

Yaqiang Wang

List of Publications by Year in descending order

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Version: 2024-02-01

120
papers

7,195
citations

61984

43
h-index

62596

80
g-index

124
all docs

124
docs citations

124
times ranked

5061
citing authors

#	ARTICLE	IF	CITATIONS
1	Characteristics of chemical composition and role of meteorological factors during heavy aerosol pollution episodes in northern Beijing area in autumn and winter of 2015. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 69, 1347484.	1.6	17
2	Aqueous-phase reactions occurred in the PM _{2.5} ; cumulative explosive growth during the heavy pollution episode (HPE) in 2016 Beijing wintertime. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 71, 1620079.	1.6	20
3	Reflections on the threshold for PM _{2.5} ; explosive growth in the cumulative stage of winter heavy aerosol pollution episodes (HPEs) in Beijing. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 71, 1528134.	1.6	22
4	The Significant Contribution of Small-Sized and Spherical Aerosol Particles to the Decreasing Trend in Total Aerosol Optical Depth over Land from 2003 to 2018. <i>Engineering</i> , 2022, 16, 82-92.	6.7	23
5	The propagation of fog and its related pollutants in the Central and Eastern China in winter. <i>Atmospheric Research</i> , 2022, 265, 105914.	4.1	3
6	On the fossil and non-fossil fuel sources of carbonaceous aerosol with radiocarbon and AMS-PMF methods during winter hazy days in a rural area of North China plain. <i>Environmental Research</i> , 2022, 208, 112672.	7.5	11
7	Extensive characterization of aerosol optical properties and chemical component concentrations: Application of the GRASP/Component approach to long-term AERONET measurements. <i>Science of the Total Environment</i> , 2022, 812, 152553.	8.0	11
8	The Different Impacts of Emissions and Meteorology on PM _{2.5} Changes in Various Regions in China: A Case Study. <i>Atmosphere</i> , 2022, 13, 222.	2.3	2
9	Effects of Different Aerosols on the Air Pollution and Their Relationship With Meteorological Parameters in North China Plain. <i>Frontiers in Environmental Science</i> , 2022, 10, .	3.3	3
10	Observational study of the PM _{2.5} and O ₃ superposition-composite pollution event during spring 2020 in Beijing associated with the water vapor conveyor belt in the northern hemisphere. <i>Atmospheric Environment</i> , 2022, 272, 118966.	4.1	5
11	Temperature Forecasting Correction Based on Operational GRAPES-3km Model Using Machine Learning Methods. <i>Atmosphere</i> , 2022, 13, 362.	2.3	7
12	Multi-Year Variation of Ozone and Particulate Matter in Northeast China Based on the Tracking Air Pollution in China (TAP) Data. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 3830.	2.6	12
13	Record-breaking dust loading during two mega dust storm events over northern China in March 2021: aerosol optical and radiative properties and meteorological drivers. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 7905-7932.	4.9	48
14	Reconstructing 6-hourly PM _{2.5} datasets from 1960 to 2020 in China. <i>Earth System Science Data</i> , 2022, 14, 3197-3211.	9.9	23
15	Climatology and trends of aerosol optical depth with different particle size and shape in northeast China from 2001 to 2018. <i>Science of the Total Environment</i> , 2021, 763, 142979.	8.0	12
16	Assessing the pollutant evolution mechanisms of heavy pollution episodes in the Yangtze-Huaihe valley: A multiscale perspective. <i>Atmospheric Environment</i> , 2021, 244, 117986.	4.1	12
17	The dominant mechanism of the explosive rise of PM _{2.5} after significant pollution emissions reduction in Beijing from 2017 to the COVID-19 pandemic in 2020. <i>Atmospheric Pollution Research</i> , 2021, 12, 272-281.	3.8	13
18	Attribution of the worse aerosol pollution in March 2018 in Beijing to meteorological variability. <i>Atmospheric Research</i> , 2021, 250, 105294.	4.1	7

