P N Vinayachandran

List of Publications by Year in descending order

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82 papers

10,083 citations

36 h-index 77 g-index

85 all docs 85 docs citations

85 times ranked 5986 citing authors

#	Article	IF	CITATIONS
1	A dipole mode in the tropical Indian Ocean. Nature, 1999, 401, 360-363.	27.8	3,946
2	Title is missing!. Nature, 1999, 401, 360-363.	27.8	1,290
3	The monsoon currents in the north Indian Ocean. Progress in Oceanography, 2002, 52, 63-120.	3.2	602
4	Extremes of the Indian summer monsoon rainfall, ENSO and equatorial Indian Ocean oscillation. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	378
5	Hydrography and circulation in the western Bay of Bengal during the northeast monsoon. Journal of Geophysical Research, 1996, 101, 14011-14025.	3.3	355
6	Observations of barrier layer formation in the Bay of Bengal during summer monsoon. Journal of Geophysical Research, 2002, 107, SRF 19-1-SRF 19-9.	3.3	271
7	BOBMEX: The Bay of Bengal Monsoon Experiment. Bulletin of the American Meteorological Society, 2001, 82, 2217-2243.	3.3	193
8	Response of the equatorial Indian Ocean to an unusual wind event during 1994. Geophysical Research Letters, 1999, 26, 1613-1616.	4.0	167
9	Intrusion of the Southwest Monsoon Current into the Bay of Bengal. Journal of Geophysical Research, 1999, 104, 11077-11085.	3.3	167
10	Monsoon Response of the Sea around Sri Lanka: Generation of Thermal Domesand Anticyclonic Vortices. Journal of Physical Oceanography, 1998, 28, 1946-1960.	1.7	165
11	Phytoplankton bloom in the Bay of Bengal during the northeast monsoon and its intensification by cyclones. Geophysical Research Letters, 2003, 30, .	4.0	159
12	Indian Ocean dipole mode events in an ocean general circulation model. Deep-Sea Research Part II: Topical Studies in Oceanography, 2002, 49, 1573-1596.	1.4	146
13	On the roles of the northeast cold surge, the Borneo vortex, the Maddenâ€Julian Oscillation, and the Indian Ocean Dipole during the extreme 2006/2007 flood in southern Peninsular Malaysia. Geophysical Research Letters, 2008, 35, .	4.0	132
14	Biological response of the sea around Sri Lanka to summer monsoon. Geophysical Research Letters, 2004, 31, .	4.0	127
15	A summer monsoon pump to keep the Bay of Bengal salty. Geophysical Research Letters, 2013, 40, 1777-1782.	4.0	101
16	Indian Ocean response to anomalous conditions in 2006. Geophysical Research Letters, 2007, 34, .	4.0	97
17	Dynamics of <scp>A</scp> ndaman <scp>S</scp> ea circulation and its role in connecting the equatorial <scp>I</scp> ndian <scp>O</scp> cean to the <scp>B</scp> ay of <scp> B</scp> engal. Journal of Geophysical Research: Oceans, 2017, 122, 3200-3218.	2.6	79
18	Mechanisms of formation of the Arabian Sea mini warm pool in a high-resolution Ocean General Circulation Model. Journal of Geophysical Research, 2007, 112, .	3.3	73

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19	An OGCM study of the impact of rain and river water forcing on the Bay of Bengal. Journal of Geophysical Research: Oceans, 2016, 121, 2425-2446.	2.6	69
20	Indian Ocean sea surface salinity variations in a coupled model. Climate Dynamics, 2009, 33, 245-263.	3.8	68
21	Signatures of Indian Ocean Dipole and El Niño–Southern Oscillation events in sea level variations in the Bay of Bengal. Journal of Geophysical Research, 2012, 117, .	3.3	67
22	Phytoplankton size structure in the southern Bay of Bengal modified by the Summer Monsoon Current and associated eddies: Implications on the vertical biogenic flux. Journal of Marine Systems, 2015, 143, 98-119.	2.1	66
23	Hydrographic observations and model simulation of the Bay of Bengal freshwater plume. Deep-Sea Research Part I: Oceanographic Research Papers, 2007, 54, 471-486.	1.4	62
24	The warm pool in the Indian Ocean. Journal of Earth System Science, 1991, 100, 165-175.	1.3	62
25	Biophysical processes in the Indian Ocean. Geophysical Monograph Series, 2009, , 9-32.	0.1	60
26	The Dynamics of the Southwest Monsoon Current in 2016 from High-Resolution In Situ Observations and Models. Journal of Physical Oceanography, 2018, 48, 2259-2282.	1.7	55
27	Inhibition of mixed-layer deepening during winter in the northeastern Arabian Sea by the West India Coastal Current. Climate Dynamics, 2016, 47, 1049-1072.	3.8	49
28	Bifurcation of the East India Coastal Current east of Sri Lanka. Geophysical Research Letters, 2005, 32,	4.0	46
29	Formation mechanisms of temperature inversions in the southeastern Arabian Sea. Geophysical Research Letters, 2006, 33, .	4.0	46
30	BoBBLE: Ocean–Atmosphere Interaction and Its Impact on the South Asian Monsoon. Bulletin of the American Meteorological Society, 2018, 99, 1569-1587.	3.3	45
31	Hydrography of the eastern Arabian Sea during summer monsoon 2002. Journal of Earth System Science, 2005, 114, 459-474.	1.3	44
32	Westward movement of eddies into the Gulf of Aden from the Arabian Sea. Journal of Geophysical Research, 2007, 112 , .	3.3	41
33	Yanai waves in the western equatorial Indian Ocean. Journal of Geophysical Research: Oceans, 2013, 118, 1556-1570.	2.6	41
34	A numerical investigation of the phytoplankton bloom in the Bay of Bengal during Northeast Monsoon. Journal of Geophysical Research, 2005, 110, .	3.3	39
35	Mechanisms of South Indian Ocean intraseasonal cooling. Geophysical Research Letters, 2008, 35, .	4.0	39
36	Mechanisms of summer intraseasonal sea surface temperature oscillations in the Bay of Bengal. Journal of Geophysical Research, 2012, 117, .	3.3	38

