Sachchida N Tripathi

List of Publications by Year in Descending Order

105 papers	4,413 citations	36 h-index	64 g-index
109 ext. papers	5,067 ext. citations	5.9 avg, IF	5.61 L-index

#	Paper	IF	Citations
105	Current status of source apportionment of ambient aerosols in India. *Atmospheric Environment*, **2022**, 274, 118987	5.3	2
104	Effect of Biomass Burning on PM 2.5 Composition and Secondary Aerosol Formation During Post-Monsoon and Winter Haze Episodes in Delhi. *Journal of Geophysical Research D: Atmospheres*, **2022**, 127,	4.4	4
103	Few-shot calibration of low-cost air pollution (PM2.5) sensors using meta-learning **2022**, 1-1		2
102	Domain Adaptation-Based Deep Calibration of Low-Cost PM□Sensors. *IEEE Sensors Journal*, **2021**, 1-1	4	3
101	Aerosol Loading and Radiation Budget Perturbations in Densely Populated and Highly Polluted Indo-Gangetic Plain by COVID-19: Influences on Cloud Properties and Air Temperature.. *Geophysical Research Letters*, **2021**, 48, e2021GL093796	4.9	3
100	Detection and Quantification of Enteric Pathogens in Aerosols Near Open Wastewater Canals in Cities with Poor Sanitation. *Environmental Science & Technology*, **2021**, 55, 14758-14771	10.3	7
99	Air Pollution in New Delhi during Late Winter: An Overview of a Group of Campaign Studies Focusing on Composition and Sources. *Atmosphere*, **2021**, 12, 1432	2.7	2
98	Long-term trends in air quality in major cities in the UK and India: a view from space. *Atmospheric Chemistry and Physics*, **2021**, 21, 6275-6296	6.8	15
97	Variations in Black Carbon concentration and sources during COVID-19 lockdown in Delhi. *Chemosphere*, **2021**, 270, 129435	8.4	14
96	Real-time characterization and source apportionment of fine particulate matter in the Delhi megacity area during late winter. *Science of the Total Environment*, **2021**, 770, 145324	10.2	14
95	Why airborne transmission hasn₹ been conclusive in case of COVID-19? An atmospheric science perspective. *Science of the Total Environment*, **2021**, 773, 145525	10.2	20
94	Effect of charge on aerosol microphysics of particles emitted from a hot wire generator: Theory and experiments. *Aerosol Science and Technology*, **2021**, 55, 1084-1098	3.4	0
93	Proliferation of Lung Epithelial Cells Is Regulated by the Mechanisms of Autophagy Upon Exposure of Soots. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 662597	5.7	1
92	Robust statistical calibration and characterization of portable low-cost air quality monitoring sensors to quantify real-time O₃ and NO₂ concentrations in diverse environments. *Atmospheric Measurement Techniques*, **2021**, 14, 37-52	4	11
91	The Indian COSMOS Network (ICON): Validating L-Band Remote Sensing and Modelled Soil Moisture Data Products. *Remote Sensing*, **2021**, 13, 537	5	6
90	Variation in chemical composition and sources of PM during the COVID-19 lockdown in Delhi. *Environment International*, **2021**, 153, 106541	12.9	19
89	An application of probability density function for the analysis of PM2.5 concentration during the COVID-19 lockdown period. *Science of the Total Environment*, **2021**, 782, 146681	10.2	3