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19	Drivers of the rapid rise and daily-based accumulation in PM1. <i>Science of the Total Environment</i> , 2021, 760, 143394.	8.0	4
20	Aerosol optical properties and its type classification based on multiyear joint observation campaign in north China plain megalopolis. <i>Chemosphere</i> , 2021, 273, 128560.	8.2	12
21	Reconstruction of Missing Data in Weather Radar Image Sequences Using Deep Neuron Networks. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 1491.	2.5	2
22	Identifying the dominant local factors of 2000â€“2019 changes in dust loading over East Asia. <i>Science of the Total Environment</i> , 2021, 777, 146064.	8.0	25
23	Deep Learning for Polarimetric Radar Quantitative Precipitation Estimation during Landfalling Typhoons in South China. <i>Remote Sensing</i> , 2021, 13, 3157.	4.0	11
24	Seasonal variability and trends in global type-segregated aerosol optical depth as revealed by MISR satellite observations. <i>Science of the Total Environment</i> , 2021, 787, 147543.	8.0	24
25	Robust prediction of hourly PM2.5 from meteorological data using LightGBM. <i>National Science Review</i> , 2021, 8, nwaa307.	9.5	59
26	A global-scale analysis of the MISR Level-3 aerosol optical depth (AOD) product: Comparison with multi-platform AOD data sources. <i>Atmospheric Pollution Research</i> , 2021, 12, 101238.	3.8	23
27	Classification of the Circulation Patterns Related to Strong Dust Weather in China Using a Combination of the Lambâ€“Jenkinson and k-Means Clustering Methods. <i>Atmosphere</i> , 2021, 12, 1545.	2.3	4
28	Atmospheric visibility variation over global land surface during 1973â€“2012: Influence of meteorological factors and effect of aerosol, cloud on ABL evolution. <i>Atmospheric Pollution Research</i> , 2020, 11, 730-743.	3.8	6
29	The two-way feedback effect between aerosol pollution and planetary boundary layer structure on the explosive rise of PM2.5 after the â€œTen Statements of Atmosphereâ€“in Beijing. <i>Science of the Total Environment</i> , 2020, 709, 136259.	8.0	20
30	Significant Changes in Chemistry of Fine Particles in Wintertime Beijing from 2007 to 2017: Impact of Clean Air Actions. <i>Environmental Science & Technology</i> , 2020, 54, 1344-1352.	10.0	84
31	Interdecadal variation in aerosol optical properties and their relationships to meteorological parameters over northeast China from 1980 to 2017. <i>Chemosphere</i> , 2020, 247, 125737.	8.2	15
32	Temporal and spatial variations of haze and fog and the characteristics of PM2.5 during heavy pollution episodes in China from 2013 to 2018. <i>Atmospheric Pollution Research</i> , 2020, 11, 1847-1856.	3.8	41
33	Long-Term Variation of Black Carbon Aerosol in China Based on Revised Aethalometer Monitoring Data. <i>Atmosphere</i> , 2020, 11, 684.	2.3	23
34	Retrievals of fine mode light-absorbing carbonaceous aerosols from POLDER/PARASOL observations over East and South Asia. <i>Remote Sensing of Environment</i> , 2020, 247, 111913.	11.0	40
35	How aerosol transport from the North China plain contributes to air quality in northeast China. <i>Science of the Total Environment</i> , 2020, 738, 139555.	8.0	27
36	Construction of a virtual PM2.5 observation network in China based on high-density surface meteorological observations using the Extreme Gradient Boosting model. <i>Environment International</i> , 2020, 141, 105801.	10.0	85

