Alexander Horner-Devine

List of Publications by Year
in descending order

54	1,572	361413	315739
papers	citations	20 h-index	38 g-index

59	59	59	1340
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mixing and Transport in Coastal River Plumes. Annual Review of Fluid Mechanics, 2015, 47, 569-594.	25.0	298
2	River Influences on Shelf Ecosystems: Introduction and synthesis. Journal of Geophysical Research, 2010, 115, .	3.3	135
3	A conceptual model of the strongly tidal Columbia River plume. Journal of Marine Systems, 2009, 78, 460-475.	2.1	120
4	Laboratory experiments simulating a coastal river inflow. Journal of Fluid Mechanics, 2006, 555, 203.	3.4	104
5	The bulge circulation in the Columbia River plume. Continental Shelf Research, 2009, 29, 234-251.	1.8	99
6	Seasonal patterns of coarse sediment transport on a mixed sand and gravel beach due to vessel wakes, wind waves, and tidal currents. Marine Geology, 2009, 259, 73-85.	2.1	57
7	Infrared-Based Measurements of Velocity, Turbulent Kinetic Energy, and Dissipation at the Water Surface in a Tidal River. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 849-853.	3.1	50
8	Asymmetry of Columbia River tidal plume fronts. Journal of Marine Systems, 2009, 78, 442-459.	2.1	44
9	Vertical boil propagation from a submerged estuarine sill. Geophysical Research Letters, 2009, 36, .	4.0	44
10	Multiple trophic levels fueled by recirculation in the Columbia River plume. Geophysical Research Letters, 2010, 37, .	4.0	36
11	Laboratory Investigation of the Impact of Lateral Spreading on Buoyancy Flux in a River Plume. Journal of Physical Oceanography, 2013, 43, 2588-2610.	1.7	33
12	Temporal and spatial variability of vertical salt flux in a highly stratified estuary. Journal of Geophysical Research, 2008, 113, .	3.3	32
13	Turbulent kinetic energy and coherent structures in a tidal river. Journal of Geophysical Research: Oceans, 2013, 118, 6965-6981.	2.6	28
14	Structure of turbulence and sediment stratification in waveâ€supported mud layers. Journal of Geophysical Research: Oceans, 2015, 120, 2430-2448.	2.6	26
15	The role of wind in the near field and midfield of a river plume. Geophysical Research Letters, 2014, 41, 5132-5138.	4.0	24
16	Wave Generation of Gravityâ€Driven Sediment Flows on a Predominantly Sandy Seabed. Geophysical Research Letters, 2018, 45, 7634-7645.	4.0	24
17	The impact of storms and stratification on sediment transport in the <scp>R</scp>hine region of freshwater influence. Journal of Geophysical Research: Oceans, 2017, 122, 4456-4477.	2.6	23
18	Evidence for the inherent unsteadiness of a river plume: Satellite observations of the Niagara River discharge. Limnology and Oceanography, 2008, 53, 2731-2737.	3.1	22

