Chengcai Li

List of Publications by Year
in descending order

82 papers	3,558 citations	186265 28 h-index	144013 57 g-index
94 all docs	94 docs citations	94 times ranked	3361 citing authors

#	Article	IF	Citations
1	Global monitoring of air pollution over land from the Earth Observing System-Terra Moderate Resolution Imaging Spectroradiometer (MODIS). Journal of Geophysical Research, 2003, 108, .	3.3	476
2	Using satellite remote sensing data to estimate the high-resolution distribution of ground-level PM2.5. Remote Sensing of Environment, 2015, 156, 117-128.	11.0	293
3	An extremely low visibility event over the Guangzhou region: A case study. Atmospheric Environment, 2005, 39, 6568-6577.	4.1	231
4	The impact of circulation patterns on regional transport pathways and air quality over Beijing and its surroundings. Atmospheric Chemistry and Physics, 2012, 12, 5031-5053.	4.9	224
5	Acute Respiratory Inflammation in Children and Black Carbon in Ambient Air before and during the 2008 Beijing Olympics. Environmental Health Perspectives, 2011, 119, 1507-1512.	6.0	173
6	Retrieval, validation, and application of the 1-km aerosol optical depth from MODIS measurements over Hong Kong. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 2650-2658.	6.3	161
7	A modeling analysis of a heavy air pollution episode occurred in Beijing. Atmospheric Chemistry and Physics, 2007, 7, 3103-3114.	4.9	130
8	An intensive study of aerosol optical properties in Beijing urban area. Atmospheric Chemistry and Physics, 2009, 9, 8903-8915.	4.9	121
9	High-resolution satellite remote sensing of provincial PM2.5 trends in China from 2001 to 2015. Atmospheric Environment, 2018, 180, 110-116.	4.1	117
10	Estimation of long-term population exposure to PM2.5 for dense urban areas using 1-km MODIS data. Remote Sensing of Environment, 2016, 179, 13-22.	11.0	92
11	Validation of MODIS derived aerosol optical depth over the Yangtze River Delta in China. Remote Sensing of Environment, 2010, 114, 1649-1661.	11.0	89
12	The significant impact of aerosol vertical structure on lower atmosphere stability and its critical role in aerosolâ€“planetary boundary layer (PBL) interactions. Atmospheric Chemistry and Physics, 2020, 20, 3713-3724.	4.9	79
13	Analysis of aerosol vertical distribution and variability in Hong Kong. Journal of Geophysical Research, 2008, 113, .	3.3	78
14	An intercomparison of longâ€term planetary boundary layer heights retrieved from CALIPSO, groundâ€based lidar, and radiosonde measurements over Hong Kong. Journal of Geophysical Research D: Atmospheres, 2017, 122, 3929-3943.	3.3	72
15	Longâ€term measurement of daytime atmospheric mixing layer height over Hong Kong. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2422-2433.	3.3	71
16	Characterizations of aerosols over the Beijing region: A case study of aircraft measurements. Atmospheric Environment, 2006, 40, 4513-4527.	4.1	70
17	Changes in surface aerosol extinction trends over China during 1980â€“2013 inferred from qualityâ€controlled visibility data. Geophysical Research Letters, 2016, 43, 8713-8719.	4.0	55
18	A study on the aerosol extinction-to-backscatter ratio with combination of micro-pulse LIDAR and MODIS over Hong Kong. Atmospheric Chemistry and Physics, 2006, 6, 3243-3256.	4.9	48