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37	Evaluating the contributions of changed meteorological conditions and emission to substantial reductions of PM _{2.5} concentration from winter 2016 to 2017 in Central and Eastern China. <i>Science of the Total Environment</i> , 2020, 716, 136892.	8.0	46
38	The effects of the "two-way feedback mechanism" on the maintenance of persistent heavy aerosol pollution over areas with relatively light aerosol pollution in northwest China. <i>Science of the Total Environment</i> , 2019, 688, 642-652.	8.0	10
39	Large contribution of meteorological factors to inter-decadal changes in regional aerosol optical depth. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 10497-10523.	4.9	169
40	Interaction Between Planetary Boundary Layer and PM _{2.5} Pollution in Megacities in China: a Review. <i>Current Pollution Reports</i> , 2019, 5, 261-271.	6.6	100
41	Spatial distribution of aerosol microphysical and optical properties and direct radiative effect from the China Aerosol Remote Sensing Network. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 11843-11864.	4.9	101
42	Satellite-derived PM _{2.5} concentration trends over Eastern China from 1998 to 2016: Relationships to emissions and meteorological parameters. <i>Environmental Pollution</i> , 2019, 247, 1125-1133.	7.5	176
43	Observational study of aerosol hygroscopic growth on scattering coefficient in Beijing: A case study in March of 2018. <i>Science of the Total Environment</i> , 2019, 685, 239-247.	8.0	19
44	The impact of meteorological changes from 2013 to 2017 on PM _{2.5} mass reduction in key regions in China. <i>Science China Earth Sciences</i> , 2019, 62, 1885-1902.	5.2	157
45	Five-year observation of aerosol optical properties and its radiative effects to planetary boundary layer during air pollution episodes in North China: Intercomparison of a plain site and a mountainous site in Beijing. <i>Science of the Total Environment</i> , 2019, 674, 140-158.	8.0	38
46	The two-way feedback mechanism between unfavorable meteorological conditions and cumulative aerosol pollution in various haze regions of China. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 3287-3306.	4.9	97
47	Aerosol and gaseous pollutant characteristics during the heating season (winter-spring transition) in the Harbin-Changchun megalopolis, northeastern China. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2019, 188, 26-43.	1.6	14
48	Relatively weak meteorological feedback effect on PM _{2.5} mass change in Winter 2017/18 in the Beijing area: Observational evidence and machine-learning estimations. <i>Science of the Total Environment</i> , 2019, 664, 140-147.	8.0	14
49	Aerosol vertical mass flux measurements during heavy aerosol pollution episodes at a rural site and an urban site in the Beijing area of the North China Plain. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 12857-12874.	4.9	10
50	Aerosol vertical distribution and optical properties of different pollution events in Beijing in autumn 2017. <i>Atmospheric Research</i> , 2019, 215, 193-207.	4.1	34
51	Influence of meteorological conditions on explosive increase in O ₃ concentration in troposphere. <i>Science of the Total Environment</i> , 2019, 652, 1228-1241.	8.0	23
52	Variation in MERRA-2 aerosol optical depth over the Yangtze River Delta from 1980 to 2016. <i>Theoretical and Applied Climatology</i> , 2019, 136, 363-375.	2.8	33
53	Interdecadal changes of summer aerosol pollution in the Yangtze River Basin of China, the relative influence of meteorological conditions and the relation to climate change. <i>Science of the Total Environment</i> , 2018, 630, 46-52.	8.0	17
54	Comparison of Submicron Particles at a Rural and an Urban Site in the North China Plain during the December 2016 Heavy Pollution Episodes. <i>Journal of Meteorological Research</i> , 2018, 32, 26-37.	2.4	18

