Raleigh Hood

List of Publications by Year
in descending order

83 papers	3,608 citations	126858 33 h-index	143943 57 g-index
91 all docs	91 docs citations	91 times ranked	4047 citing authors

#	Article	IF	Citations
1	Assessment of skill and portability in regional marine biogeochemical models: Role of multiple planktonic groups. Journal of Geophysical Research, 2007, 112, .	3.3	215
2	Pelagic functional group modeling: Progress, challenges and prospects. Deep-Sea Research Part II: Topical Studies in Oceanography, 2006, 53, 459-512.	0.6	200
3	Phosphorus deficiency in the Atlantic: An emerging paradigm in oceanography. Eos, 2003, 84, 165.	0.1	178
4	A four-component ecosystem model of biological activity in the Arabian Sea. Progress in Oceanography, 1996, 37, 193-240.	1.5	167
5	Detecting Trichodesmium blooms in SeaWiFS imagery. Deep-Sea Research Part II: Topical Studies in Oceanography, 2001, 49, 107-121.	0.6	148
6	The pathways and properties of the Amazon River Plume in the tropical North Atlantic Ocean. Journal of Geophysical Research: Oceans, 2013, 118, 6894-6913.	1.0	128
7	Dynamics of the Indian-Ocean oxygen minimum zones. Progress in Oceanography, 2013, 112-113, 15-37.	1.5	126
8	Ecosystem model complexity versus physical forcing: Quantification of their relative impact with assimilated Arabian Sea data. Deep-Sea Research Part II: Topical Studies in Oceanography, 2006, 53, 576-600.	0.6	124
9	Ocean biogeochemistry modeled with emergent trait-based genomics. Science, 2017, 358, 1149-1154.	6.0	122
10	Modeling the effect of nitrogen fixation on carbon and nitrogen fluxes at BATS. Deep-Sea Research Part II: Topical Studies in Oceanography, 2001, 48, 1609-1648.	0.6	99
11	Modeling the distribution ofTrichodesmiumand nitrogen fixation in the Atlantic Ocean. Journal of Geophysical Research, 2004, 109, .	3.3	98
12	Chesapeake Bay nitrogen fluxes derived from a landâ€estuarine ocean biogeochemical modeling system: Model description, evaluation, and nitrogen budgets. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1666-1695.	1.3	97
13	Progress made in study of ocean's calcium carbonate budget. Eos, 2002, 83, 365-375.	0.1	87
14	Influences of diurnal and intraseasonal forcing on mixed-layer and biological variability in the central Arabian Sea. Journal of Geophysical Research, 2001, 106, 7139-7155.	3.3	80
15	Challenges associated with modeling low-oxygen waters inÂChesapeake Bay: a multiple model comparison. Biogeosciences, 2016, 13, 2011-2028.	1.3	73
16	The influence of wind and river pulses on an estuarine turbidity maximum: Numerical studies and field observations in Chesapeake Bay. Estuaries and Coasts, 2004, 27, 132-146.	1.7	67
17	Climate Forcing and Salinity Variability in Chesapeake Bay, USA. Estuaries and Coasts, 2012, 35, 237-261.	1.0	67
18	Surface patterns in temperature, flow, phytoplankton biomass, and species composition in the coastal transition zone off Northern California. Journal of Geophysical Research, 1990, 95, 18081-18094.	3.3	66

