

Rajesh Kumar

List of Publications by Year in descending order

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118
papers

3,692
citations

113904

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144563

57
g-index

191
all docs

191
docs citations

191
times ranked

4662
citing authors

#	ARTICLE	IF	CITATIONS
1	Utilising BC observations to estimate CO contributions from fossil fuel and biomass burning in the Central Himalayan region. Environmental Pollution, 2024, 341, 122975.	7.7	0
2	Enhancing Air Quality Forecasts Across the Contiguous United States (CONUS) During Wildfires Using Analog-Based Post-Processing Methods. Atmospheric Environment, 2024, 316, 120165.	4.2	1
3	On the influence of vertical mixing, boundary layer schemes, and temporal emission profiles on tropospheric NO ₂ in WRF-Chem " comparisons to in situ, satellite, and MAX-DOAS observations. Atmospheric Chemistry and Physics, 2024, 24, 185-217.	5.0	1
4	Impact of direct insertion of SMAP soil moisture retrievals in WRF-Chem for dust storm events in the western U.S.. Atmospheric Environment, 2024, 321, 120349.	4.2	0
5	Causes and effects of worldwide demutualization of financial exchanges. International Review of Economics and Finance, 2024, 91, 864-882.	4.7	0
6	Chemical Data Assimilation With Aqueous Chemistry in WRF-Chem Coupled With WRFDA (V4.4.1). Journal of Advances in Modeling Earth Systems, 2024, 16, .	3.7	1
7	Decision Support System version 1.0 (DSS v1.0) for air quality management in Delhi, India. Geoscientific Model Development, 2024, 17, 2617-2640.	3.7	1
8	Hotspot driven air pollution during crop residue burning season in the Indo-Gangetic Plain, India. Environmental Pollution, 2024, 350, 124013.	7.7	0
9	Investigating ground-level ozone pollution in semi-arid and arid regions of Arizona using WRF-Chem v4.4 modeling. Geoscientific Model Development, 2024, 17, 4331-4353.	3.7	1
10	Role of atmospheric aerosols in severe winter fog over the Indo-Gangetic Plain of India: a case study. Atmospheric Chemistry and Physics, 2024, 24, 6635-6662.	5.0	0
11	Redefining the Role of Ornithine Aspartate and Vitamin E in Metabolic-Dysfunction-Associated Steatotic Liver Disease through Its Biochemical Properties. International Journal of Molecular Sciences, 2024, 25, 6839.	4.2	0
12	High-Resolution Modeling of Air Quality in Abidjan (Côte d'Ivoire) Using a New Urban-Scale Inventory. Atmosphere, 2024, 15, 758.	2.3	0
13	Managing synthetic N-fertilizer emissions in India: Insights from field surveys across 102 districts. Journal of Environmental Management, 2024, 366, 121909.	7.9	0
14	Source attribution of carbon monoxide over Northern India during crop residue burning period over Punjab. Environmental Pollution, 2024, , 124707.	7.7	0
15	Insights into the long-term (2005–2021) spatiotemporal evolution of summer ozone production sensitivity in the Northern Hemisphere derived with the Ozone Monitoring Instrument (OMI). Atmospheric Chemistry and Physics, 2024, 24, 10363-10384.	5.0	0
16	Comparison of CAMS and CMAQ analyses of surface-level PM _{2.5} and O ₃ over the conterminous United States (CONUS). Atmospheric Environment, 2024, 338, 120833.	4.2	0
17	The co-benefits of a low-carbon future for PM _{2.5} and O ₃ air pollution in Europe. Atmospheric Chemistry and Physics, 2024, 24, 10717-10740.	5.0	0
18	Chloride (HCl) dominates inorganic aerosol formation from ammonia in the Indo-Gangetic Plain during winter: modeling and comparison with observations. Atmospheric Chemistry and Physics, 2023, 23, 41-59.	5.0	7