88	Interaction of cesium bound fission product compounds (CsI and CsOH) with abundant inorganic compounds of atmosphere: Effect on hygroscopic growth properties. *Journal of Hazardous Materials*, **2021**, 418, 126356	12.8	2
87	Diurnal variability in the spectral characteristics and sources of water-soluble brown carbon aerosols over Delhi. *Science of the Total Environment*, **2021**, 794, 148589	10.2	6
86	Evolution of size and composition of fine particulate matter in the Delhi megacity during later winter. *Atmospheric Environment*, **2021**, 267, 118752	5.3	1
85	Large global variations in measured airborne metal concentrations driven by anthropogenic sources. *Scientific Reports*, **2020**, 10, 21817	4.9	4
84	Real-Time Measurements of PM2.5 Oxidative Potential Using a Dithiothreitol Assay in Delhi, India. *Environmental Science and Technology Letters*, **2020**, 7, 504-510	11	20
83	Validation of Low-Cost Sensors in Measuring Real-Time PM Concentrations at Two Sites in Delhi National Capital Region. *Sensors*, **2020**, 20,	3.8	8
82	Real-time measurement and source apportionment of elements in Delhi's atmosphere. *Science of the Total Environment*, **2020**, 742, 140332	10.2	40
81	Extended-spectrum beta-lactamase (ESBL)-positive Escherichia coli presence in urban aquatic environments in Kanpur, India. *Journal of Water and Health*, **2020**, 18, 849-854	2.2	3
80	Source characterization of volatile organic compounds measured by proton-transfer-reaction time-of-flight mass spectrometers in Delhi, India. *Atmospheric Chemistry and Physics*, **2020**, 20, 9753-9770	6.8	18
79	Particle formation from vapors emitted from glowing wires: Theory and experiments. *Aerosol Science and Technology*, **2020**, 54, 243-261	3.4	5
78	Wintertime hygroscopic growth factors (HGFs) of accumulation mode particles and their linkage to chemical composition in a heavily polluted urban atmosphere of Kanpur at the Centre of IGP, India: Impact of ambient relative humidity. *Science of the Total Environment*, **2020**, 704, 135363	10.2	6
77	Chemical characterization of PM and source apportionment of organic aerosol in New Delhi, India. *Science of the Total Environment*, **2020**, 745, 140924	10.2	34
76	Climatological trends in satellite-derived aerosol optical depth over North India and its relationship with crop residue burning: Rural-urban contrast. *Science of the Total Environment*, **2020**, 748, 140963	10.2	17
75	Spatial and temporal variability in energy and water vapour fluxes observed at seven sites on the Indian subcontinent during 2017. *Quarterly Journal of the Royal Meteorological Society*, **2020**, 146, 2853-2866	6.4	6
74	Interaction of convective organization with monsoon precipitation, atmosphere, surface and sea: The 2016 INCOMPASS field campaign in India. *Quarterly Journal of the Royal Meteorological Society*, **2020**, 146, 2828-2852	6.4	21
73	Gaussian process regression model for dynamically calibrating and surveilling a wireless low-cost particulate matter sensor network in Delhi. *Atmospheric Measurement Techniques*, **2019**, 12, 5161-5181	4	16
72	Examination of monitoring approaches for ambient air pollution: A case study for India. *Atmospheric Environment*, **2019**, 216, 116940	5.3	29
71	Evolution of Aerosol Size and Composition in the Indo-Gangetic Plain: Size-Resolved Analysis of High-Resolution Aerosol Mass Spectra. *ACS Earth and Space Chemistry*, **2019**, 3, 823-832	3.2	6

70	SATVAM: Toward an IoT Cyber-Infrastructure for Low-Cost Urban Air Quality Monitoring **2019**,		1
69	Biases in Model-Simulated Surface Energy Fluxes During the Indian Monsoon Onset Period. *Boundary-Layer Meteorology*, **2019**, 170, 323-348	3.4	9
68	Intensive allochthonous inputs along the Ganges River and their effect on microbial community composition and dynamics. *Environmental Microbiology*, **2019**, 21, 182-196	5.2	18
67	Access to Household Water Quality Information Leads to Safer Water: A Cluster Randomized Controlled Trial in india. *Environmental Science & Technology*, **2018**, 52, 5319-5329	10.3	11
66	Vertical Structure and Radiative Forcing of Monsoon Clouds Over Kanpur During the 2016 INCOMPASS Field Campaign. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 2152-2174	4.4	6
65	Realtime chemical characterization of post monsoon organic aerosols in a polluted urban city: Sources, composition, and comparison with other seasons. *Environmental Pollution*, **2018**, 232, 310-321	9.3	16
64	Field evaluation of low-cost particulate matter sensors in high- and low-concentration environments. *Atmospheric Measurement Techniques*, **2018**, 11, 4823-4846	4	143
63	Absorbing Refractive Index and Direct Radiative Forcing of Atmospheric Brown Carbon over Gangetic Plain. *ACS Earth and Space Chemistry*, **2018**, 2, 31-37	3.2	22
62	Global Sources of Fine Particulate Matter: Interpretation of PM Chemical Composition Observed by SPARTAN using a Global Chemical Transport Model. *Environmental Science & Technology*, **2018**, 52, 11670-11681	10.3	40
61	Aerosol-induced intensification of cooling effect of clouds during Indian summer monsoon. *Nature Communications*, **2018**, 9, 3754	17.4	39
60	Aerosol and Urban Land Use Effect on Rainfall Around Cities in Indo-Gangetic Basin From Observations and Cloud Resolving Model Simulations. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 3645-3667	4.4	19
59	Laboratory observations of temperature and humidity dependencies of nucleation and growth rates of sub-3 nm particles. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 1919-1929	4.4	20
58	Understanding Diurnality and Inter-Seasonality of a Sub-tropical Urban Heat Island. *Boundary-Layer Meteorology*, **2017**, 163, 287-309	3.4	28
57	Investigation of the aerosol□cloud□rainfall association over the Indian summer monsoon region. *Atmospheric Chemistry and Physics*, **2017**, 17, 5185-5204	6.8	48
56	Refractive Index and Absorption Attribution of Highly Absorbing Brown Carbon Aerosols from an Urban Indian City-Kanpur. *Scientific Reports*, **2016**, 6, 37735	4.9	44
55	Characterization of organic residues of size-resolved fog droplets and their atmospheric implications. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 4317-4332	4.4	23
54	Elevated aerosol layers and their radiative impact over Kanpur during monsoon onset period. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 7936-7957	4.4	36
53	Applications of Electrified Dust and Dust Devil Electrodynamics to Martian Atmospheric Electricity. *Space Science Reviews*, **2016**, 203, 299-345	7.5	61

