

Rajesh Kumar

List of Publications by Year in descending order

Source: [//exaly.com/author-pdf/3897110/publications.pdf](https://exaly.com/author-pdf/3897110/publications.pdf)

Version: 2024-02-01

118
papers

3,692
citations

113904

34
h-index

144563

57
g-index

191
all docs

191
docs citations

191
times ranked

4662
citing authors

#	ARTICLE	IF	CITATIONS
1	Premature mortality in India due to PM _{2.5} and ozone exposure. Geophysical Research Letters, 2016, 43, 4650-4658.	4.0	227
2	Tropospheric Ozone Assessment Report: Assessment of global-scale model performance for global and regional ozone distributions, variability, and trends. Elementa, 2018, 6, .	3.3	193
3	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
4	WRF-Chem simulations of a typical pre-monsoon dust storm in northern India: influences on aerosol optical properties and radiation budget. Atmospheric Chemistry and Physics, 2014, 14, 2431-2446.	5.0	153
5	Simulations over South Asia using the Weather Research and Forecasting model with Chemistry (WRF-Chem): chemistry evaluation and initial results. Geoscientific Model Development, 2012, 5, 619-648.	3.7	147
6	Reductions in India's crop yield due to ozone. Geophysical Research Letters, 2014, 41, 5685-5691.	4.0	147
7	Influences of the springtime northern Indian biomass burning over the central Himalayas. Journal of Geophysical Research, 2011, 116, .	3.3	137
8	Variabilities in ozone at a semi-urban site in the Indo-Gangetic Plain region: Association with the meteorology and regional processes. Journal of Geophysical Research, 2012, 117, .	3.3	120
9	NMR parameters in alkali, alkaline earth and rare earth fluorides from first principle calculations. Physical Chemistry Chemical Physics, 2011, 13, 18539.	2.9	118
10	Variations in surface ozone at Nainital: A high-altitude site in the central Himalayas. Journal of Geophysical Research, 2010, 115, .	3.3	111
11	First simultaneous measurements of ozone, CO, and NO _y at a high-altitude regional representative site in the central Himalayas. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1592-1611.	3.3	104
12	Impact of Deadly Dust Storms (May 2018) on Air Quality, Meteorological, and Atmospheric Parameters Over the Northern Parts of India. GeoHealth, 2019, 3, 67-80.	4.1	91
13	How Much Does Large-Scale Crop Residue Burning Affect the Air Quality in Delhi?. Environmental Science & Technology, 2020, 54, 4790-4799.	10.5	90
14	Ozone pollution over China and India: seasonality and sources. Atmospheric Chemistry and Physics, 2020, 20, 4399-4414.	5.0	89
15	What controls the seasonal cycle of black carbon aerosols in India?. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7788-7812.	3.3	87
16	Effects of dust aerosols on tropospheric chemistry during a typical pre-monsoon season dust storm in northern India. Atmospheric Chemistry and Physics, 2014, 14, 6813-6834.	5.0	71
17	Source attribution of carbon monoxide in India and surrounding regions during wintertime. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1981-1995.	3.3	69
18	The Regional Impacts of Cooking and Heating Emissions on Ambient Air Quality and Disease Burden in China. Environmental Science & Technology, 2016, 50, 9416-9423.	10.5	69

