

# Pucaï Wang

## List of Publications by Year in descending order

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79

papers

3,610

citations

126907

33

h-index

138484

58

g-index

80

all docs

80

docs citations

80

times ranked

3856

citing authors

#	ARTICLE	IF	CITATIONS
1	Aerosol optical properties and their radiative effects in northern China. Journal of Geophysical Research, 2007, 112, .	3.3	209
2	A simple method to estimate actual evapotranspiration from a combination of net radiation, vegetation index, and temperature. Journal of Geophysical Research, 2007, 112, .	3.3	200
3	Aerosol optical depth (AOD) and Ångström exponent of aerosols observed by the Chinese Sun Hazemeter Network from August 2004 to September 2005. Journal of Geophysical Research, 2007, 112, .	3.3	166
4	Estimation of surface long wave radiation and broadband emissivity using Moderate Resolution Imaging Spectroradiometer (MODIS) land surface temperature/emissivity products. Journal of Geophysical Research, 2005, 110, .	3.3	164
5	Validation of SO <sub>2</sub> retrievals from the Ozone Monitoring Instrument over NE China. Journal of Geophysical Research, 2008, 113, .	3.3	139
6	Influences of urbanization on surface characteristics as derived from the Moderate Resolution Imaging Spectroradiometer: A case study for the Beijing metropolitan area. Journal of Geophysical Research, 2007, 112, .	3.3	137
7	Chemical characterization of air pollution in Eastern China and the Eastern United States. Atmospheric Environment, 2006, 40, 2607-2625.	4.1	134
8	Aerosol optical properties and radiative effects in the Yangtze Delta region of China. Journal of Geophysical Research, 2007, 112, .	3.3	120
9	The Campaign on Atmospheric Aerosol Research Network of China: CARE-China. Bulletin of the American Meteorological Society, 2015, 96, 1137-1155.	3.3	115
10	Baseline continental aerosol over the central Tibetan plateau and a case study of aerosol transport from South Asia. Atmospheric Environment, 2011, 45, 7370-7378.	4.1	112
11	Validation and understanding of Moderate Resolution Imaging Spectroradiometer aerosol products (C5) using ground-based measurements from the handheld Sun photometer network in China. Journal of Geophysical Research, 2007, 112, .	3.3	108
12	Variation of surface albedo and soil thermal parameters with soil moisture content at a semi-desert site on the western Tibetan Plateau. Boundary-Layer Meteorology, 2005, 116, 117-129.	2.3	93
13	Aerosol characterization over the North China Plain: Haze life cycle and biomass burning impacts in summer. Journal of Geophysical Research D: Atmospheres, 2016, 121, 2508-2521.	3.3	93
14	In situ measurements of trace gases and aerosol optical properties at a rural site in northern China during East Asian Study of Tropospheric Aerosols: An International Regional Experiment 2005. Journal of Geophysical Research, 2007, 112, .	3.3	91
15	Seasonal variations in aerosol optical properties over China. Journal of Geophysical Research, 2011, 116, .	3.3	87
16	Improved aerosol correction for OMI tropospheric NO <sub>2</sub> retrieval over East Asia: constraint from CALIOP aerosol vertical profile. Atmospheric Measurement Techniques, 2019, 12, 1-21.	3.1	75
17	Aerosol optical depth over the Tibetan Plateau and its relation to aerosols over the Taklimakan Desert. Geophysical Research Letters, 2008, 35, .	4.0	72
18	Low-level temperature inversions and their effect on aerosol condensation nuclei concentrations under different large-scale synoptic circulations. Advances in Atmospheric Sciences, 2015, 32, 898-908.	4.3	72