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19	Performance of AIRS ozone retrieval over the central Himalayas: use of ozonesonde and other satellite datasets. <i>Atmospheric Measurement Techniques</i> , 2023, 16, 889-909.	3.1	5
20	Capturing High-Resolution Air Pollution Features Using the Multi-Scale Infrastructure for Chemistry and Aerosols Version 0 (MUSICAv0) Global Modeling System. <i>Journal of Geophysical Research D: Atmospheres</i> , 2023, 128, .	3.3	3
21	Sensitivity of WRF/Chem simulated PM _{2.5} to initial/boundary conditions and planetary boundary layer parameterization schemes over the Indo-Gangetic Plain. <i>Environmental Monitoring and Assessment</i> , 2023, 195, .	2.7	5
22	Satellite remote-sensing capability to assess tropospheric-column ratios of formaldehyde and nitrogen dioxide: case study during the Long Island Sound Tropospheric Ozone Study 2018 (LISTOS). <i>Journal of Geophysical Research D: Atmospheres</i> , 2023, 128, .	3.3	3
23	Impact of dust aerosols on the Indian Summer Monsoon Rainfall on intra-seasonal time-scale. <i>Atmospheric Environment</i> , 2023, 305, 119802.	4.2	4
24	Characterizing the Role of Moisture and Smoke on the 2021 Santa Coloma de Queralt Pyroconvective Event Using WRF-Fire. <i>Journal of Advances in Modeling Earth Systems</i> , 2023, 15, .	3.7	2
25	Decoupling in the vertical shape of HCHO during a sea breeze event: The effect on trace gas satellite retrievals and column-to-surface translation. <i>Atmospheric Environment</i> , 2023, 309, 119929.	4.2	1
26	Atmospheric heating in the US from saharan dust: Tracking the June 2020 event with surface and satellite observations. <i>Atmospheric Environment</i> , 2023, 310, 119988.	4.2	1
27	Forecasting of an unusual dust event over western India by the Air Quality Early Warning System. <i>Atmospheric Environment</i> , 2023, 311, 120013.	4.2	2
28	Search for the rare decays $\Lambda_c^0 \rightarrow p \pi^-$ and $\Lambda_c^0 \rightarrow n \pi^0$ at LHCb. <i>Chinese Physics C</i> , 2023, 47, 093002.	3.6	1
29	Plume detection and emission estimate for biomass burning plumes from TROPOMI carbon monoxide observations using APE v1.1. <i>Geoscientific Model Development</i> , 2023, 16, 4835-4852.	3.7	0
30	Application of the Multi-Scale Infrastructure for Chemistry and Aerosols version 0 (MUSICAv0) for air quality research in Africa. <i>Geoscientific Model Development</i> , 2023, 16, 6001-6028.	3.7	1
31	Simulation of Indian Summer Monsoon Rainfall (ISMR) with fully coupled regional chemistry transport model: A case study for 2017. <i>Atmospheric Environment</i> , 2022, 268, 118785.	4.2	5
32	Drivers of air pollution variability during second wave of COVID-19 in Delhi, India. <i>Urban Climate</i> , 2022, 41, 101059.	5.8	13
33	Modeling an Extreme Dust Deposition Event to the French Alpine Seasonal Snowpack in April 2018: Meteorological Context and Predictions of Dust Deposition. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	3.3	3
34	Assessment of regional carbon monoxide simulations over Africa and insights into source attribution and regional transport. <i>Atmospheric Environment</i> , 2022, 277, 119075.	4.2	5
35	Probing into the wintertime meteorology and particulate matter (PM _{2.5} and PM ₁₀) forecast over Delhi. <i>Atmospheric Pollution Research</i> , 2022, 13, 101426.	3.9	18
36	Measurement of light-absorbing particles in surface snow of central and western Himalayan glaciers: spatial variability, radiative impacts, and potential source regions. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 8725-8737.	5.0	6