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55	Feedback effects of boundary-layer meteorological factors on cumulative explosive growth of PM _{2.5} during winter heavy pollution episodes in Beijing from 2013 to 2016. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 247-258.	4.9	196
56	Aerosol optical characteristics and their vertical distributions under enhanced haze pollution events: effect of the regional transport of different aerosol types over eastern China. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 2949-2971.	4.9	69
57	Aerosol optical properties and direct radiative forcing based on measurements from the China Aerosol Remote Sensing Network (CARSNET) in eastern China. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 405-425.	4.9	113
58	Aerosol Hygroscopicity during the Haze Red-Alert Period in December 2016 at a Rural Site of the North China Plain. <i>Journal of Meteorological Research</i> , 2018, 32, 38-48.	2.4	11
59	Chemical Components, Variation, and Source Identification of PM ₁ during the Heavy Air Pollution Episodes in Beijing in December 2016. <i>Journal of Meteorological Research</i> , 2018, 32, 1-13.	2.4	28
60	Temporal and spatial variations in sand and dust storm events in East Asia from 2007 to 2016: Relationships with surface conditions and climate change. <i>Science of the Total Environment</i> , 2018, 633, 452-462.	8.0	118
61	Heavy aerosol pollution episodes in winter Beijing enhanced by radiative cooling effects of aerosols. <i>Atmospheric Research</i> , 2018, 209, 59-64.	4.1	74
62	The interdecadal worsening of weather conditions affecting aerosol pollution in the Beijing area in relation to climate warming. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 5991-5999.	4.9	79
63	Multiyear Ground-Based Measurements of Aerosol Optical Properties and Direct Radiative Effect Over Different Surface Types in Northeastern China. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 13,887.	3.3	27
64	Air stagnation and its impact on air quality during winter in Sichuan and Chongqing, southwestern China. <i>Science of the Total Environment</i> , 2018, 635, 576-585.	8.0	97
65	Contribution distinguish between emission reduction and meteorological conditions to "Blue Sky". <i>Atmospheric Environment</i> , 2018, 190, 209-217.	4.1	11
66	Comparison of Aerosol Optical Properties Between Two Nearby Urban Sites in Beijing, China. <i>Aerosol Science and Engineering</i> , 2017, 1, 78-92.	1.9	1
67	On the influence of atmospheric super-saturation layer on China's heavy haze-fog events. <i>Atmospheric Environment</i> , 2017, 171, 261-271.	4.1	20
68	Relative contributions of boundary-layer meteorological factors to the explosive growth of PM _{2.5} during the red-alert heavy pollution episodes in Beijing in December 2016. <i>Journal of Meteorological Research</i> , 2017, 31, 809-819.	2.4	115
69	Aerosol optical properties observation and its relationship to meteorological conditions and emission during the Chinese National Day and Spring Festival holiday in Beijing. <i>Atmospheric Research</i> , 2017, 197, 188-200.	4.1	23
70	Water vapor variation and the effect of aerosols in China. <i>Atmospheric Environment</i> , 2017, 165, 322-335.	4.1	33
71	Attributions of meteorological and emission factors to the 2015 winter severe haze pollution episodes in China's Jing-Jin-Ji area. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 2971-2980.	4.9	127
72	The Relationship of PM Variation with Visibility and Mixing-Layer Height under Hazy/Foggy Conditions in the Multi-Cities of Northeast China. <i>International Journal of Environmental Research and Public Health</i> , 2017, 14, 471.	2.6	32