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37	Closing the sea surface mixed layer temperature budget from in situ observations alone: Operation Advection during BoBBLE. Scientific Reports, 2020, 10, 7062.	3.3	38
38	Impact of physical processes on chlorophyll distribution in the Bay of Bengal. Geophysical Monograph Series, 2009, , 71-86.	0.1	37
39	Consequences of inhibition of mixedâ€layer deepening by the West India Coastal Current for winter phytoplankton bloom in the northeastern Arabian Sea. Journal of Geophysical Research: Oceans, 2016, 121, 6583-6603.	2.6	33
40	Mechanisms of Barrier Layer Formation and Erosion from In Situ Observations in the Bay of Bengal. Journal of Physical Oceanography, 2019, 49, 1183-1200.	1.7	33
41	Long-term impact of Amazon river runoff on northern hemispheric climate. Scientific Reports, 2017, 7, 10989.	3.3	31
42	Evidence for the existence of Persian Gulf Water and Red Sea Water in the Bay of Bengal. Climate Dynamics, 2017, 48, 3207-3226.	3.8	30
43	Unprecedented Surface Chlorophyll Blooms inÂtheÂSoutheastern Arabian Sea During an Extreme Negative Indian Ocean Dipole. Geophysical Research Letters, 2020, 47, e2019GL085026.	4.0	30
44	Triggering of the positive Indian Ocean dipole events by severe cyclones over the Bay of Bengal. Tellus, Series A: Dynamic Meteorology and Oceanography, 2007, 59, 461-475.	1.7	29
45	Impact of river runoff into the ocean on Indian summer monsoon. Environmental Research Letters, 2015, 10, 054008.	5.2	29
46	Influence of Rainfall Over Eastern Arabian Sea on Its Salinity. Journal of Geophysical Research: Oceans, 2019, 124, 5003-5020.	2.6	28
47	Summer cooling of the Arabian Sea during contrasting monsoons. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	26
48	Response of phytoplankton to heavy cloud cover and turbidity in the northern Bay of Bengal. Scientific Reports, 2018, 8, 11282.	3.3	26
49	Shift of peak in summer monsoon rainfall over Korea and its association with El Niño–Southern Oscillation. Journal of Geophysical Research, 2010, 115, .	3.3	25
50	Formation of summer phytoplankton bloom in the northwestern Bay of Bengal in a coupled physical-ecosystem model. Journal of Geophysical Research: Oceans, 2016, 121, 8535-8550.	2.6	25
51	Numerical simulation of the observed near-surface East India Coastal Current on the continental slope. Climate Dynamics, 2018, 50, 3949-3980.	3.8	24
52	The Railroad Switch Effect of Seasonally Reversing Currents on the Bay of Bengal Highâ€Salinity Core. Geophysical Research Letters, 2019, 46, 6005-6014.	4.0	24
53	High-Resolution Operational Ocean Forecast and Reanalysis System for the Indian Ocean. Bulletin of the American Meteorological Society, 2020, 101, E1340-E1356.	3.3	23
54	Particulate polyphosphate and alkaline phosphatase activity across a latitudinal transect in the tropical Indian Ocean. Limnology and Oceanography, 2018, 63, 1395-1406.	3.1	19