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19	Characteristics of distribution and seasonal variation of aerosol optical depth in eastern China with MODIS products. Science Bulletin, 2003, 48, 2488-2495.	9.0	47
20	Assessing Long-Term Trend of Particulate Matter Pollution in the Pearl River Delta Region Using Satellite Remote Sensing. Environmental Science & Technology, 2015, 49, 11670-11678.	10.0	44
21	Aerosol optical properties retrieved from Sun photometer measurements over Shanghai, China. Journal of Geophysical Research, 2012, 117, .	3.3	43
22	Study on Long-term Aerosol Distribution over the Land of East China Using MODIS Data. Aerosol and Air Quality Research, 2012, 12, 304-319.	2.1	43
23	Seasonal and diurnal variability of planetary boundary layer height in Beijing: Intercomparison between MPL and WRF results. Atmospheric Research, 2019, 227, 1-13.	4.1	37
24	Preliminary results of 4-D water vapor tomography in the troposphere using GPS. Advances in Atmospheric Sciences, 2006, 23, 551-560.	4.3	34
25	PM_{2.5} mass, chemical composition, and light extinction before and during the 2008 Beijing Olympics. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,158.	3.3	32
26	The Properties and Formation of Cirrus Clouds over the Tibetan Plateau Based on Summertime Lidar Measurements. Journals of the Atmospheric Sciences, 2013, 70, 901-915.	1.7	32
27	An intercomparison of AOD-converted PM2.5 concentrations using different approaches for estimating aerosol vertical distribution. Atmospheric Environment, 2017, 166, 531-542.	4.1	31
28	Impact of aerosol hygroscopic growth on retrieving aerosol extinction coefficient profiles from elastic-backscatter lidar signals. Atmospheric Chemistry and Physics, 2017, 17, 12133-12143.	4.9	31
29	A parameterization scheme of aerosol vertical distribution for surface-level visibility retrieval from satellite remote sensing. Remote Sensing of Environment, 2016, 181, 1-13.	11.0	29
30	Effects of potential recirculation on air quality in coastal cities in the Yangtze River Delta. Science of the Total Environment, 2019, 651, 12-23.	8.0	29
31	Current challenges of improving visibility due to increasing nitrate fraction in PM2.5 during the haze days in Beijing, China. Environmental Pollution, 2021, 290, 118032.	7.5	29
32	Analysis on the impact of aerosol optical depth on surface solar radiation in the Shanghai megacity, China. Atmospheric Chemistry and Physics, 2011, 11, 3281-3289.	4.9	28
33	An Improved Method for Monitoring Fine Particulate Matter Mass Concentrations via Satellite Remote Sensing. Aerosol and Air Quality Research, 2016, 16, 1081-1092.	2.1	28
34	Long-term characteristics of satellite-based PM2.5 over East China. Science of the Total Environment, 2018, 612, 1417-1423.	8.0	25
35	15-Year PM2.5 Trends in the Pearl River Delta Region and Hong Kong from Satellite Observation. Aerosol and Air Quality Research, 2018, 18, 2355-2362.	2.1	25
36	Evaluation and possible uncertainty source analysis of JAXA Himawari-8 aerosol optical depth product over China. Atmospheric Research, 2021, 248, 105248.	4.1	24

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37	Difference in PM2.5 Variations between Urban and Rural Areas over Eastern China from 2001 to 2015. Atmosphere, 2018, 9, 312.	2.3	20
38	Evaluation of Atmospheric Aerosol Optical Depth Products at Ultraviolet Bands Derived from MODIS Products. Aerosol Science and Technology, 2012, 46, 1025-1034.	3.1	19
39	Effects of synoptic circulation patterns on air quality in Nanjing and its surrounding areas during 2013â€“2015. Atmospheric Pollution Research, 2018, 9, 723-734.	3.8	19
40	Spatio-temporal variation of wind influence on distribution of fine particulate matter and its precursor gases. Atmospheric Pollution Research, 2019, 10, 53-64.	3.8	17
41	Lidar-observed enhancement of aerosols in the upper troposphere and lower stratosphere over the Tibetan Plateau induced by the Nabro volcano eruption. Atmospheric Chemistry and Physics, 2014, 14, 11687-11696.	4.9	16
42	Different trends in extreme and median surface aerosol extinction coefficients over China inferred from quality-controlled visibility data. Atmospheric Chemistry and Physics, 2018, 18, 3289-3298.	4.9	15
43	Long-term variation of satellite-based PM2.5 and influence factors over East China. Scientific Reports, 2018, 8, 11764.	3.3	15
44	The Influence of Multi-Scale Atmospheric Circulation on Severe Haze Events in Autumn and Winter in Shanghai, China. Sustainability, 2019, 11, 5979.	3.2	15
45	Dual-field-of-view high-spectral-resolution lidar: Simultaneous profiling of aerosol and water cloud to study aerosolâ€“cloud interaction. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2110756119.	7.1	15
46	PM2.5 Chemical Compositions and Aerosol Optical Properties in Beijing during the Late Fall. Atmosphere, 2015, 6, 164-182.	2.3	13
47	Potential of Polarization Lidar to Profile the Urban Aerosol Phase State during Haze Episodes. Environmental Science and Technology Letters, 2020, 7, 54-59.	8.7	13
48	Geometrical constraint experimental determination of Raman lidar overlap profile. Applied Optics, 2016, 55, 4924.	2.1	12
49	An improved dark target method for aerosol optical depth retrieval over China from Himawari-8. Atmospheric Research, 2021, 250, 105399.	4.1	12
50	Remote sensing precipitable water with GPS. Science Bulletin, 1999, 44, 1041-1045.	1.7	11
51	Impacts of meteorology and emission control on the abnormally low particulate matter concentration observed during the winter of 2017. Atmospheric Environment, 2020, 225, 117377.	4.1	11
52	Assessment of satellite-based aerosol optical depth using continuous lidar observation. Atmospheric Environment, 2016, 140, 273-282.	4.1	10
53	DAILY ESTIMATION OF FINE PARTICULATE MATTER MASS CONCENTRATION THROUGH SATELLITE BASED AEROSOL OPTICAL DEPTH. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 0, IV-4/W2, 175-181.	0.0	10
54	A High CO Episode of Long-Range Transport Detected by MOPITT. Water, Air, and Soil Pollution, 2007, 178, 207-216.	2.4	9