52	Quantitative assessment of AOD from 17 CMIP5 models based on satellite-derived AOD over India. *Annales Geophysicae*, **2016**, 34, 657-671	2	10
51	A photochemical model of the dust-loaded ionosphere of Mars. *Journal of Geophysical Research E: Planets*, **2016**, 121, 2335-2348	4.1	9
50	Combined effects of organic aerosol loading and fog processing on organic aerosols oxidation, composition, and evolution. *Science of the Total Environment*, **2016**, 573, 690-698	10.2	21
49	Highly time resolved chemical characterization of submicron organic aerosols at a polluted urban location. *Environmental Sciences: Processes and Impacts*, **2016**, 18, 1285-1296	4.3	15
48	SPARTAN: a global network to evaluate and enhance satellite-based estimates of ground-level particulate matter for global health applications. *Atmospheric Measurement Techniques*, **2015**, 8, 505-521	4	56
47	Contribution of Brown Carbon to Direct Radiative Forcing over the Indo-Gangetic Plain. *Environmental Science & Technology*, **2015**, 49, 10474-81	10.3	53
46	CCN closure study: Effects of aerosol chemical composition and mixing state. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 766-783	4.4	54
45	Aerosol-cloud associations over Gangetic Basin during a typical monsoon depression event using WRF-Chem simulation. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 10,974-10,995	4.4	21
44	Real-time measurements of ambient aerosols in a polluted Indian city: Sources, characteristics, and processing of organic aerosols during foggy and nonfoggy periods. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 9006-9019	4.4	53
43	Atmospheric ions and new particle formation events at a tropical location, Pune, India. *Quarterly Journal of the Royal Meteorological Society*, **2015**, 141, 3140-3156	6.4	17
42	Remote Sensing of Atmospheric Aerosols **2014**, 119-151		1
41	Inter-seasonal variability in size-resolved CCN properties at Kanpur, India. *Atmospheric Environment*, **2014**, 85, 161-168	5.3	27
40	Latitudinal variation of aerosol properties from Indo-Gangetic Plain to central Himalayan foothills during TIGERZ campaign. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 4750-4769	4.4	43
39	Four-year measurements of trace gases (SO2, NOx, CO, and O3) at an urban location, Kanpur, in Northern India. *Journal of Atmospheric Chemistry*, **2014**, 71, 283-301	3.2	95
38	Observations of new particle formation at two distinct Indian subcontinental urban locations. *Atmospheric Environment*, **2014**, 96, 370-379	5.3	45
37	An overview of the physico-chemical characteristics of dust at Kanpur in the central Indo-Gangetic basin. *Atmospheric Environment*, **2014**, 97, 386-396	5.3	25
36	Harmonisation of nanoparticle concentration measurements using GRIMM and TSI scanning mobility particle sizers. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	25
35	Temporal trends in atmospheric PM□□PM□elemental carbon, organic carbon, water-soluble organic carbon, and optical properties: impact of biomass burning emissions in the Indo-Gangetic Plain. *Environmental Science & Technology*, **2012**, 46, 686-95	10.3	154