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37	Effects of Fire Diurnal Variation and Plume Rise on U.S. Air Quality During FIREXâ€AQ and WEâ€CAN Based on the Multiâ€Scale Infrastructure for Chemistry and Aerosols (MUSICAv0). Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	19
38	On the Relevance of Aerosols to Snow Cover Variability Over High Mountain Asia. Geophysical Research Letters, 2022, 49, .	4.0	5
39	Cropland trees need to be included for accurate model simulations of land-atmosphere heat fluxes, temperature, boundary layer height, and ozone. Science of the Total Environment, 2021, 751, 141728.	8.2	7
40	Exploring analog-based schemes for aerosol optical depth forecasting with WRF-Chem. Atmospheric Environment, 2021, 246, 118134.	4.2	5
41	Evaluating the Mobile Flux Plane (MFP) Method to Estimate Methane Emissions Using Large Eddy Simulations (LES). Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD032663.	3.3	0
42	Description and Evaluation of the Fine Particulate Matter Forecasts in the NCAR Regional Air Quality Forecasting System. Atmosphere, 2021, 12, 302.	2.3	7
43	Performance of high resolution (400Âm) PM2.5 forecast over Delhi. Scientific Reports, 2021, 11, 4104.	3.4	43
44	Black carbon concentration in the central Himalayas: Impact on glacier melt and potential source contribution. Environmental Pollution, 2021, 275, 116544.	7.7	36
45	The impact of Los Angeles Basin pollution and stratospheric intrusions on the surrounding San Gabriel Mountains as seen by surface measurements, lidar, and numerical models. Atmospheric Chemistry and Physics, 2021, 21, 6129-6153.	5.0	7
46	Interstate transport of carbon monoxide and black carbon over India. Atmospheric Environment, 2021, 251, 118268.	4.2	6
47	Chemical Weather and Chemical Climate. AGU Advances, 2021, 2, e2021AV000399.	6.2	4
48	A 57-year-old man with rapidly progressive pulmonary hypertension. Monaldi Archives for Chest Disease, 2021, , .	0.6	2
49	The impacts of transported wildfire smoke aerosols on surface air quality in New York State: A multi-year study using machine learning. Atmospheric Environment, 2021, 259, 118513.	4.2	11
50	Evaluation and intercomparison of wildfire smoke forecasts from multiple modeling systems for the 2019 Williams Flats fire. Atmospheric Chemistry and Physics, 2021, 21, 14427-14469.	5.0	39
51	Chemical Tomography in a Fresh Wildland Fire Plume: A Large Eddy Simulation (LES) Study. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035203.	3.3	17
52	What is driving the diurnal variation in tropospheric NO2 columns over a cluster of high emission thermal power plants in India?. Atmospheric Environment: X, 2020, 5, 100058.	1.5	7
53	A Novel Ensemble Design for Probabilistic Predictions of Fine Particulate Matter Over the Contiguous United States (CONUS). Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032554.	3.3	2
54	Tradeoffs between air pollution mitigation and meteorological response in India. Scientific Reports, 2020, 10, 14796.	3.4	11

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55	Enhancing Accuracy of Air Quality and Temperature Forecasts During Paddy Crop Residue Burning Season in Delhi Via Chemical Data Assimilation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD033019.	3.3	35
56	Estimation of PM _{2.5} Concentrations in New York State: Understanding the Influence of Vertical Mixing on Surface PM _{2.5} Using Machine Learning. <i>Atmosphere</i> , 2020, 11, 1303.	2.3	7
57	The laser diode calibration system of the ICARUS T600 detector at FNAL. <i>Journal of Instrumentation</i> , 2020, 15, C05042-C05042.	1.3	8
58	Ozone pollution over China and India: seasonality and sources. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 4399-4414.	5.0	89
59	How Much Does Large-Scale Crop Residue Burning Affect the Air Quality in Delhi?. <i>Environmental Science & Technology</i> , 2020, 54, 4790-4799.	10.5	90
60	Intelligent Mechanisms of Macrophage Apoptosis Subversion by Mycobacterium. <i>Pathogens</i> , 2020, 9, 218.	2.9	16
61	Improving Air Quality Predictions over the United States with an Analog Ensemble. <i>Weather and Forecasting</i> , 2020, 35, 2145-2162.	2.0	20
62	Prognostic nomograms and Aggtrmmns scoring system for predicting overall survival and cancerâ€specific survival of patients with kidney cancer. <i>Cancer Medicine</i> , 2020, 9, 2710-2722.	2.9	12
63	CNS Involvement in <i>Tropheryma whipplei</i> Infection. , 2020, , 331-336.		0
64	Substantial Increase in the Joint Occurrence and Human Exposure of Heatwave and Highâ€PM Hazards Over South Asia in the Midâ€21st Century. <i>AGU Advances</i> , 2020, 1, e2019AV000103.	6.2	33
65	Neural Network Analysis to Evaluate Ozone Damage to Vegetation Under Different Climatic Conditions. <i>Frontiers in Forests and Global Change</i> , 2020, 3, .	2.5	6
66	Effect of Meteorological Variability on Fine Particulate Matter Simulations Over the Contiguous United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 5669-5694.	3.3	5
67	Radiative Effects of Residential Sector Emissions in China: Sensitivity to Uncertainty in Black Carbon Emissions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 5029-5044.	3.3	5
68	Impact of Deadly Dust Storms (May 2018) on Air Quality, Meteorological, and Atmospheric Parameters Over the Northern Parts of India. <i>GeoHealth</i> , 2019, 3, 67-80.	4.1	91
69	Toward Improving Shortâ€Term Predictions of Fine Particulate Matter Over the United States Via Assimilation of Satellite Aerosol Optical Depth Retrievals. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 2753-2773.	3.3	28
70	Separating Emission and Meteorological Drivers of Midâ€21stâ€Century Air Quality Changes in IndiaBased on Multiyear Globalâ€RegionalChemistryâ€Climate Simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 13420-13438.	3.3	13
71	Investigation of a regional ozone reduction event over eastern India by integrating in situ and satellite measurements with WRF-Chem simulations. <i>Theoretical and Applied Climatology</i> , 2019, 137, 399-416.	2.8	7
72	Year-long variability of the fossil fuel and wood burning black carbon components at a rural site in southern Delhi outskirts. <i>Atmospheric Research</i> , 2019, 216, 11-25.	4.3	50

