Markedly enhanced absorption and direct radiative for polluted urban environments

Proceedings of the National Academy of Sciences of the Unite 113, 4266-4271

DOI: 10.1073/pnas.1602310113

Citation Report

#	Article	IF	CITATIONS
4	Measured Wavelength-Dependent Absorption Enhancement of Internally Mixed Black Carbon with Absorbing and Nonabsorbing Materials. Environmental Science & Technology, 2016, 50, 7982-7990.	4.6	49
5	OH-Initiated Oxidation of <i>m</i> -Xylene on Black Carbon Aging. Environmental Science & Technology, 2016, 50, 8605-8612.	4.6	47
6	Temporal variations of black carbon during haze and non-haze days in Beijing. Scientific Reports, 2016, 6, 33331.	1.6	38
7	Convergence on climate warming by black carbon aerosols. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4243-4245.	3.3	152
8	Influence of sulfur in fuel on the properties of diffusion flame soot. Atmospheric Environment, 2016, 142, 383-392.	1.9	17
9	Confronting the "Indian summer monsoon response to black carbon aerosol―with the uncertainty in its radiative forcing and beyond. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7833-7852.	1.2	16
10	Reply to Boucher et al.: Rate and timescale of black carbon aging regulate direct radiative forcing. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5094-5.	3.3	4
11	Evolution of secondary inorganic and organic aerosols during transport: A case study at a regional receptor site. Environmental Pollution, 2016, 218, 794-803.	3.7	18
12	Jury is still out on the radiative forcing by black carbon. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5092-3.	3.3	43
13	Deriving aerosol hygroscopic mixing state from size-resolved CCN activity and HR-ToF-AMS measurements. Atmospheric Environment, 2016, 142, 57-70.	1.9	18
14	Mixing states of lightâ€absorbing particles measured using a transmission electron microscope and a singleâ€particle soot photometer in Tokyo, Japan. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9153-9164.	1.2	42
15	Review of Aerosol–Cloud Interactions: Mechanisms, Significance, and Challenges. Journals of the Atmospheric Sciences, 2016, 73, 4221-4252.	0.6	439
16	Persistent sulfate formation from London Fog to Chinese haze. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13630-13635.	3.3	1,044
17	Distinct Impacts of Aerosols on an Evolving Continental Cloud Complex during the RACORO Field Campaign. Journals of the Atmospheric Sciences, 2016, 73, 3681-3700.	0.6	30
18	The climatology of planetary boundary layer height in China derived from radiosonde and reanalysis data. Atmospheric Chemistry and Physics, 2016, 16, 13309-13319.	1.9	384
19	Optical properties of atmospheric fine particles near Beijing during the HOPE-J ³ A campaign. Atmospheric Chemistry and Physics, 2016, 16, 6421-6439.	1.9	38
20	Coating surface tension dependence of soot aggregate restructuring. Journal of Aerosol Science, 2017, 106, 43-55.	1.8	31
21	Identification of Nitration Products during Heterogeneous Reaction of NO ₂ on Soot in the Dark and under Simulated Sunlight Journal of Physical Chemistry A 2017 121 482-492	1.1	21

#	Article	IF	CITATIONS
22	Characterization of black carbon in an urban-rural fringe area of Beijing. Environmental Pollution, 2017, 223, 524-534.	3.7	54
23	Black-carbon absorption enhancement in the atmosphere determined by particle mixingÂstate. Nature Geoscience, 2017, 10, 184-188.	5.4	303
24	Estimation of atmospheric aging time of black carbon particles in the polluted atmosphere over central-eastern China using microphysical process analysis in regional chemical transport model. Atmospheric Environment, 2017, 163, 44-56.	1.9	37
25	Reconciling modeling with observations of radiative absorption of black carbon aerosols. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5932-5942.	1.2	13
26	Sulfur isotopic fractionation and its implication: Sulfate formation in PM2.5 and coal combustion under different conditions. Atmospheric Research, 2017, 194, 142-149.	1.8	21
27	Black carbon aerosol and its radiative impact at a highâ€altitude remote site on the southeastern Tibet Plateau. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5515-5530.	1.2	36
28	Effect of nitrogen oxides (NO and NO 2) and toluene on SO 2 photooxidation, nucleation and growth: A smog chamber study. Atmospheric Research, 2017, 192, 38-47.	1.8	34
29	Smog chamber study on aging of combustion soot in isoprene/SO2/NOx system: Changes of mass, size, effective density, morphology and mixing state. Atmospheric Research, 2017, 184, 139-148.	1.8	38
30	Nanoscale spectroscopic and mechanical characterization of individual aerosol particles using peak force infrared microscopy. Chemical Communications, 2017, 53, 7397-7400.	2.2	16
31	The effects of biodiesels on semivolatile and nonvolatile particulate matter emissions from a light-duty diesel engine. Environmental Pollution, 2017, 230, 72-80.	3.7	10
32	A review of biomass burning: Emissions and impacts on air quality, health and climate in China. Science of the Total Environment, 2017, 579, 1000-1034.	3.9	815
33	Light absorption enhancement of black carbon from urban haze in Northern China winter. Environmental Pollution, 2017, 221, 418-426.	3.7	61
34	Heating with Biomass in the United Kingdom: Lessons from New Zealand. Atmospheric Environment, 2017, 152, 431-454.	1.9	9
35	Heterogeneous reaction of SO2 with soot: The roles of relative humidity and surface composition of soot in surface sulfate formation. Atmospheric Environment, 2017, 152, 465-476.	1.9	68
36	Evolution of In-Cylinder Diesel Engine Soot and Emission Characteristics Investigated with Online Aerosol Mass Spectrometry. Environmental Science & Technology, 2017, 51, 1876-1885.	4.6	38
37	A Model for the Spectral Dependence of Aerosol Sunlight Absorption. ACS Earth and Space Chemistry, 2017, 1, 533-539.	1.2	9
38	Diesel soot aging in urban plumes within hours under cold dark and humid conditions. Scientific Reports, 2017, 7, 12364.	1.6	24
39	Fractal Dimensions and Mixing Structures of Soot Particles during Atmospheric Processing. Environmental Science and Technology Letters, 2017, 4, 487-493.	3.9	136

