Richard P Signell

List of Publications by Year
in descending order

63 papers	5,167 citations	147726 31 h-index	133188 59 g-index
74 all docs	74 docs citations	74 times ranked	4444 citing authors

#	Article	IF	Citations
1	Ocean forecasting in terrain-following coordinates: Formulation and skill assessment of the Regional Ocean Modeling System. Journal of Computational Physics, 2008, 227, 3595-3624.	1.9	1,032
2	Development of a three-dimensional, regional, coupled wave, current, and sediment-transport model. Computers and Geosciences, 2008, 34, 1284-1306.	2.0	641
3	Performance of four turbulence closure models implemented using a generic length scale method. Ocean Modelling, 2005, 8, 81-113.	1.0	588
4	Transient eddy formation around headlands. Journal of Geophysical Research, 1991, 96, 2561-2575.	3.3	282
5	Measurements of tidal flow around a headland with a shipboard acoustic Doppler current profiler. Journal of Geophysical Research, 1990, 95, 3189-3197.	3.3	183
6	The kinematic and hydrographic structure of the Gulf of Maine Coastal Current. Deep-Sea Research Part II: Topical Studies in Oceanography, 2005, 52, 2369-2391.	0.6	156
7	Assessment of wind quality for oceanographic modelling in semi-enclosed basins. Journal of Marine Systems, 2005, 53, 217-233.	0.9	143
8	A Reassessment of the Role of Tidal Dispersion in Estuaries and Bays. Estuaries and Coasts, 1992, 15, 97.	1.7	142
9	Effect of wave–current interaction on wind–driven circulation in narrow, shallow embayments. Journal of Geophysical Research, 1990, 95, 9671-9678.	3.3	137
10	Role of Sediment Resuspension in the Remobilization of Particulate-Phase Metals from Coastal Sediments. Environmental Science & Technology, 2007, 41, 2282-2288.	4.6	117
11	The wind-forced response on a buoyant coastal current: Observations of the western Gulf of Maine plume. Journal of Marine Systems, 1997, 12, 69-81.	0.9	104
12	Modeling tidal exchange and dispersion in Boston Harbor. Journal of Geophysical Research, 1992, 97, 15591-15606.	3.3	100
13	A mechanism for offshore initiation of harmful algal blooms in the coastal Gulf of Maine. Journal of Plankton Research, 2003, 25, 1131-1138.	0.8	92
14	Sediment dispersal in the northwestern Adriatic Sea. Journal of Geophysical Research, 2008, 113, .	3.3	84
15	Bora event variability and the role of air-sea feedback. Journal of Geophysical Research, 2007, 112, .	3.3	72
16	U.S. IOOS coastal and ocean modeling testbed: Inter-model evaluation of tides, waves, and hurricane surge in the Gulf of Mexico. Journal of Geophysical Research: Oceans, 2013, 118, 5129-5172.	1.0	72
17	Northern Adriatic response to a wintertime bora wind event. Eos, 2005, 86, 157.	0.1	69
18	Two-Way Air–Sea Coupling: A Study of the Adriatic. Monthly Weather Review, 2006, 134, 1465-1483.	0.5	67

#	ARTICLE	IF	CITATIONS
19	The freshwater transport and dynamics of the western Maine coastal current. Continental Shelf Research, 2004, 24, 1339-1357.	0.9	63
20	Progress and Challenges in Coupled Hydrodynamic-Ecological Estuarine Modeling. Estuaries and Coasts, 2016, 39, 311-332.	1.0	62
21	Toxic Alexandrium blooms in the western Gulf of Maine: The plume advection hypothesis revisited. Limnology and Oceanography, 2005, 50, 328-345.	1.6	59
22	February 2003 marine atmospheric conditions and the bora over the northern Adriatic. Journal of Geophysical Research, 2007, 112, .	3.3	49
23	Characterizing wave- and current- induced bottom shear stress: U.S. middle Atlantic continental shelf. Continental Shelf Research, 2013, 52, 73-86.	0.9	48
24	High€resolution mapping of Bora winds in the northern Adriatic Sea using synthetic aperture radar. Journal of Geophysical Research, 2010, 115, .	3.3	47
25	Deposition and flux of sediment from the Po River, Italy: An idealized and wintertime numerical modeling study. Marine Geology, 2009, 260, 69-80.	0.9	46
26	Predicting the Physical Effects of Relocating Boston's Sewage Outfall. Estuarine, Coastal and Shelf Science, 2000, 50, 59-71.	0.9	45
27	Sediment Dynamics in the Adriatic Sea Investigated with Coupled Models. Oceanography, 2004, 17, 58-69.	0.5	43
28	Surface drift prediction in the Adriatic Sea using hyper-ensemble statistics on atmospheric, ocean and wave models: Uncertainties and probability distribution areas. Journal of Marine Systems, 2008, 69, 86-98.	0.9	39
29	Structure and variability of the Western Maine Coastal Current. Deep-Sea Research Part II: Topical Studies in Oceanography, 2005, 52, 2392-2410.	0.6	38
30	Modeling coastal current transport in the Gulf of Maine. Deep-Sea Research Part II: Topical Studies in Oceanography, 2005, 52, 2430-2449.	0.6	38
31	Surface drifter derived circulation in the northern and middle Adriatic Sea: Response to wind regime and season. Journal of Geophysical Research, 2007, 112, .	3.3	33
32	Cloud-Native Repositories for Big Scientific Data. Computing in Science and Engineering, 2021, 23, 26-35.	1.2	33
33	Automated Sensor Network to Advance Ocean Science. Eos, 2010, 91, 345-346.	0.1	32
34	Investigating the importance of sediment resuspension in Alexandrium fundyense cyst population dynamics in the Gulf of Maine. Deep-Sea Research Part II: Topical Studies in Oceanography, 2014, 103, 79-95.	0.6	32
35	Collaboration tools and techniques for large model datasets. Journal of Marine Systems, 2008, 69, 154-161.	0.9	31
36	Cross-frontal entrainment of plankton into a buoyant plume: The frog tongue mechanism. Journal of Marine Research, 2002, 60, 763-777.	0.3	27

