research Part I: Oceanographic Research Papers, 1995, 42, 331-349.	0.6	27
126	Buoyancy driven flows in a rotating, stratified fluid. , 1994, , .		0



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127	Boundary mixing in stratified reservoirs. <i>Journal of Fluid Mechanics</i> , 1993, 248, 477-491.	1.4	34
128	On the Nature of Turbulence in a Stratified Fluid. Part I: The Energetics of Mixing. <i>Journal of Physical Oceanography</i> , 1991, 21, 650-658.	0.7	332
129	On the Nature of Turbulence in a Stratified Fluid. Part II: Application to Lakes. <i>Journal of Physical Oceanography</i> , 1991, 21, 659-680.	0.7	172
130	Convection Near the Temperature of Maximum Density for High Rayleigh Number, Low Aspect Ratio, Rectangular Cavities. <i>Journal of Heat Transfer</i> , 1989, 111, 100-105.	1.2	22
131	Vertical mixing due to the breaking of critical internal waves on sloping boundaries. <i>Journal of Fluid Mechanics</i> , 1989, 204, 479.	1.4	213
132	Convectively driven coastal currents in a rotating basin. <i>Journal of Marine Research</i> , 1988, 46, 473-494.	0.3	21
133	The role of boundary mixing in the deep ocean. <i>Journal of Geophysical Research</i> , 1987, 92, 11873-11878.	3.3	29
134	Boundary mixing in a rotating, stratified fluid. <i>Journal of Fluid Mechanics</i> , 1987, 183, 25-44.	1.4	29
135	Density and viscosity gradients in zoned magma chambers, and their influence withdrawal dynamics. <i>Journal of Volcanology and Geothermal Research</i> , 1986, 30, 201-230.	0.8	82
136	Magma-mixing and the dynamics of withdrawal from stratified reservoirs. <i>Journal of Volcanology and Geothermal Research</i> , 1986, 27, 153-178.	0.8	177
137	A dissolved oxygen budget model for Lake Erie in summer. <i>Freshwater Biology</i> , 1985, 15, 683-694.	1.2	33
138	Helium accumulation in groundwater. II: A model for the accumulation of the crustal $4\text{He}$ degassing flux. <i>Geochimica Et Cosmochimica Acta</i> , 1985, 49, 2445-2452.	1.6	134
139	Axisymmetric withdrawal and inflow in a density-stratified container. <i>Journal of Fluid Mechanics</i> , 1985, 161, 115.	1.4	61
140	Experiments on transient natural convection in a cavity. <i>Journal of Fluid Mechanics</i> , 1984, 144, 389-401.	1.4	130
141	A model of the vertical mixing in Lake Erie in summer. <i>Limnology and Oceanography</i> , 1984, 29, 553-563.	1.6	46
142	Entrainment by bottom currents in Lake Erie. <i>Limnology and Oceanography</i> , 1982, 27, 1029-1038.	1.6	26
143	Boundary mixing in a stratified fluid. <i>Journal of Fluid Mechanics</i> , 1982, 121, 1.	1.4	82
144	Field Investigation of Selective Withdrawal. <i>Journal of Hydraulic Engineering</i> , 1978, 104, 1225-1237.	0.2	6

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145	Two Intersecting Internal Wave Rays: a Comparison Between Numerical and Laboratory Results. Coastal and Estuarine Studies, 0, , 241-250.	0.4	0
146	Local winds and encroaching currents drive summertime subsurface blooms over a narrow shelf. Limnology and Oceanography, 0, , .	1.6	0