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73	Surface PM _{2.5} Estimate Using Satellite-Derived Aerosol Optical Depth over India. <i>Aerosol and Air Quality Research</i> , 2019, 19, 25-37.	2.1	42
74	How Will Air Quality Change in South Asia by 2050?. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 1840-1864.	3.3	64
75	Seasonal characteristics of black carbon aerosol mass concentrations and influence of meteorology, New Delhi (India). <i>Urban Climate</i> , 2018, 24, 968-981.	5.8	18
76	Radiative impact of a heavy dust storm over India and surrounding oceanic regions. <i>Atmospheric Environment</i> , 2018, 185, 109-120.	4.2	39
77	Concentrations and radiative forcing of anthropogenic aerosols from 1750 to 2014 simulated with the Oslo-CTM3 and CEDS emission inventory. <i>Geoscientific Model Development</i> , 2018, 11, 4909-4931.	3.7	37
78	Five steps to improve air-quality forecasts. <i>Nature</i> , 2018, 561, 27-29.	36.2	40
79	Sources of Black Carbon Deposition to the Himalayan Glaciers in Current and Future Climates. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 7482-7505.	3.3	13
80	Variations in surface ozone and carbon monoxide in the Kathmandu Valley and surrounding broader regions during SusKat-ABC field campaign: role of local and regional sources. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 11949-11971.	5.0	41
81	Tropospheric Ozone Assessment Report: Assessment of global-scale model performance for global and regional ozone distributions, variability, and trends. <i>Elementa</i> , 2018, 6, .	3.3	193
82	THU0593â€¦Multicentric osteolysis with nodulosis and arthropathy (MONA): report of the first lebanese family. <i>Annals of the Rheumatic Diseases</i> , 2018, , .	7.6	0
83	An Overview of Air Quality Modeling Activities in South Asia. , 2017, , 27-47.		0
84	Source region and sector contributions of atmospheric soot particle in a coalfield region of Dhanbad, eastern part of India. <i>Atmospheric Research</i> , 2017, 197, 415-424.	4.3	8
85	A case study of aerosol data assimilation with the Community Multi-scale Air Quality Model over the contiguous United States using 3D-Var and optimal interpolation methods. <i>Geoscientific Model Development</i> , 2017, 10, 4743-4758.	3.7	41
86	Seasonal, interannual, and long-term variabilities in biomass burning activity over South Asia. <i>Environmental Science and Pollution Research</i> , 2016, 23, 4397-4410.	5.3	41
87	Significant cooling effect on the surface due to soot particles over Brahmaputra River Valley region, India: An impact on regional climate. <i>Science of the Total Environment</i> , 2016, 562, 504-516.	8.2	22
88	The Regional Impacts of Cooking and Heating Emissions on Ambient Air Quality and Disease Burden in China. <i>Environmental Science & Technology</i> , 2016, 50, 9416-9423.	10.5	69
89	Dynamical characteristics of atmospheric aerosols over IG region. <i>Proceedings of SPIE</i> , 2016, , .	1.0	1
90	Premature mortality in India due to PM _{2.5} and ozone exposure. <i>Geophysical Research Letters</i> , 2016, 43, 4650-4658.	4.0	227