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19	Biogeochemical and ecological impacts of boundary currents in the Indian Ocean. Progress in Oceanography, 2017, 156, 290-325.	1.5	65
20	Indonesian throughflow nutrient fluxes and their potential impact on Indian Ocean productivity. Geophysical Research Letters, 2014, 41, 5060-5067.	1.5	64
21	Phytoplankton and photosynthetic light response in the Coastal Transition Zone off northern California in June 1987. Journal of Geophysical Research, 1991, 96, 14769-14780.	3.3	63
22	Biophysical processes in the Indian Ocean. Geophysical Monograph Series, 2009, , 9-32.	0.1	60
23	A simple empirical optical model for simulating light attenuation variability in a partially mixed estuary. Estuaries and Coasts, 2005, 28, 572-580.	1.7	59
24	A four-dimensional validation of a coupled physicalâ€"biological model of the Arabian Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2003, 50, 2917-2945.	0.6	52
25	Linking optimization and ecological models in a decision support tool for oyster restoration and management. Ecological Applications, 2010, 20, 851-866.	1.8	52
26	Top-down, bottom-up and physical controls on diatom-diazotroph assemblage growth in the Amazon River plume. Biogeosciences, 2014, 11, 3259-3278.	1.3	52
27	Modeling biogeochemical cycles in Chesapeake Bay with a coupled physicalâ€"biological model. Estuarine, Coastal and Shelf Science, 2006, 69, 19-46.	0.9	51
28	Predicting the Distribution of Vibrio spp. in the Chesapeake Bay: A Vibrio cholerae Case Study. EcoHealth, 2009, 6, 378-389.	0.9	51
29	Modeling particles and pelagic organisms in Chesapeake Bay: Convergent features control plankton distributions. Journal of Geophysical Research, 1999, 104, 1223-1243.	3.3	49
30	Answers sought to the enigma of marine nitrogen fixation. Eos, 2000, 81, 133.	0.1	42
31	Modeling the impact of iron and phosphorus limitations on nitrogen fixation in the Atlantic Ocean. Biogeosciences, 2007, 4, 455-479.	1.3	41
32	Modeling the impact ofTrichodesmiumand nitrogen fixation in the Atlantic Ocean. Journal of Geophysical Research, 2004, 109, .	3.3	40
33	A numerical investigation of the phytoplankton bloom in the Bay of Bengal during Northeast Monsoon. Journal of Geophysical Research, 2005, 110, .	3.3	39
34	Assessment of Fecal Indicator Bacteria and Potential Pathogen Co-Occurrence at a Shellfish Growing Area. Frontiers in Microbiology, 2018, 9, 384.	1.5	38
35	A Community Approach to Earth Systems Modeling. Eos, 2010, 91, 117-118.	0.1	35
36	Modeling the seasonal autochthonous sources of dissolved organic carbon and nitrogen in the upper Chesapeake Bay. Ecological Modelling, 2011, 222, 1139-1162.	1.2	34

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37	Modeling and forecasting the distribution of<i>Vibrio vulnificus</i>in Chesapeake Bay. Journal of Applied Microbiology, 2014, 117, 1312-1327.	1.4	33
38	Biogeochemical variability in the central equatorial Indian Ocean during the monsoon transition. Biogeosciences, 2015, 12, 2367-2382.	1.3	31
39	The influence of episodic events on transport of striped bass eggs to the estuarine turbidity maximum nursery area. Estuaries and Coasts, 2005, 28, 108-123.	1.7	29
40	Modeling the Effects of Oyster Reefs and Breakwaters on Seagrass Growth. Estuaries and Coasts, 2009, 32, 748-757.	1.0	28
41	Remote sensing of new production fuelled by nitrogen fixation. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	27
42	Modeling the influence of nutrients, turbulence and grazing on Pfiesteria population dynamics. Harmful Algae, 2006, 5, 459-479.	2.2	26
43	Comparative simulations of dissolved organic matter cycling in idealized oceanic, coastal, and estuarine surface waters. Journal of Marine Systems, 2013, 109-110, 109-128.	0.9	26
44	Environmental Models and Public Stakeholders in the Chesapeake Bay Watershed. Estuaries and Coasts, 2015, 38, 97-113.	1.0	23
45	Remote estimation of nitrogen fixation by Trichodesmium. Deep-Sea Research Part II: Topical Studies in Oceanography, 2001, 49, 123-147.	0.6	21
46	Assimilating high-resolution salinity data into a model of a partially mixed estuary. Journal of Geophysical Research, 2002, 107, 11-1.	3.3	20
47	A mechanistic model of photochemical transformation and degradation of colored dissolved organic matter. Marine Chemistry, 2019, 214, 103666.	0.9	19
48	Response of Chrysaora quinquecirrha medusae to low temperature. Hydrobiologia, 2010, 645, 125-133.	1.0	18
49	Indian Ocean research: Opportunities and challenges. Geophysical Monograph Series, 2009, , 409-429.	0.1	18
50	Turbidity Maximum Entrapment of Phytoplankton in the Chesapeake Bay. Estuaries and Coasts, 2014, 37, 279-298.	1.0	17
51	Patterns of Transcript Abundance of Eukaryotic Biogeochemically-Relevant Genes in the Amazon River Plume. PLoS ONE, 2016, 11, e0160929.	1.1	17
52	Modelling pelagic biogeography. Progress in Oceanography, 1994, 34, 161-205.	1.5	16
53	Modeling and Prediction of Marine Microbial Populations in the Genomic Era. Oceanography, 2007, 20, 155-165.	0.5	16
54	Modeling how surface nitrogen fixation influences subsurface nutrient patterns in the North Atlantic. Journal of Geophysical Research: Oceans, 2013, 118, 2520-2534.	1.0	15