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37	Numerical simulation of tidal dispersion around a coastal headland. Coastal and Estuarine Studies, 1990, , 210-222.	0.4	23
38	Introduction to special section on The U.S. IOOS Coastal and Ocean Modeling Testbed. Journal of Geophysical Research: Oceans, 2013, 118, 6319-6328.	1.0	22
39	Seafloor environments in the Long Island Sound estuarine system. Marine Geology, 1999, 155, 277-318.	0.9	20
40	Measurements of storm and nonstorm circulation in the northern Adriatic: October 2002 Through April 2003. Journal of Geophysical Research, 2007, 112, .	3.3	20
41	Science Storms the Cloud. AGU Advances, 2021, 2, e2020AV000354.	2.3	19
42	Observations and a linear model of water level in an interconnected inletâ€‹bay system. Journal of Geophysical Research: Oceans, 2017, 122, 2760-2780.	1.0	18
43	From the Oceans to the Cloud: Opportunities and Challenges for Data, Models, Computation and Workflows. Frontiers in Marine Science, 2019, 6, .	1.2	18
44	Effect of Wave-Enhanced Bottom Friction on Storm-Driven Circulation in Massachusetts Bay. Journal of Waterway, Port, Coastal and Ocean Engineering, 1997, 123, 233-239.	0.5	16
45	Variational analysis of drifter positions and model outputs for the reconstruction of surface currents in the central Adriatic during fall 2002. Journal of Geophysical Research, 2008, 113, .	3.3	15
46	Near-bottom circulation and dispersion of sediment containing Alexandrium fundyense cysts in the Gulf of Maine during 2010â€"2011. Deep-Sea Research Part II: Topical Studies in Oceanography, 2014, 103, 96-111.	0.6	15
47	Blooms of the toxic dinoflagellate Alexandrium fundyense in the western Gulf of Maine in 1993 and 1994: A comparative modeling study. Continental Shelf Research, 2007, 27, 2486-2512.	0.9	13
48	Seafloor environments in Cape Cod Bay, a large coastal embayment. Marine Geology, 1996, 133, 11-33.	0.9	12
49	Model Data Interoperability for the United States Integrated Ocean Observing System (IOOS). , 2010, , .		11
50	Observations and predictions of summertime winds on the Skagit tidal flats, Washington. Continental Shelf Research, 2013, 60, S13-S21.	0.9	11
51	Advances in a Distributed Approach for Ocean Model Data Interoperability. Journal of Marine Science and Engineering, 2014, 2, 194-208.	1.2	10
52	Workshop discusses community models for coastal sediment transport. Eos, 2000, 81, 502.	0.1	8
53	Analysis and Visualization of Coastal Ocean Model Data in the Cloud. Journal of Marine Science and Engineering, 2019, 7, 110.	1.2	8
54	Data management update for the integrated ocean observing system (IOOS®). , 2014, , .		6

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55	Implementing the National Integrated Ocean Observing System (IOOSÂ®)â€"From the Federal Agency Perspective. Marine Technology Society Journal, 2010, 44, 32-41.	0.3	5
56	Technical note: Harmonising metocean model data via standard web services within small research groups. Ocean Science, 2016, 12, 633-645.	1.3	5
57	Hydrodynamic Forcing and Sediment Character in Boston Harbor. Journal of Waterway, Port, Coastal and Ocean Engineering, 1998, 124, 40-42.	0.5	4
58	Numerical Simulation of Tidal Dispersion Around a Coastal Headland. , 1990, , 210-222.		4
59	Building the IOOSÂ® Data Management Subsystem. Marine Technology Society Journal, 2010, 44, 73-83.	0.3	2
60	Spatial distribution of water level impacting back-barrier bays. Natural Hazards and Earth System Sciences, 2019, 19, 1823-1838.	1.5	2
61	Modeling Waves and Circulation in Lake Pontchartrain : ABSTRACT. AAPG Bulletin, 1997, 81 (1997), .	0.7	2
62	The US IOOS Coastal and Ocean Modeling Testbed for advancing research to applications. , 2012, , .		1
63	Dynamic Reusable Workflows for Ocean Science. Journal of Marine Science and Engineering, 2016, 4, 68.	1.2	1