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91	First observations of light non-methane hydrocarbons (C ₂ –C ₅) over a high altitude site in the central Himalayas. <i>Atmospheric Environment</i> , 2016, 125, 450-460.	4.2	18
92	Investigations of aerosol black carbon from a semi-urban site in the Indo-Gangetic Plain region. <i>Atmospheric Environment</i> , 2016, 125, 346-359.	4.2	67
93	What controls the seasonal cycle of black carbon aerosols in India?. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 7788-7812.	3.3	87
94	Sources of black carbon aerosols in South Asia and surrounding regions during the Integrated Campaign for Aerosols, Gases and Radiation Budget (ICARB). <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 5415-5428.	5.0	50
95	Inter-comparison of different NO _x emission inventories and associated variation in simulated surface ozone in Indian region. <i>Atmospheric Environment</i> , 2015, 117, 61-73.	4.2	40
96	Air quality simulation over South Asia using Hemispheric Transport of Air Pollution version-2 (HTAP-v2) emission inventory and Model for Ozone and Related chemical Tracers (MOZART-4). <i>Atmospheric Environment</i> , 2015, 122, 357-372.	4.2	27
97	Influence of springtime biomass burning in South Asia on regional ozone (O ₃): A model based case study. <i>Atmospheric Environment</i> , 2015, 100, 37-47.	4.2	38
98	On the processes influencing the vertical distribution of ozone over the central Himalayas: Analysis of yearlong ozonesonde observations. <i>Atmospheric Environment</i> , 2014, 88, 201-211.	4.2	44
99	Seasonal trends, meteorological impacts, and associated health risks with atmospheric concentrations of gaseous pollutants at an Indian coastal city. <i>Environmental Science and Pollution Research</i> , 2014, 21, 11418-11432.	5.3	29
100	Reductions in India's crop yield due to ozone. <i>Geophysical Research Letters</i> , 2014, 41, 5685-5691.	4.0	147
101	Effects of dust aerosols on tropospheric chemistry during a typical pre-monsoon season dust storm in northern India. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 6813-6834.	5.0	71
102	WRF-Chem simulations of a typical pre-monsoon dust storm in northern India: influences on aerosol optical properties and radiation budget. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 2431-2446.	5.0	153
103	First simultaneous measurements of ozone, CO, and NO _y at a high-altitude regional representative site in the central Himalayas. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 1592-1611.	3.3	104
104	Interannual and Intraseasonal Variability in Fine Mode Particles over Delhi: Influence of Meteorology. <i>Advances in Meteorology</i> , 2013, 2013, 1-9.	1.7	13
105	Constraints on surface NO _x emissions by assimilating satellite observations of multiple species. <i>Geophysical Research Letters</i> , 2013, 40, 4745-4750.	4.0	28
106	Source attribution of carbon monoxide in India and surrounding regions during wintertime. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 1981-1995.	3.3	69
107	Simulations over South Asia using the Weather Research and Forecasting model with Chemistry (WRF-Chem): chemistry evaluation and initial results. <i>Geoscientific Model Development</i> , 2012, 5, 619-648.	3.7	147
108	Variabilities in ozone at a semi-urban site in the Indo-Gangetic Plain region: Association with the meteorology and regional processes. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	120

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109	Influences of the springtime northern Indian biomass burning over the central Himalayas. Journal of Geophysical Research, 2011, 116, .	3.3	137
110	NMR parameters in alkali, alkaline earth and rare earth fluorides from first principle calculations. Physical Chemistry Chemical Physics, 2011, 13, 18539.	2.9	118
111	Variations in surface ozone at Nainital: A high altitude site in the central Himalayas. Journal of Geophysical Research, 2010, 115, .	3.3	111
112	Characteristics of aerosol black carbon mass concentration over a high altitude location in the Central Himalayas from multi-year measurements. Atmospheric Research, 2010, 96, 510-521.	4.3	166
113	Compromised Proteolytic Cleavage of Von Willebrand Factor Type 2N Variants by ADAMTS13 in the Presence of Factor VIII (and Platelets) Under Fluid Shear Stress.. Blood, 2009, 114, 28-28.	1.4	2
114	Phase and envelope characteristics of ultrashort pulses reflected from a two-dimensional silicon photonic crystal. Physical Review B, 2006, 74, .	3.3	4
115	Effects of intrinsic fluorescence and quenching on fluorescence-based screening of natural products. Phytomedicine, 2002, 9, 263-267.	5.4	37
116	Optical coating on plastics. , 2001, , .		0
117	Virulence factors in Escherichia coli from children with pyelonephritis. Clinical Microbiology and Infection, 2000, 6, 328-330.	6.5	9
118	On the thread problem for minimal surfaces. Calculus of Variations and Partial Differential Equations, 1997, 5, 117-136.	1.7	2