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55	Forecasting system predicts presence of sea nettles in Chesapeake Bay. Eos, 2002, 83, 321.	0.1	14
56	An integrated modelling system for management of the Patuxent River estuary and basin, Maryland, USA. International Journal of Remote Sensing, 2006, 27, 3705-3726.	1.3	14
57	A Comprehensive Estuarine Dissolved Organic Carbon Budget Using an Enhanced Biogeochemical Model. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005442.	1.3	14
58	The 2nd International Indian Ocean Expedition (IIOEâ€2): Motivating New Exploration in a Poorly Understood Basin. Limnology and Oceanography Bulletin, 2016, 25, 117-124.	0.2	13
59	Research Opportunities and Challenges in the Indian Ocean. Eos, 2008, 89, 125-126.	0.1	12
60	Approaches and Challenges for Linking Marine Biogeochemical Models with the â€œOmicsâ€•Revolution. , 2016, , 45-63.		12
61	Estuarine Sediment Dissolved Organic Matter Dynamics in an Enhanced Sediment Flux Model. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 2669-2682.	1.3	11
62	Wind-Driven Dissolved Organic Matter Dynamics in a Chesapeake Bay Tidal Marsh-Estuary System. Estuaries and Coasts, 2018, 41, 708-723.	1.0	11
63	An individual-based numerical model of medusa swimming behavior. Marine Biology, 2006, 149, 595-608.	0.7	9
64	Precipitation thresholds for fecal bacterial indicators in the Chesapeake Bay. Water Research, 2018, 139, 252-262.	5.3	9
65	Modeling the Origin of the Particulate Organic Matter Flux to the Hypoxic Zone of Chesapeake Bay in Early Summer. Estuaries and Coasts, 2021, 44, 672-688.	1.0	9
66	Low temperature sensitivity of picophytoplankton PÂ:ÂB ratios and growth rates across a natural 10Â°C temperature gradient in the oligotrophic Indian Ocean. Limnology and Oceanography Letters, 2022, 7, 112-121.	1.6	7
67	Climate Extremes and Variability Surrounding Chesapeake Bay: Past, Present, and Future. Journal of the American Water Resources Association, 2022, 58, 826-854.	1.0	6
68	Patterns in swimming by a scyphomedusa: a novel approach to quantifying behavior in individuals. Marine Biology, 2004, 145, 303.	0.7	5
69	Introduction to Indian Ocean biogeochemical processes and ecological variability: Current understanding and emerging perspectives. Geophysical Monograph Series, 2009, , 1-7.	0.1	5
70	New Indian Ocean Program Builds on a Scientific Legacy. Eos, 2014, 95, 349-350.	0.1	5
71	Ocean Nitrogen Cycle Modeling. , 2008, , 1445-1495.		4
72	Microbial community biomass, production and grazing along 110Â°E in the eastern Indian Ocean. Deep-Sea Research Part II: Topical Studies in Oceanography, 2022, 202, 105134.	0.6	4

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73	Abundance and patchiness of Chrysaora quinquecirrha medusae from a high-frequency time series in the Choptank River, Chesapeake Bay, USA. Hydrobiologia, 2017, 792, 227-242.	1.0	3
74	Biogeochemical and Ecological Research in the Indian Ocean. Eos, 2007, 88, 144.	0.1	2
75	Modeling Hypoxia and Its Ecological Consequences in Chesapeake Bay. , 2017, , 119-147.		2
76	Sensitivity of a biogeochemical model to the formulation of oyster filtration. Ecological Modelling, 2019, 403, 70-84.	1.2	1
77	A Near Real Time Simulation of Salinity, Temperature and Sea Nettles (<i>Chrysaora quinquecirrha</i>) Tj ETQq1 1 0.784314 rgBT /Ov		0
78	OCEAN SCIENCES MEETING 2010: FROM OBSERVATION TO PREDICTION IN THE 21ST CENTURY. Limnology and Oceanography Bulletin, 2009, 18, 76-77.	0.2	0
79	IMBIZO II: JGOFS MEETS GLOBEC IN CRETE. Limnology and Oceanography Bulletin, 2010, 19, 82-83.	0.2	0
80	The second International Indian Ocean Expedition (IIOE-2): Motivating new exploration in a poorly understood ocean basin (volume 2). Deep-Sea Research Part II: Topical Studies in Oceanography, 2019, 166, 3-5.	0.6	0
81	The Second International Indian Ocean Expedition (IIOE-2): Motivating New Exploration in a Poorly Understood Ocean Basin (Volume 1). Deep-Sea Research Part II: Topical Studies in Oceanography, 2019, 161, 2-4.	0.6	0
82	OCEAN PROCESSES RELEVANT TO CLIMATE VARIATIONS IN THE INDIAN OCEAN SECTOR. World Scientific Series on Asia-Pacific Weather and Climate, 2016, , 25-61.	0.2	0
83	Transport and Fate of Particulate Organic Nitrogen in Chesapeake Bay: a Numerical Study. Estuaries and Coasts, 0, , .	1.0	0