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19	Vertical profiles of black carbon measured by a micro-aethalometer in summer in the North China Plain. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 10441-10454.	4.9	72
20	Positive relationship between liquid cloud droplet effective radius and aerosol optical depth over Eastern China from satellite data. <i>Atmospheric Environment</i> , 2014, 84, 244-253.	4.1	66
21	TROPOMI Sentinel-5 Precursor formaldehyde validation using an extensive network of ground-based Fourier-transform infrared stations. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 3751-3767.	3.1	66
22	Climatological aspects of aerosol optical properties in North China Plain based on ground and satellite remote-sensing data. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013, 127, 12-23.	2.3	60
23	Identification of sources and formation processes of atmospheric sulfate by sulfur isotope and scanning electron microscope measurements. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	58
24	Significant reduction of surface solar irradiance induced by aerosols in a suburban region in northeastern China. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	57
25	Validation of methane and carbon monoxide from Sentinel-5 Precursor using TCCON and NDACC-IRWG stations. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 6249-6304.	3.1	57
26	Trends in aerosol optical properties over the Bohai Rim in Northeast China from 2004 to 2010. <i>Atmospheric Environment</i> , 2011, 45, 6317-6325.	4.1	56
27	Comparison and Validation of TROPOMI and OMI NO <sub>2</sub> Observations over China. <i>Atmosphere</i> , 2020, 11, 636.	2.3	49
28	Diurnal variability of dust aerosol optical thickness and Angstr�m exponent over dust source regions in China. <i>Geophysical Research Letters</i> , 2004, 31, .	4.0	47
29	Growth rates of fine aerosol particles at a site near Beijing in June 2013. <i>Advances in Atmospheric Sciences</i> , 2018, 35, 209-217.	4.3	45
30	Spatial and temporal changes in SO <sub>2</sub> regimes over China in the recent decade and the driving mechanism. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 18063-18078.	4.9	44
31	Impacts of organic aerosols and its oxidation level on CCN activity from measurement at a suburban site in China. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 5413-5425.	4.9	42
32	Comparison between measurements and modeling of UV-B irradiance for clear sky: a case study. <i>Applied Optics</i> , 1994, 33, 3964.	2.1	41
33	The Spatial Temporal Variation of Tropospheric NO <sub>2</sub> over China during 2005 to 2018. <i>Atmosphere</i> , 2019, 10, 444.	2.3	39
34	Studying the pollution of Moscow and Beijing atmospheres with carbon monoxide and aerosol. <i>Izvestiya - Atmospheric and Oceanic Physics</i> , 2015, 51, 1-11.	0.9	32
35	Validation of an UV inversion algorithm using satellite and surface measurements. <i>Journal of Geophysical Research</i> , 2000, 105, 5037-5048.	3.3	31
36	A simple and efficient method for retrieving surface UV radiation dose rate from satellite. <i>Journal of Geophysical Research</i> , 2000, 105, 5027-5036.	3.3	30

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37	Validation of MODIS aerosol products by CSHNET over China. Science Bulletin, 2007, 52, 1708-1718.	1.7	30
38	Validation of TANSO-FTS/GOSAT XCO <sub>2</sub> and XCH <sub>4</sub> glint mode retrievals using TCCON data from near-ocean sites. Atmospheric Measurement Techniques, 2016, 9, 1415-1430.	3.1	30
39	CFC-11, CFC-12 and HCFC-22 ground-based remote sensing FTIR measurements at RÅunion Island and comparisons with MIPAS/ENVISAT data. Atmospheric Measurement Techniques, 2016, 9, 5621-5636.	3.1	29
40	New ground-based Fourier-transform near-infrared solar absorption measurements of XCO <sub>2</sub> , XCH <sub>4</sub> and XCO at Xianghe, China. Earth System Science Data, 2020, 12, 1679-1696.	9.9	28
41	Midlatitude cirrus cloud radiative forcing over China. Journal of Geophysical Research, 2010, 115, .	3.3	25
42	In situ measurements of aerosol mass concentration and radiative properties in Xianghe, southeast of Beijing. Journal of Geophysical Research, 2007, 112, .	3.3	24
43	Advances in sunphotometer-measured aerosol optical properties and related topics in China: Impetus and perspectives. Atmospheric Research, 2021, 249, 105286.	4.1	23
44	Change of NO <sub>2</sub> column density over Beijing from satellite measurement during the Beijing 2008 Olympic Games. Science Bulletin, 2010, 55, 308-313.	1.7	21
45	Long-Term Trends of Carbon Monoxide Total Columnar Amount in Urban Areas and Background Regions: Ground- and Satellite-based Spectroscopic Measurements. Advances in Atmospheric Sciences, 2018, 35, 785-795.	4.3	21
46	Analysis of Low-level Temperature Inversions and Their Effects on Aerosols in the Lower Atmosphere. Advances in Atmospheric Sciences, 2019, 36, 1235-1250.	4.3	21
47	Observed decreases in on-road CO <sub>2</sub> concentrations in Beijing during COVID-19 restrictions. Atmospheric Chemistry and Physics, 2021, 21, 4599-4614.	4.9	21
48	Aerosol chemistry and particle growth events at an urban downwind site in North China Plain. Atmospheric Chemistry and Physics, 2018, 18, 14637-14651.	4.9	19
49	The aerosol direct radiative forcing over the Beijing metropolitan area from 2004 to 2011. Journal of Aerosol Science, 2014, 69, 62-70.	3.8	18
50	New dust aerosol identification method for spaceborne lidar measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 338-345.	2.3	17
51	Cirrus cloud macrophysical and optical properties over North China from CALIOP measurements. Advances in Atmospheric Sciences, 2011, 28, 653-664.	4.3	14
52	Nocturnal aerosol particle formation in the North China Plain. Lithuanian Journal of Physics, 2015, 55, .	0.4	13
53	Effects of ocean particles on the upwelling radiance and polarized radiance in the atmosphere-ocean system. Advances in Atmospheric Sciences, 2015, 32, 1186-1196.	4.3	12
54	Assessment of the Performance of TROPOMI NO <sub>2</sub> and SO <sub>2</sub> Data Products in the North China Plain: Comparison, Correction and Application. Remote Sensing, 2022, 14, 214.	4.0	12