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55	Formation of the southern Bay of Bengal cold pool. Climate Dynamics, 2016, 47, 2009-2023.	3.8	18
56	Intraseasonal Variability of Air–Sea Fluxes over the Bay of Bengal during the Southwest Monsoon. Journal of Climate, 2018, 31, 7087-7109.	3.2	17
57	Effect of freshwater advection and winds on the vertical structure of chlorophyll in the northern Bay of Bengal. Deep-Sea Research Part II: Topical Studies in Oceanography, 2020, 179, 104622.	1.4	15
58	Impact of diurnal forcing on intraseasonal sea surface temperature oscillations in the <scp>B</scp> ay of <scp>B</scp> engal. Journal of Geophysical Research: Oceans, 2014, 119, 8221-8241.	2.6	14
59	Injection of Oxygenated Persian Gulf Water Into the Southern Bay of Bengal. Geophysical Research Letters, 2020, 47, e2020GL087773.	4.0	14
60	Dynamics of summer monsoon current around Sri Lanka. Ocean Dynamics, 2019, 69, 1133-1154.	2.2	13
61	Modulation of chlorophyll concentration by downwelling Rossby waves during the winter monsoon in the southeastern Arabian Sea. Progress in Oceanography, 2020, 186, 102365.	3.2	13
62	Understanding Iodine Chemistry Over the Northern and Equatorial Indian Ocean. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8104-8118.	3.3	11
63	The role of Amazon river runoff on the multidecadal variability of the Atlantic ITCZ. Environmental Research Letters, 2020, 15, 054013.	5.2	10
64	Maintenance of the southern Bay of Bengal cold pool. Deep-Sea Research Part II: Topical Studies in Oceanography, 2020, 179, 104624.	1.4	9
65	Comment on "Indian Ocean: Validation of the Miami Isopycnic Coordinate Ocean Model and ENSO events during 1958–1998―by V. E. Haugen et al Journal of Geophysical Research, 2003, 108, .	3.3	8
66	Processes governing the seasonality of vertical chlorophyll-a distribution in the central Arabian Sea: Bio-Argo observations and ecosystem model simulation. Deep-Sea Research Part II: Topical Studies in Oceanography, 2021, 183, 104926.	1.4	8
67	Southern Bay of Bengal: A possible hotspot for CO2 emission during the summer monsoon. Progress in Oceanography, 2021, 197, 102638.	3.2	5
68	Variability in the Concentration of Lithium in the Indoâ€Pacific Ocean. Global Biogeochemical Cycles, 2022, 36, .	4.9	5
69	Latent and sensible heat fluxes under active and weak phases of the summer monsoon of 1986. Journal of Earth System Science, 1989, 98, 213-222.	1.3	3
70	Water vapour flux divergence over the Arabian Sea during 1987 summer monsoon using satellite data. Boundary-Layer Meteorology, 1990, 51, 199-209.	2.3	3
71	Interannual variation of the Indian summer monsoon, ENSO, IOD, and EQUINOO., 2021,, 29-48.		3
72	Role of ocean dynamics in the evolution of mixed-layer temperature in the Bay of Bengal during the summer monsoon. Ocean Modelling, 2021, 168, 101895.	2.4	3

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73	Asynchronous and synchronous models of executions on Intel® Xeon Phiâ,,¢ coprocessor systems for high performance of long wave radiation calculations in atmosphere models. Journal of Parallel and Distributed Computing, 2017, 102, 199-212.	4.1	2
74	Wind forcing of the Ganga-Brahmaputra river plume. Ocean Dynamics, 2021, 71, 125-156.	2.2	2
75	Data-driven feature-oriented modeling of Southwest Monsoon Current. Ocean Modelling, 2021, , 101912.	2.4	2
76	Radiant heating rate associated with chlorophyll dynamics in upper ocean of Southern Bay of Bengal: A case study during Bay of Bengal Boundary Layer Experiment. Deep-Sea Research Part II: Topical Studies in Oceanography, 2022, 196, 105026.	1.4	2
77	On the weakening of northward propagation of intraseasonal oscillations during positive Indian Ocean Dipole events. Climate Dynamics, 2022, 59, 915-938.	3.8	2
78	Connectivity networks and delineation of disconnected coastal provinces along the Indian coastline using largeâ€scale Lagrangian transport simulations. Limnology and Oceanography, 0, , .	3.1	2
79	The Irrawaddy River Jet in the Andaman Sea During the Summer Monsoon. Frontiers in Marine Science, 0, 9, .	2.5	2
80	A dipole mode in the tropical Indian Ocean. , 0, .		1
81	Front and skeleton features based methods for tracking salinity propagation in the ocean. Computers and Geosciences, 2022, 159, 104993.	4.2	1
82	Fate and impact of Bay of Bengal rivers in an intermediate resolution ocean model. , 2022, , .		0