#	Article	IF	Citations
19	Remotely sensed river surface features compared with modeling and in situ measurements. Journal of Geophysical Research, 2009, 114, .	3.3	21
20	Particle resuspension in the Columbia River plume near field. Journal of Geophysical Research, 2009, 114, .	3.3	21
21	Wave breaking turbulence at the offshore front of the Columbia River Plume. Geophysical Research Letters, 2014, 41, 8987-8993.	4.0	21
22	Rapid sediment removal from the Columbia River plume near field. Continental Shelf Research, 2012, 35, 16-28.	1.8	20
23	An Autonomous Open-Ocean Stereoscopic PIV Profiler. Journal of Atmospheric and Oceanic Technology, 2010, 27, 1362-1380.	1.3	18
24	Frontogenesis and Frontal Progression of a Trapping-Generated Estuarine Convergence Front and Its Influence on Mixing and Stratification. Estuaries and Coasts, 2012, 35, 665-681.	2.2	18
25	Lobeâ€cleft instability in the buoyant gravity current generated by estuarine outflow. Geophysical Research Letters, 2017, 44, 5001-5007.	4.0	18
26	The Influence of Wind and Waves on Spreading and Mixing in the Fraser River Plume. Journal of Geophysical Research: Oceans, 2018, 123, 6818-6840.	2.6	18
27	Velocity, density and transport measurements in rotating, stratified flows. Experiments in Fluids, 2006, 41, 559-571.	2.4	17
28	A two-color optical method for determining layer thickness in two interacting buoyant plumes. Experiments in Fluids, 2011, 50, 1235-1245.	2.4	17
29	The Influence of Tide and Wind on the Propagation of Fronts in a Shallow River Plume. Journal of Geophysical Research: Oceans, 2018, 123, 5426-5442.	2.6	17
30	The use of a morphological acceleration factor in the simulation of large-scale fluvial morphodynamics. Geomorphology, 2020, 356, 107088.	2.6	15
31	Crossâ€shore transport of nearshore sediment by river plume frontal pumping. Geophysical Research Letters, 2017, 44, 6343-6351.	4.0	14
32	On the dynamics of turbulence near a free surface. Journal of Fluid Mechanics, 2017, 821, 248-265.	3.4	13
33	Experimental investigation of large-scale vortices in a freely spreading gravity current. Physics of Fluids, 2017, 29, 106603.	4.0	13
34	The role of periodically varying discharge on river plume structure and transport. Continental Shelf Research, 2018, 158, 15-25.	1.8	13
35	The Sensitivity of Salt Wedge Estuaries to Channel Geometry. Journal of Physical Oceanography, 2015, 45, 3169-3183.	1.7	11
36	A Conceptual Model of a River Plume in the Surf Zone. Journal of Geophysical Research: Oceans, 2019, 124, 8060-8078.	2.6	10

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37	Mixing layer dynamics in separated flow over an estuarine sill with variable stratification. Journal of Geophysical Research, 2010, 115, .	3.3	9
38	Channel Conveyance Variability can Influence Flood Risk as Much as Streamflow Variability in Western Washington State. Water Resources Research, 2022, 58, .	4.2	9
39	Seasonal Changes in Structure and Dynamics in an Urbanized Salt Wedge Estuary. Estuaries and Coasts, 2021, 44, 589-607.	2.2	7
40	Two-layer hydraulics at the riverâ€“ocean interface. Journal of Fluid Mechanics, 2018, 856, 633-672.	3.4	5
41	Airborne LiDAR Measurements and Model Simulations of Tides, Waves, and Surface Slope at the Mouth of the Columbia River. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 7038-7048.	6.3	5
42	River Plume Liftoff Dynamics and Surface Expressions. Water Resources Research, 2020, 56, e2019WR026475.	4.2	5
43	The Formation of Turbidity Maximum Zones by Minor Axis Tidal Straining in Regions of Freshwater Influence. Journal of Physical Oceanography, 2020, 50, 1265-1287.	1.7	5
44	The evolution of plume fronts in the Rhine region of freshwater influence. Journal of Geophysical Research: Oceans, 2021, 126, e2019JC015927.	2.6	5
45	Observations of Multiple Internal Wave Packets in a Tidal River Plume. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016575.	2.6	3
46	Influence of Subsurface Stratification on Turbulence and Aeration in a Tidal River. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1975-1978.	3.1	2
47	Small Scale Bedform Types off the South-Holland Coast. Journal of Coastal Research, 2016, 75, 423-426.	0.3	2
48	The Role of Sand in Wave Boundary Layers Over Primarily Muddy Seabeds: Implications for Waveâ€Supported Gravity Flows. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016621.	2.6	2
49	Surface Turbulence Reveals Riverbed Drag Coefficient. Geophysical Research Letters, 2021, 48, e2020GL092326.	4.0	2
50	Cross-shore stratified tidal flow seaward of a mega-nourishment. Estuarine, Coastal and Shelf Science, 2018, 200, 59-70.	2.1	1
51	Estimation of In Situ 3-D Particle Distributions From a Stereo Laser Imaging Profiler. IEEE Journal of Oceanic Engineering, 2011, 36, 586-601.	3.8	0
52	Offshore spreading of buoyant bulge from numerical simulations and laboratory experiments. , 2014, , .		0
53	Middle shoreface sand transport under the influence of a river plume. Journal of Coastal Research, 2014, 70, 182-186.	0.3	0
54	10.1063/1.5006176.1. , 2017, , .		0