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73	A Study on Parameterization of the Beijing Winter Heavy Haze Events Associated with Height of Pollution Mixing Layer. <i>Advances in Meteorology</i> , 2017, 2017, 1-11.	1.6	4
74	Temporal variation and source identification of black carbon at Lin ^{an} and Longfengshan regional background stations in China. <i>Journal of Meteorological Research</i> , 2017, 31, 1070-1084.	2.4	4
75	Optical and radiative properties of aerosols during a severe haze episode over the North China Plain in December 2016. <i>Journal of Meteorological Research</i> , 2017, 31, 1045-1061.	2.4	12
76	A Gis Based Seismic Hazard Zonation System of Loess for Lanzhou City. , 2017, , 161-164.		0
77	The Impacts of Different PBL Schemes on the Simulation of PM _{2.5} during Severe Haze Episodes in the Jing-Jin-Ji Region and Its Surroundings in China. <i>Advances in Meteorology</i> , 2016, 2016, 1-15.	1.6	17
78	Analysis of the Error in Retrievals of Aerosol Optical Properties from Sunphotometer Measurements of CARSNET Due to a Variety of Objective Factors. <i>Atmosphere</i> , 2016, 7, 9.	2.3	10
79	Aerosol Optical Properties over Beijing during the World Athletics Championships and Victory Day Military Parade in August and September 2015. <i>Atmosphere</i> , 2016, 7, 47.	2.3	16
80	Aerosol Optical Properties Based on Ground and Satellite Retrievals during a Serious Haze Episode in December 2015 over Beijing. <i>Atmosphere</i> , 2016, 7, 70.	2.3	24
81	Investigation of the Optical Properties of Aerosols over the Coastal Region at Dalian, Northeast China. <i>Atmosphere</i> , 2016, 7, 103.	2.3	6
82	The strong El Niño of 2015/16 and its dominant impacts on global and China's climate. <i>Journal of Meteorological Research</i> , 2016, 30, 283-297.	2.4	115
83	Regional prediction of carbon isotopes in soil carbonates for Asian dust source tracer. <i>Atmospheric Environment</i> , 2016, 142, 1-8.	4.1	3
84	PLAM – a meteorological pollution index for air quality and its applications in fog-haze forecasts in North China. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 1353-1364.	4.9	28
85	Biogeographical estimates of allergenic pollen transport over regional scales: Common ragweed and Szeged, Hungary as a test case. <i>Agricultural and Forest Meteorology</i> , 2016, 221, 94-110.	4.8	29
86	OutlierFlag: A Tool for Scientific Data Quality Control by Outlier Data Flagging. <i>Journal of Open Research Software</i> , 2016, 4, 20.	5.9	4
87	Detection and attribution of regional CO ₂ concentration anomalies using surface observations. <i>Atmospheric Environment</i> , 2015, 123, 88-101.	4.1	8
88	Ground-based aerosol climatology of China: aerosol optical depths from the China Aerosol Remote Sensing Network (CARSNET) 2002–2013. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 7619-7652.	4.9	224
89	Changes in chemical components of aerosol particles in different haze regions in China from 2006 to 2013 and contribution of meteorological factors. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 12935-12952.	4.9	119
90	Widespread Albedo Decreasing and Induced Melting of Himalayan Snow and Ice in the Early 21st Century. <i>PLoS ONE</i> , 2015, 10, e0126235.	2.5	53