#	ARTICLE	IF	CITATIONS
19	Investigations of aerosol black carbon from a semi-urban site in the Indo-Gangetic Plain region. Atmospheric Environment, 2016, 125, 346-359.	4.2	67
20	How Will Air Quality Change in South Asia by 2050?. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1840-1864.	3.3	64
21	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.	5.0	50
22	Year-long variability of the fossil fuel and wood burning black carbon components at a rural site in southern Delhi outskirts. Atmospheric Research, 2019, 216, 11-25.	4.3	50
23	On the processes influencing the vertical distribution of ozone over the central Himalayas: Analysis of yearlong ozonesonde observations. Atmospheric Environment, 2014, 88, 201-211.	4.2	44
24	Performance of high resolution (400Åm) PM2.5 forecast over Delhi. Scientific Reports, 2021, 11, 4104.	3.4	43
25	Surface PM2.5 Estimate Using Satellite-Derived Aerosol Optical Depth over India. Aerosol and Air Quality Research, 2019, 19, 25-37.	2.1	42
26	Seasonal, interannual, and long-term variabilities in biomass burning activity over South Asia. Environmental Science and Pollution Research, 2016, 23, 4397-4410.	5.3	41
27	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. Geoscientific Model Development, 2017, 10, 4743-4758.	3.7	41
28	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. Atmospheric Chemistry and Physics, 2018, 18, 11949-11971.	5.0	41
29	Inter-comparison of different NOX emission inventories and associated variation in simulated surface ozone in Indian region. Atmospheric Environment, 2015, 117, 61-73.	4.2	40
30	Five steps to improve air-quality forecasts. Nature, 2018, 561, 27-29.	36.2	40
31	Radiative impact of a heavy dust storm over India and surrounding oceanic regions. Atmospheric Environment, 2018, 185, 109-120.	4.2	39
32	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
33	Influence of springtime biomass burning in South Asia on regional ozone (O ₃): A model based case study. Atmospheric Environment, 2015, 100, 37-47.	4.2	38
34	Effects of intrinsic fluorescence and quenching on fluorescence-based screening of natural products. Phytomedicine, 2002, 9, 263-267.	5.4	37
35	Concentrations and radiative forcing of anthropogenic aerosols from 1750 to 2014 simulated with the Oslo-CTM3 and CEDS emission inventory. Geoscientific Model Development, 2018, 11, 4909-4931.	3.7	37
36	Black carbon concentration in the central Himalayas: Impact on glacier melt and potential source contribution. Environmental Pollution, 2021, 275, 116544.	7.7	36

#	ARTICLE	IF	CITATIONS
37	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
38	Substantial Increase in the Joint Occurrence and Human Exposure of Heatwave and High $\hat{\epsilon}$ PM Hazards Over South Asia in the Mid $\hat{\epsilon}$ 21st Century. <i>AGU Advances</i> , 2020, 1, e2019AV000103.	6.2	33
39	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
40	Constraints on surface NO $\hat{\epsilon}$ x $\hat{\epsilon}$ emissions by assimilating satellite observations of multiple species. <i>Geophysical Research Letters</i> , 2013, 40, 4745-4750.	4.0	28
41	Toward Improving Short $\hat{\epsilon}$ 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
42	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
43	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
44	Improving Air Quality Predictions over the United States with an Analog Ensemble. <i>Weather and Forecasting</i> , 2020, 35, 2145-2162.	2.0	20
45	Effects of Fire Diurnal Variation and Plume Rise on U.S. Air Quality During FIREX $\hat{\epsilon}$ AQ and WE $\hat{\epsilon}$ CAN Based on the Multi $\hat{\epsilon}$ Scale Infrastructure for Chemistry and Aerosols (MUSICAv0). <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	3.3	19
46	First observations of light non-methane hydrocarbons (C2 $\hat{\epsilon}$ C5) over a high altitude site in the central Himalayas. <i>Atmospheric Environment</i> , 2016, 125, 450-460.	4.2	18
47	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
48	Probing into the wintertime meteorology and particulate matter (PM2.5 and PM10) forecast over Delhi. <i>Atmospheric Pollution Research</i> , 2022, 13, 101426.	3.9	18
49	Chemical Tomography in a Fresh Wildland Fire Plume: A Large Eddy Simulation (LES) Study. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD035203.	3.3	17
50	Intelligent Mechanisms of Macrophage Apoptosis Subversion by Mycobacterium. <i>Pathogens</i> , 2020, 9, 218.	2.9	16
51	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
52	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
53	Separating Emission and Meteorological Drivers of Mid $\hat{\epsilon}$ 1st $\hat{\epsilon}$ Century Air Quality Changes in India Based on Multiyear Global $\hat{\epsilon}$ Regional Chemistry $\hat{\epsilon}$ Climate Simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 13420-13438.	3.3	13
54	Drivers of air pollution variability during second wave of COVID-19 in Delhi, India. <i>Urban Climate</i> , 2022, 41, 101059.	5.8	13