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55	XCO <sub>2</sub> satellite retrieval experiments in short-wave infrared spectrum and ground-based validation. Science China Earth Sciences, 2015, 58, 1191-1197.	5.2	11
56	Ground-based FTIR retrievals of SF <sub>6</sub> on Reunion Island. Atmospheric Measurement Techniques, 2018, 11, 651-662.	3.1	11
57	Estimation of PM <sub>2.5</sub> Mass Concentration from Visibility. Advances in Atmospheric Sciences, 2020, 37, 671-678.	4.3	11
58	Ground-based measurements of aerosol optical properties and radiative forcing in North China. Particology: Science and Technology of Particles, 2007, 5, 202-205.	0.4	10
59	Global to local impacts on atmospheric CO <sub>2</sub> from the COVID-19 lockdown, biosphere and weather variabilities. Environmental Research Letters, 2022, 17, 015003.	5.2	10
60	Deriving Temporal and Vertical Distributions of Methane in Xianghe Using Ground-based Fourier Transform Infrared and Gas-analyzer Measurements. Advances in Atmospheric Sciences, 2020, 37, 597-607.	4.3	9
61	Spatial and temporal variations of CO <sub>2</sub> mole fractions observed at Beijing, Xianghe, and Xinglong in North China. Atmospheric Chemistry and Physics, 2021, 21, 11741-11757.	4.9	9
62	Ground-based Fourier transform infrared (FTIR) O <sub>3</sub> retrievals from the 3040-1100 cm <sup>-1</sup> spectral range at Xianghe, China. Atmospheric Measurement Techniques, 2020, 13, 5379-5394.	3.1	9
63	Oscillation cumulative volatile organic compounds on the northern edge of the North China Plain: Impact of mountain-plain breeze. Science of the Total Environment, 2022, 821, 153541.	8.0	9
64	Surface and Column-Integrated Aerosol Properties of Heavy Haze Events in January 2013 over the North China Plain. Aerosol and Air Quality Research, 2015, 15, 1514-1524.	2.1	8
65	CHANGES IN TRENDS OF ATMOSPHERIC COMPOSITION OVER URBAN AND BACKGROUND REGIONS OF EURASIA: ESTIMATES BASED ON SPECTROSCOPIC OBSERVATIONS. Geography, Environment, Sustainability, 2018, 11, 84-96.	1.3	7
66	Glyoxal tropospheric column retrievals from TROPOMI – multi-satellite intercomparison and ground-based validation. Atmospheric Measurement Techniques, 2021, 14, 7775-7807.	3.1	7
67	Recent progress in atmospheric observation research in China. Advances in Atmospheric Sciences, 2007, 24, 940-953.	4.3	6
68	A New Method to Calibrate Shortwave Solar Radiation Measurements. Journal of Atmospheric and Oceanic Technology, 2014, 31, 1321-1329.	1.3	6
69	Characterization of Regional Combustion Efficiency using $\delta^{13}C_{CO_2}$ Observed by a Portable Fourier-Transform Spectrometer at an Urban Site in Beijing. Advances in Atmospheric Sciences, 2022, , 1-17.	4.3	6
70	Re-examine the APEC blue in Beijing 2014. Journal of Atmospheric Chemistry, 2018, 75, 235-246.	3.2	5
71	Preliminary accuracy assessment of MODIS land surface temperature products at a semi-desert site. , 2005, , .		4
72	In-situ measurement of CO <sub>2</sub> at the Xinglong regional background station over North China. Atmospheric and Oceanic Science Letters, 2019, 12, 385-391.	1.3	4

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73	Correction to “Aerosol optical properties and their radiative effects in northern China”, Journal of Geophysical Research, 2008, 113, .	3.3	3
74	Radiative Transfer Model Simulations for Ground-Based Microwave Radiometers in North China. Remote Sensing, 2021, 13, 5161.	4.0	3
75	Tropospheric and stratospheric NO retrieved from ground-based Fourier-transform infrared (FTIR) measurements. Atmospheric Measurement Techniques, 2021, 14, 6233-6247.	3.1	2
76	Preliminary comparison of OMI PBL SO2 data to in-situ measurements in Beijing. , 2008, , .		1
77	Measurement and analysis of atmospheric aerosol optical thickness and Angstrom exponent of 1998-2000 over the Beijing area. , 2003, , .		0
78	<title>Ground-based monitoring of CO and H<math>\times</math>2</math>O total content in the atmosphere over Beijing</title>. , 2005, 5832, 316.		0
79	Calibration and Data Quality Assurance Technical Advancements for Quantitative Remote Sensing in the DRAGON 4 Project. Remote Sensing, 2021, 13, 4996.	4.0	0