Vijayakumar S Nair

List of Publications by Year
in descending order

59 papers	2,214 citations	236925 25 h-index	243625 44 g-index
72 all docs	72 docs citations	72 times ranked	1750 citing authors

#	Article	IF	Citations
1	Wintertime aerosol characteristics over the Indoâ€Gangetic Plain (IGP): Impacts of local boundary layer processes and longâ€range transport. Journal of Geophysical Research, 2007, 112, .	3.3	287
2	Trends in aerosol optical depth over Indian region: Potential causes and impact indicators. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,794.	3.3	195
3	Black carbon aerosols over the Himalayas: direct and surface albedo forcing. Tellus, Series B: Chemical and Physical Meteorology, 2022, 65, 19738.	1.6	118
4	Spatial and vertical heterogeneities in aerosol properties over oceanic regions around India: Implications for radiative forcing. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 2131-2145.	2.7	116
5	Increasing Arabian dust activity and the Indian summer monsoon. Atmospheric Chemistry and Physics, 2015, 15, 8051-8064.	4.9	113
6	Simulation of South Asian aerosols for regional climate studies. Journal of Geophysical Research, 2012, 117, .	3.3	100
7	Aerosol characteristics in the marine atmospheric boundary layer over the Bay of Bengal and Arabian Sea during ICARB: Spatial distribution and latitudinal and longitudinal gradients. Journal of Geophysical Research, 2008, 113, .	3.3	67
8	Characteristics of spectral aerosol optical depths over India during ICARB. Journal of Earth System Science, 2008, 117, 303-313.	1.3	55
9	Optical and physical characteristics of Bay of Bengal aerosols during Wâ€ICARB: Spatial and vertical heterogeneities in the marine atmospheric boundary layer and in the vertical column. Journal of Geophysical Research, 2010, 115, .	3.3	53
10	Aircraft measurements of aerosol black carbon from a coastal location in the north-east part of peninsular India during ICARB. Journal of Earth System Science, 2008, 117, 263-271.	1.3	52
11	Vertical structure and horizontal gradients of aerosol extinction coefficients over coastal India inferred from airborne lidar measurements during the Integrated Campaign for Aerosol, Gases and Radiation Budget (ICARB) field campaign. Journal of Geophysical Research, 2009, 114, .	3.3	49
12	Sources of black carbon aerosols in South Asia and surrounding regions during the Integrated Campaign for Aerosols, Gases and Radiation Budget (ICARB). Atmospheric Chemistry and Physics, 2015, 15, 5415-5428.	4.9	48
13	Optical and Physical Properties of Atmospheric Aerosols over the Bay of Bengal during ICARB. Journals of the Atmospheric Sciences, 2009, 66, 2640-2658.	1.7	43
14	Black carbon aerosols over coastal Antarctica and its scavenging by snow during the Southern Hemispheric summer. Journal of Geophysical Research, 2010, 115, .	3.3	39
15	Modeling of aerosol induced snow albedo feedbacks over the Himalayas and its implications on regional climate. Climate Dynamics, 2020, 54, 4191-4210.	3.8	39
16	Seasonal variation of vertical distribution of aerosol single scattering albedo over Indian sub-continent: RAWEX aircraft observations. Atmospheric Environment, 2016, 125, 312-323.	4.1	38
17	Vertical distribution of aerosols over the east coast of India inferred from airborne LIDAR measurements. Annales Geophysicae, 2009, 27, 4157-4169.	1.6	37
18	Physical and optical properties of aerosols in a free tropospheric environment: Results from long-term observations over western trans-Himalayas. Atmospheric Environment, 2014, 84, 262-274.	4.1	37

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19	Spatial distribution and spectral characteristics of aerosol single scattering albedo over the Bay of Bengal inferred from shipborne measurements. Geophysical Research Letters, 2008, 35, .	4.0	36
20	Direct radiative effects of aerosols over South Asia from observations and modeling. Climate Dynamics, 2017, 49, 1411-1428.	3.8	33
21	Long-Range Transport of Mineral Dust to the Northeast Indian Ocean: Regional versus Remote Sources and the Implications. Journal of Climate, 2019, 32, 1525-1549.	3.2	33
22	Vertical Structure of Aerosols and Mineral Dust Over the Bay of Bengal From Multisatellite Observations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,845.	3.3	30
23	Black carbon and carbon monoxide over Bay of Bengal during W_ICARB: Source characteristics. Atmospheric Environment, 2014, 94, 508-517.	4.1	29
24	Aerosol black carbon over Svalbard regions of Arctic. Polar Science, 2016, 10, 60-70.	1.2	28
25	CCN characteristics over a tropical coastal station during south-west monsoon: observations and closure studies. Atmospheric Environment, 2017, 164, 299-308.	4.1	28
26	Seasonal changes in aerosol characteristics over Arabian Sea and their consequence on aerosol short-wave radiative forcing: Results from ARMEX field campaign. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 820-834.	1.6	26
27	Cloud condensation nuclei properties of South Asian outflow over the northern Indian Ocean during winter. Atmospheric Chemistry and Physics, 2020, 20, 3135-3149.	4.9	26
28	The optical and physical properties of atmospheric aerosols over the Indian Antarctic stations during southern hemispheric summer of the International Polar Year 2007â€“2008. Annales Geophysicae, 2011, 29, 109-121.	1.6	25
29	Modeling of the Effects of Wintertime Aerosols on Boundary Layer Properties Over the Indo Gangetic Plain. Journal of Geophysical Research D: Atmospheres, 2019, 124, 4141-4157.	3.3	25
30	Anthropogenic emissions from South Asia reverses the aerosol indirect effect over the northern Indian Ocean. Scientific Reports, 2020, 10, 18360.	3.3	25
31	Size segregated aerosol mass concentration measurements over the Arabian Sea during ICARB. Journal of Earth System Science, 2008, 117, 315-323.	1.3	23
32	Particle number size distributions and new particle formation events over the northern Indian Ocean during continental outflow. Atmospheric Environment, 2020, 238, 117719.	4.1	22
33	Altitude profiles of cloud condensation nuclei characteristics across the Indo-Gangetic Plain prior to the onset of the Indian summer monsoon. Atmospheric Chemistry and Physics, 2020, 20, 561-576.	4.9	22
34	Radiative properties of Bay of Bengal aerosols: Spatial distinctiveness and source impacts. Journal of Geophysical Research, 2012, 117, .	3.3	21
35	Influence of continental outflow and ocean biogeochemistry on the distribution of fine and ultrafine particles in the marine atmospheric boundary layer over Arabian Sea and Bay of Bengal. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7321-7331.	3.3	20
36	Surprising observation of large anthropogenic aerosol fraction over the â€œnearâ€pristineâ€•southern Bay of Bengal: Climate implications. Journal of Geophysical Research, 2010, 115, .	3.3	19