#	ARTICLE	IF	CITATIONS
55	Prognostic nomograms and Aggtrmmns scoring system for predicting overall survival and cancer-specific survival of patients with kidney cancer. <i>Cancer Medicine</i> , 2020, 9, 2710-2722.	2.9	12
56	Tradeoffs between air pollution mitigation and meteorological response in India. <i>Scientific Reports</i> , 2020, 10, 14796.	3.4	11
57	The impacts of transported wildfire smoke aerosols on surface air quality in New York State: A multi-year study using machine learning. <i>Atmospheric Environment</i> , 2021, 259, 118513.	4.2	11
58	Virulence factors in <i>Escherichia coli</i> from children with pyelonephritis. <i>Clinical Microbiology and Infection</i> , 2000, 6, 328-330.	6.5	9
59	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
60	The laser diode calibration system of the ICARUS T600 detector at FNAL. <i>Journal of Instrumentation</i> , 2020, 15, C05042-C05042.	1.3	8
61	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
62	What is driving the diurnal variation in tropospheric NO ₂ columns over a cluster of high emission thermal power plants in India?. <i>Atmospheric Environment: X</i> , 2020, 5, 100058.	1.5	7
63	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
64	Cropland trees need to be included for accurate model simulations of land-atmosphere heat fluxes, temperature, boundary layer height, and ozone. <i>Science of the Total Environment</i> , 2021, 751, 141728.	8.2	7
65	Description and Evaluation of the Fine Particulate Matter Forecasts in the NCAR Regional Air Quality Forecasting System. <i>Atmosphere</i> , 2021, 12, 302.	2.3	7
66	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. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 6129-6153.	5.0	7
67	Chloride (HCl) dominates inorganic aerosol formation from ammonia in the Indo-Gangetic Plain during winter: modeling and comparison with observations. <i>Atmospheric Chemistry and Physics</i> , 2023, 23, 41-59.	5.0	7
68	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
69	Interstate transport of carbon monoxide and black carbon over India. <i>Atmospheric Environment</i> , 2021, 251, 118268.	4.2	6
70	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
71	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
72	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

#	ARTICLE	IF	CITATIONS
73	Exploring analog-based schemes for aerosol optical depth forecasting with WRF-Chem. Atmospheric Environment, 2021, 246, 118134.	4.2	5
74	Simulation of Indian Summer Monsoon Rainfall (ISMR) with fully coupled regional chemistry transport model: A case study for 2017. Atmospheric Environment, 2022, 268, 118785.	4.2	5
75	Assessment of regional carbon monoxide simulations over Africa and insights into source attribution and regional transport. Atmospheric Environment, 2022, 277, 119075.	4.2	5
76	On the Relevance of Aerosols to Snow Cover Variability Over High Mountain Asia. Geophysical Research Letters, 2022, 49, .	4.0	5
77	Performance of AIRS ozone retrieval over the central Himalayas: use of ozonesonde and other satellite datasets. Atmospheric Measurement Techniques, 2023, 16, 889-909.	3.1	5
78	Sensitivity of WRF/Chem simulated PM2.5 to initial/boundary conditions and planetary boundary layer parameterization schemes over the Indo-Gangetic Plain. Environmental Monitoring and Assessment, 2023, 195, .	2.7	5
79	Phase and envelope characteristics of ultrashort pulses reflected from a two-dimensional silicon photonic crystal. Physical Review B, 2006, 74, .	3.3	4
80	Chemical Weather and Chemical Climate. AGU Advances, 2021, 2, e2021AV000399.	6.2	4
81	Impact of dust aerosols on the Indian Summer Monsoon Rainfall on intra-seasonal time-scale. Atmospheric Environment, 2023, 305, 119802.	4.2	4
82	Modeling an Extreme Dust Deposition Event to the French Alpine Seasonal Snowpack in April 2018: Meteorological Context and Predictions of Dust Deposition. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	3
83	Capturing High-Resolution Air Pollution Features Using the Multi-scale Infrastructure for Chemistry and Aerosols Version 0 (MUSICAv0) Global Modeling System. Journal of Geophysical Research D: Atmospheres, 2023, 128, .	3.3	3
84	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) Tj ETQq0 0 0 gBT /Overdock 10 Tf		
85	On the thread problem for minimal surfaces. Calculus of Variations and Partial Differential Equations, 1997, 5, 117-136.	1.7	2
86	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
87	A 57-year-old man with rapidly progressive pulmonary hypertension. Monaldi Archives for Chest Disease, 2021, , .	0.6	2
88	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
89	Characterizing the Role of Moisture and Smoke on the 2021 Santa Coloma de Queralt Pyroconvective Event Using WRF-Fire. Journal of Advances in Modeling Earth Systems, 2023, 15, .	3.7	2
90	Forecasting of an unusual dust event over western India by the Air Quality Early Warning System. Atmospheric Environment, 2023, 311, 120013.	4.2	2