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55	A Long-Term Wind Speed Ensemble Forecasting System with Weather Adapted Correction. Energies, 2016, 9, 894.	3.1	9
56	Assessing Effect of Targeting Reduction of PM2.5 Concentration on Human Exposure and Health Burden in Hong Kong Using Satellite Observation. Remote Sensing, 2018, 10, 2064.	4.0	9
57	Research on air pollution in Beijing and its surroundings with MODIS aerosol products. , 2003, , .		8
58	Method to retrieve cloud condensation nuclei number concentrations using lidar measurements. Atmospheric Measurement Techniques, 2019, 12, 3825-3839.	3.1	8
59	Assessing the Effect of the Long-Term Variations in Aerosol Characteristics on Satellite Remote Sensing of PM_{2.5} Using an Observation-Based Model. Environmental Science & Technology, 2019, 53, 2990-3000.	10.0	8
60	Retrieval of aerosol profiles by Raman lidar with dynamic determination of the lidar equation reference height. Atmospheric Environment, 2019, 199, 252-259.	4.1	8
61	Profiling Aerosol Liquid Water Content Using a Polarization Lidar. Environmental Science & Technology, 2020, 54, 3129-3137.	10.0	8
62	Application of aircraft observations over Beijing in cloud microphysical property retrievals from CloudSat. Advances in Atmospheric Sciences, 2014, 31, 926-937.	4.3	7
63	The Evolution of Springtime Water Vapor Over Beijing Observed by a High Dynamic Raman Lidar System: Case Studies. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 1715-1726.	4.9	7
64	Variability of surface aerosol properties at an urban site in Beijing based on two years of in-situ measurements. Atmospheric Research, 2021, 256, 105562.	4.1	7
65	A new way of using MODIS data to study air pollution over Hong Kong and the Pearl River Delta. , 2003, , .		6
66	Sensitivity analysis of single-angle polarization reflectance observed by satellite. Science Bulletin, 2014, 59, 1519-1528.	1.7	5
67	Dependence of Mixed Aerosol Light Scattering Extinction on Relative Humidity in Beijing and Hong Kong. Atmospheric and Oceanic Science Letters, 2013, 6, 117-121.	1.3	4
68	Decomposing the Long-term Variation in Population Exposure to Outdoor PM2.5 in the Greater Bay Area of China Using Satellite Observations. Remote Sensing, 2019, 11, 2646.	4.0	4
69	Retrieval of aerosol liquid water content from high spectral resolution lidar. Science of the Total Environment, 2021, 799, 149423.	8.0	4
70	Retrieval of Atmospheric Aerosol and Surface Properties Over Land Using Satellite Observations. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 1039-1047.	6.3	3
71	Validation of MODIS AOD products with 1-km resolution and their application in the study of urban air pollution in Hong Kong. , 2004, , .		2
72	Deduction of the sensible heat flux from SODAR data. Advances in Atmospheric Sciences, 2008, 25, 253-266.	4.3	2

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73	The role of ASM on the formation and properties of cirrus clouds over the Tibetan Plateau. Tellus, Series B: Chemical and Physical Meteorology, 2022, 71, 1577070.	1.6	2
74	A novel framework for decomposing PM2.5 variation and demographic change effects on human exposure using satellite observations. Environmental Research, 2020, 182, 109120.	7.5	2
75	Retrieval of Atmospheric Aerosol Optical Depth From AVHRR Over Land With Global Coverage Using Machine Learning Method. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	2
76	<title>Remote sensing of atmospheric aerosol over China</title>. , 2001, , .		1
77	Constructing temporal and spatial water vapor figures by GPS remote sensing along slant rays. Science in China Series D: Earth Sciences, 2007, 50, 296-305.	0.9	1
78	Retrieval of column-averaged volume mixing ratio of CO2 with ground-based high spectral resolution solar absorption. Science Bulletin, 2014, 59, 1536-1540.	1.7	1
79	Acute Effect of Black Carbon and Particle Pollution in the Air on Exhaled Nitric Oxide of Elementary School Children Before and During 2008 Beijing Olympic. Epidemiology, 2009, 20, S250.	2.7	1
80	GPS remote sensing precipitable water in typhoon and severe storm background. Proceedings of SPIE, 1998, , .	0.8	0
81	Study on particulate matter air pollution in Beijing with MODIS aerosol level 2 products. , 2004, 5547, 103.		0
82	<title>Remote sensing of atmospheric water vapor in the region of southwest China using GPS</title>. , 2005, , .		0