#	Article	IF	CITATIONS
40	Rapid Adjustments Cause Weak Surface Temperature Response to Increased Black Carbon Concentrations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11462-11481.	1.2	118
41	Overview of Persistent Haze Events in China. , 2017, , 3-25.		1
42	Chemical Composition During Severe Haze Events in Northern China. , 2017, , 245-264.		0
43	Climate Impacts of CALIPSOâ€Guided Corrections to Black Carbon Aerosol Vertical Distributions in a Global Climate Model. Geophysical Research Letters, 2017, 44, 10,549.	1.5	0
44	Reassessing the atmospheric oxidation mechanism of toluene. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8169-8174.	3.3	151
45	Characteristics of black carbon in snow from Laohugou No. 12 glacier on the northern Tibetan Plateau. Science of the Total Environment, 2017, 607-608, 1237-1249.	3.9	38
46	Quantification of the impact of aerosol on broadband solar radiation in North China. Scientific Reports, 2017, 7, 44851.	1.6	45
47	Trans-Pacific transport of dust aerosols from East Asia: Insights gained from multiple observations and modeling. Environmental Pollution, 2017, 230, 1030-1039.	3.7	111
48	Internally mixed black carbon in the Indo-Gangetic Plain and its effect on absorption enhancement. Atmospheric Research, 2017, 197, 211-223.	1.8	50
49	Absorption enhancement of aged black carbon aerosols affected by their microphysics: A numerical investigation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 202, 90-97.	1.1	37
50	Radiative effect of black carbon aerosol on a squall line case in North China. Atmospheric Research, 2017, 197, 407-414.	1.8	10
51	First Chemical Characterization of Refractory Black Carbon Aerosols and Associated Coatings over the Tibetan Plateau (4730 m a.s.l). Environmental Science & Technology, 2017, 51, 14072-14082.	4.6	55
52	Heterogeneous Reaction of SO2 on Manganese Oxides: the Effect of Crystal Structure and Relative Humidity. Scientific Reports, 2017, 7, 4550.	1.6	56
53	The mobile monitoring of black carbon and its association with roadside data in the Chinese megacity of Shanghai. Environmental Science and Pollution Research, 2017, 24, 7482-7489.	2.7	14
54	Relationship between Coating-Induced Soot Aggregate Restructuring and Primary Particle Number. Environmental Science & Technology, 2017, 51, 8376-8383.	4.6	17
55	Fractal scaling of coated soot aggregates. Aerosol Science and Technology, 2017, 51, 12-19.	1.5	28
56	Direct radiative effects of aerosols over South Asia from observations and modeling. Climate Dynamics, 2017, 49, 1411-1428.	1.7	33
57	Aerosol and boundary-layer interactions and impact on air quality. National Science Review, 2017, 4, 810-833.	4.6	524