#	ARTICLE	IF	CITATIONS
91	Dynamical characteristics of atmospheric aerosols over IG region. Proceedings of SPIE, 2016, , .	1.0	1
92	Decoupling in the vertical shape of HCHO during a sea breeze event: The effect on trace gas satellite retrievals and column-to-surface translation. Atmospheric Environment, 2023, 309, 119929.	4.2	1
93	Atmospheric heating in the US from saharan dust: Tracking the June 2020 event with surface and satellite observations. Atmospheric Environment, 2023, 310, 119988.	4.2	1
94	Search for the rare decays Λ_c^+ and Λ_c^0 at LHCb. Chinese Physics C, 2023, 47, 093002.	3.6	1
95	Application of the Multi-Scale Infrastructure for Chemistry and Aerosols version 0 (MUSICAv0) for air quality research in Africa. Geoscientific Model Development, 2023, 16, 6001-6028.	3.7	1
96	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
97	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
98	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
99	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
100	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
101	An Overview of Air Quality Modeling Activities in South Asia. , 2017, , 27-47.		0
102	CNS Involvement in <i>Tropheryma whipplei</i> Infection. , 2020, , 331-336.		0
103	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
104	Optical coating on plastics. , 2001, , .		0
105	THU0593â€¦Multicentric osteolysis with nodulosis and arthropathy (MONA): report of the first lebanese family. Annals of the Rheumatic Diseases, 2018, , .	7.6	0
106	Plume detection and emission estimate for biomass burning plumes from TROPOMI carbon monoxide observations using APE v1.1. Geoscientific Model Development, 2023, 16, 4835-4852.	3.7	0
107	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
108	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

#	ARTICLE	IF	CITATIONS
109	Causes and effects of worldwide demutualization of financial exchanges. International Review of Economics and Finance, 2024, 91, 864-882.	4.7	0
110	Hotspot driven air pollution during crop residue burning season in the Indo-Gangetic Plain, India. Environmental Pollution, 2024, 350, 124013.	7.7	0
111	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
112	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
113	High-Resolution Modeling of Air Quality in Abidjan (Côte d'Ivoire) Using a New Urban-Scale Inventory. Atmosphere, 2024, 15, 758.	2.3	0
114	Managing synthetic N-fertilizer emissions in India: Insights from field surveys across 102 districts. Journal of Environmental Management, 2024, 366, 121909.	7.9	0
115	Source attribution of carbon monoxide over Northern India during crop residue burning period over Punjab. Environmental Pollution, 2024, , 124707.	7.7	0
116	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
117	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
118	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