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37	Largeâ€scale enhancement in aerosol absorption in the lower free troposphere over continental India during spring. Geophysical Research Letters, 2016, 43, 11,453.	4.0	19
38	CCN activation properties at a tropical hill station in Western Ghats during south-west summer monsoon: Vertical heterogeneity. Atmospheric Research, 2018, 214, 36-45.	4.1	17
39	Effect of aerosol-induced snow darkening on the direct radiative effect of aerosols over the Himalayan region. Environmental Research Letters, 2021, 16, 064004.	5.2	17
40	Scavenging ratio of black carbon in the Arctic and the Antarctic. Polar Science, 2018, 16, 10-22.	1.2	16
41	Recent Regime Shifts in Mineral Dust Trends Over South Asia From Long-Term CALIPSO Observations. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 4485-4489.	6.3	16
42	Spatial gradient of aerosol mass concentrations and size distributions over southeastern Arabian Sea and equatorial Indian Ocean during ICARB-2018. Atmospheric Environment, 2019, 213, 727-738.	4.1	16
43	Mixing state of refractory black carbon aerosol in the South Asian outflow over the northern Indian Ocean during winter. Atmospheric Chemistry and Physics, 2021, 21, 9173-9199.	4.9	16
44	Characterisation of Absorbing Aerosols Using Ground and Satellite Data at an Urban Location, Hyderabad. Aerosol and Air Quality Research, 2016, 16, 1427-1440.	2.1	15
45	Assessment of the vertical distribution of speciated aerosol absorption over South Asia using spaceborne LIDAR and ground-based observations. Remote Sensing of Environment, 2021, 253, 112164.	11.0	15
46	Influence of circulation parameters on the AOD variations over the Bay of Bengal during ICARB. Journal of Earth System Science, 2008, 117, 353-360.	1.3	14
47	Spatial Gradients in Aerosol-Induced Atmospheric Heating and Surface Dimming over the Oceanic Regions around India: Anthropogenic or Natural?. Journal of Climate, 2013, 26, 7611-7621.	3.2	14
48	Seasonal variation in the spatial distribution of aerosol black carbon over Bay of Bengal: A synthesis of multi-campaign measurements. Atmospheric Environment, 2013, 64, 366-373.	4.1	13
49	Airborne measurements of aerosol scattering properties above the MABL over Bay of Bengal during W_ICARB â€“ characteristics and spatial gradients. Annales Geophysicae, 2011, 29, 895-908.	1.6	10
50	Seasonal contrast in the vertical profiles of aerosol number concentrations and size distributions over India: Implications from RAWEX aircraft campaign. Journal of Earth System Science, 2019, 128, 1.	1.3	9
51	Effects of Aerosolâ€“Induced Snow Albedo Feedback on the Seasonal Snowmelt Over the Himalayan Region. Water Resources Research, 2022, 58, .	4.2	8
52	Implications of multiple scattering on the assessment of black carbon aerosol radiative forcing. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 148, 134-140.	2.3	7
53	Amplification of South Asian haze by water vapourâ€“aerosol interactions. Atmospheric Chemistry and Physics, 2020, 20, 14457-14471.	4.9	6
54	Linkage between the absorbing aerosol-induced snow darkening effects over the Himalayas-Tibetan Plateau and the pre-monsoon climate over northern India. Theoretical and Applied Climatology, 2022, 147, 1033-1048.	2.8	6

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55	Mesoscale variations of the chemical composition of submicron aerosols and its influence on the cloud condensation nuclei activation. Atmospheric Environment, 2022, 268, 118778.	4.1	5
56	Vertical distributions of the microscopic morphological characteristics and elemental composition of aerosols over India. Journal of Atmospheric Chemistry, 2020, 77, 117-140.	3.2	3
57	Long-term changes in aerosol radiative properties over Ny-Ã…lesund: Results from Indian scientific expeditions to the Arctic. Polar Science, 2021, 30, 100700.	1.2	3
58	Deciphering the Role of Aerosolâ€Induced Snow Albedo Feedback on Dust Emission Over the Tibetan Plateau. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	3
59	Mineral dust characterization over the Himalayan cryosphere using space-borne lidar depolarization observations. , 2020, , .		0