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91	Analyses of aerosol optical properties and direct radiative forcing over urban and industrial regions in Northeast China. <i>Meteorology and Atmospheric Physics</i> , 2015, 127, 345-354.	2.0	46
92	Aerosol optical properties under the condition of heavy haze over an urban site of Beijing, China. <i>Environmental Science and Pollution Research</i> , 2015, 22, 1043-1053.	5.3	95
93	Application of aerosol optical properties to estimate aerosol type from ground-based remote sensing observation at urban area of northeastern China. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2015, 132, 37-47.	1.6	29
94	Aerosol Optical Properties Retrieved from a Prede Sky Radiometer over an Urban Site of Beijing, China. <i>Journal of the Meteorological Society of Japan</i> , 2014, 92A, 17-31.	1.8	7
95	A study of the meteorological causes of a prolonged and severe haze episode in January 2013 over central-eastern China. <i>Atmospheric Environment</i> , 2014, 98, 146-157.	4.1	158
96	Development of an integrating sphere calibration method for Cimel sunphotometers in China aerosol remote sensing network. <i>Particuology</i> , 2014, 13, 88-99.	3.6	28
97	Mixing state and hygroscopicity of dust and haze particles before leaving Asian continent. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 1044-1059.	3.3	67
98	Study of Aerosol Optical Properties Based on Ground Measurements over Sichuan Basin, China. <i>Aerosol and Air Quality Research</i> , 2014, 14, 905-915.	2.1	27
99	Diagnostic identification of the impact of meteorological conditions on PM _{2.5} concentrations in Beijing. <i>Atmospheric Environment</i> , 2013, 81, 158-165.	4.1	62
100	Characteristics of visibility and particulate matter (PM) in an urban area of Northeast China. <i>Atmospheric Pollution Research</i> , 2013, 4, 427-434.	3.8	109
101	æ²â½/2é¾¾æ²â¾¾...¶æ²»ç†çš,,æ€è€f. <i>Chinese Science Bulletin</i> , 2013, 58, 1178-1187.	0.7	151
102	Variation of Aerosol Optical Properties over the Taklimakan Desert in China. <i>Aerosol and Air Quality Research</i> , 2013, 13, 777-785.	2.1	58
103	Atmospheric aerosol compositions in China: spatial/temporal variability, chemical signature, regional haze distribution and comparisons with global aerosols. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 779-799.	4.9	741
104	Synergy of satellite and ground based observations in estimation of particulate matter in eastern China. <i>Science of the Total Environment</i> , 2012, 433, 20-30.	8.0	89
105	Aerosol optical properties at Mt. Waliguan Observatory, China. <i>Atmospheric Environment</i> , 2011, 45, 6004-6009.	4.1	60
106	Global sand and dust storms in 2008: Observation and HYSPLIT model verification. <i>Atmospheric Environment</i> , 2011, 45, 6368-6381.	4.1	67
107	Emission inventories of primary particles and pollutant gases for China. <i>Science Bulletin</i> , 2011, 56, 781-788.	1.7	120
108	Assessment of In-situ Langley Calibration of CE-318 Sunphotometer at Mt. Waliguan Observatory, China. <i>Scientific Online Letters on the Atmosphere</i> , 2011, 7, 89-92.	1.4	8

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109	Spatial distribution and interannual variation of surface PM ₁₀ concentrations over eighty-six Chinese cities. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5641-5662.	4.9	144
110	Seasonal variation, source, and regional representativeness of the background aerosol from two remote sites in western China. <i>Environmental Monitoring and Assessment</i> , 2010, 167, 265-288.	2.7	6
111	Aerosol optical properties based on ground measurements over the Chinese Yangtze Delta Region. <i>Atmospheric Environment</i> , 2010, 44, 2587-2596.	4.1	105
112	Aerosol optical properties of regional background atmosphere in Northeast China. <i>Atmospheric Environment</i> , 2010, 44, 4404-4412.	4.1	66
113	CHANGES OF ATMOSPHERIC COMPOSITION AND OPTICAL PROPERTIES OVER BEIJINGâ€™2008 Olympic Monitoring Campaign. <i>Bulletin of the American Meteorological Society</i> , 2009, 90, 1633-1652.	3.3	110
114	Aerosol background at two remote CAWNET sites in western China. <i>Science of the Total Environment</i> , 2009, 407, 3518-3529.	8.0	35
115	TrajStat: GIS-based software that uses various trajectory statistical analysis methods to identify potential sources from long-term air pollution measurement data. <i>Environmental Modelling and Software</i> , 2009, 24, 938-939.	4.5	772
116	Development and evaluation of an operational SDS forecasting system for East Asia: CUACE/Dust. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 787-798.	4.9	59
117	Surface observation of sand and dust storm in East Asia and its application in CUACE/Dust. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 545-553.	4.9	87
118	Mass concentration and mineralogical characteristics of aerosol particles collected at Dunhuang during ACE-Asia. <i>Advances in Atmospheric Sciences</i> , 2006, 23, 291-298.	4.3	28
119	The contribution from distant dust sources to the atmospheric particulate matter loadings at XiAn, China during spring. <i>Science of the Total Environment</i> , 2006, 368, 875-883.	8.0	149
120	Characteristics of clay minerals in asian dust and their environmental significance. <i>Particuology: Science and Technology of Particles</i> , 2005, 3, 260-264.	0.4	28