34	Comparison of experimental and modeled absorption enhancement by black carbon (BC) cored polydisperse aerosols under hygroscopic conditions. *Environmental Science & Technology*, **2012** , 46, 8082-9	10.3	27
33	Fog- and cloud-induced aerosol modification observed by the Aerosol Robotic Network (AERONET). *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		70
32	Study of MPLNET-Derived Aerosol Climatology over Kanpur, India, and Validation of CALIPSO Level 2 Version 3 Backscatter and Extinction Products. *Journal of Atmospheric and Oceanic Technology*, **2012**, 29, 1285-1294	2	59
31	First Surface Measurement of Cloud Condensation Nuclei over Kanpur, IGP: Role of Long Range Transport. *Aerosol Science and Technology*, **2012**, 46, 973-982	3.4	22
30	Aerosol properties over the Indo-Gangetic Plain: A mesoscale perspective from the TIGERZ experiment. *Journal of Geophysical Research*, **2011**, 116,		122
29	Observation-based 3-D view of aerosol radiative properties over Indian Continental Tropical Convergence Zone: implications to regional climate. *Tellus, Series B: Chemical and Physical Meteorology*, **2011**, 63, 971-989	3.3	34
28	Pre-monsoon aerosol characteristics over the Indo-Gangetic Basin: implications to climatic impact. *Annales Geophysicae*, **2011**, 29, 789-804	2	105
27	On radiative forcing of sulphate aerosol produced from ion-promoted nucleation mechanisms in an atmospheric global model. *Meteorology and Atmospheric Physics*, **2011**, 112, 101-115	2	2
26	Climatological aspects of the optical properties of fine/coarse mode aerosol mixtures. *Journal of Geophysical Research*, **2010**, 115,		276
25	A 1 year record of carbonaceous aerosols from an urban site in the Indo-Gangetic Plain: Characterization, sources, and temporal variability. *Journal of Geophysical Research*, **2010**, 115,		170
24	Numerical study for production of space charge within the stratiform cloud. *Journal of Earth System Science*, **2010**, 119, 627-638	1.8	3
23	Climatological aspects of the optical properties of fine/coarse mode aerosol mixtures **2010**, 115,		1
22	Retrieving the composition and concentration of aerosols over the Indo-Gangetic basin using CALIOP and AERONET data. *Geophysical Research Letters*, **2009**, 36,	4.9	52
21	Highly charged cloud particles in the atmosphere of Venus. *Journal of Geophysical Research*, **2009**, 114,		29
20	Probable mixing state of aerosols in the Indo-Gangetic Basin, northern India. *Geophysical Research Letters*, **2008**, 35,	4.9	53
19	Aerosol direct radiative effects over Kanpur in the Indo-Gangetic basin, northern India: Long-term (2001–2005) observations and implications to regional climate. *Journal of Geophysical Research*, **2008**, 113,		103
18	Dust charging and electrical conductivity in the day and nighttime atmosphere of Mars. *Journal of Geophysical Research*, **2008**, 113,		30
17	Implications of particle composition and shape to dust radiative effect: A case study from the Great Indian Desert. *Geophysical Research Letters*, **2008**, 35,	4.9	30

16	Modeling optical properties of mineral dust over the Indian Desert. *Journal of Geophysical Research*, **2008**, 113,		41
15	Profiles of Ion and Aerosol Interactions in Planetary Atmospheres. *Space Science Reviews*, **2008**, 137, 193-211	7.5	17
14	Numerical predictions of aerosol charging and electrical conductivity of the lower atmosphere of Mars. *Geophysical Research Letters*, **2007**, 34,	4.9	20
13	Estimation of aerosol optical properties and radiative effects in the Ganga basin, northern India, during the wintertime. *Journal of Geophysical Research*, **2007**, 112,		68
12	Wintertime aerosol characteristics over the Indo-Gangetic Plain (IGP): Impacts of local boundary layer processes and long-range transport. *Journal of Geophysical Research*, **2007**, 112,		235
11	Role of atmospheric ammonia in the formation of inorganic secondary particulate matter: A study at Kanpur, India. *Journal of Atmospheric Chemistry*, **2007**, 58, 1-17	3.2	104
10	Dust events in Kanpur, northern India: Chemical evidence for source and implications to radiative forcing. *Geophysical Research Letters*, **2006**, 33,	4.9	91
9	Evidence for the role of ion-induced particle formation during an atmospheric nucleation event observed in Tropospheric Ozone Production about the Spring Equinox (TOPSE). *Journal of Geophysical Research*, **2006**, 111,		31
8	Measurements of atmospheric parameters during Indian Space Research Organization Geosphere Biosphere Programme Land Campaign II at a typical location in the Ganga basin: 1. Physical and optical properties. *Journal of Geophysical Research*, **2006**, 111,		93
7	Measurements of atmospheric parameters during Indian Space Research Organization Geosphere Biosphere Program Land Campaign II at a typical location in the Ganga Basin: 2. Chemical properties. *Journal of Geophysical Research*, **2006**, 111,		78
6	A parameterization of ion-induced nucleation of sulphuric acid and water for atmospheric conditions. *Journal of Geophysical Research*, **2005**, 110,		46
5	Aerosol black carbon radiative forcing at an industrial city in northern India. *Geophysical Research Letters*, **2005**, 32,	4.9	94
4	Enhanced layer of black carbon in a north Indian industrial city. *Geophysical Research Letters*, **2005**, 32, n/a-n/a	4.9	37
3	Influence of dust storms on the aerosol optical properties over the Indo-Gangetic basin. *Journal of Geophysical Research*, **2004**, 109,		288
2	Variability of aerosol parameters over Kanpur, northern India. *Journal of Geophysical Research*, **2004** , 109,		304
1	Detection and quantification of enteric pathogens in aerosols near open wastewater canals in cities with poor sanitation		2