#	Article	IF	CITATIONS
58	Ageing and hygroscopicity variation of black carbon particles in Beijing measured by a quasi-atmospheric aerosol evolution study (QUALITY) chamber. Atmospheric Chemistry and Physics, 2017, 17, 10333-10348.	1.9	47
59	Gasoline aromatics: aÂcritical determinant of urban secondary organic aerosol formation. Atmospheric Chemistry and Physics, 2017, 17, 10743-10752.	1.9	58
60	Contributions of trans-boundary transport to summertime air quality in Beijing, China. Atmospheric Chemistry and Physics, 2017, 17, 2035-2051.	1.9	69
61	Classification of summertime synoptic patterns in Beijing and their associations with boundary layer structure affecting aerosol pollution. Atmospheric Chemistry and Physics, 2017, 17, 3097-3110.	1.9	210
62	Direct radiative effect of carbonaceous aerosols from crop residue burning during the summer harvest season in East China. Atmospheric Chemistry and Physics, 2017, 17, 5205-5219.	1.9	29
63	Simultaneous measurements of new particle formation at $1\hat{a}$ s time resolution at a street site and a rooftop site. Atmospheric Chemistry and Physics, 2017, 17, 9469-9484.	1.9	18
64	Aerosol vertical distribution and optical properties over China from long-term satellite and ground-based remote sensing. Atmospheric Chemistry and Physics, 2017, 17, 2509-2523.	1.9	105
65	Size distribution and source of black carbon aerosol in urban Beijing during winter haze episodes. Atmospheric Chemistry and Physics, 2017, 17, 7965-7975.	1.9	53
66	The variability in the relationship between black carbon and carbon monoxide over the eastern coast of China: BC aging during transport. Atmospheric Chemistry and Physics, 2017, 17, 10395-10403.	1.9	18
67	The single-particle mixing state and cloud scavenging of black carbon: a case study at a high-altitude mountain site in southern China. Atmospheric Chemistry and Physics, 2017, 17, 14975-14985.	1.9	31
68	Formation of secondary organic aerosol coating on black carbon particles near vehicular emissions. Atmospheric Chemistry and Physics, 2017, 17, 15055-15067.	1.9	30
69	Size-selected black carbon mass distributions and mixing state in polluted and clean environments of northern India. Atmospheric Chemistry and Physics, 2017, 17, 371-383.	1.9	35
70	Insight into winter haze formation mechanisms based on aerosol hygroscopicity and effective density measurements. Atmospheric Chemistry and Physics, 2017, 17, 7277-7290.	1.9	26
71	Air stagnation in China (1985–2014): climatological mean features and trends. Atmospheric Chemistry and Physics, 2017, 17, 7793-7805.	1.9	59
72	Opposite long-term trends in aerosols between low and high altitudes: a testimony to the aerosol–PBL feedback. Atmospheric Chemistry and Physics, 2017, 17, 7997-8009.	1.9	47
73	Concentrations and stable carbon isotope compositions of oxalic acid and related SOA in Beijing before, during, and after the 2014 APEC. Atmospheric Chemistry and Physics, 2017, 17, 981-992.	1.9	35
75	Characteristics of Aerosol Types in Beijing and the Associations with Air Pollution from 2004 to 2015. Remote Sensing, 2017, 9, 898.	1.8	22
76	Elemental Mixing State of Aerosol Particles Collected in Central Amazonia during GoAmazon2014/15. Atmosphere, 2017, 8, 173.	1.0	30

		INEPORT	
#	Article	IF	CITATIONS
80	The Impact of Sampling Medium and Environment on Particle Morphology. Atmosphere, 2017, 8, 162.	1.0	6
81	Enhanced light absorption due to the mixing state of black carbon in fresh biomass burning emissions. Atmospheric Environment, 2018, 180, 184-191.	1.9	22
82	Updated emission inventories of power plants in simulating air quality during haze periods over East China. Atmospheric Chemistry and Physics, 2018, 18, 2065-2079.	1.9	41
83	Secondary organic aerosol formation from ambient air in an oxidation flow reactor in central Amazonia. Atmospheric Chemistry and Physics, 2018, 18, 467-493.	1.9	63
84	Aerosol Absorption: Progress Towards Global and Regional Constraints. Current Climate Change Reports, 2018, 4, 65-83.	2.8	103
85	Numerical Investigation on Absorption Enhancement of Black Carbon Aerosols Partially Coated With Nonabsorbing Organics. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1297-1308.	1.2	35
86	Impact of Climate Change on Siberian High and Wintertime Air Pollution in China in Past Two Decades. Earth's Future, 2018, 6, 118-133.	2.4	49
87	Aerosol microphysical and radiative effects on continental cloud ensembles. Advances in Atmospheric Sciences, 2018, 35, 234-247.	1.9	24
88	Dome effect of black carbon and its key influencing factors: aÂone-dimensional modelling study. Atmospheric Chemistry and Physics, 2018, 18, 2821-2834.	1.9	124
89	Quantifying black carbon light absorption enhancement with aÂnovel statistical approach. Atmospheric Chemistry and Physics, 2018, 18, 289-309.	1.9	84
90	lce-nucleating particle concentrations unaffected by urban air pollution in Beijing, China. Atmospheric Chemistry and Physics, 2018, 18, 3523-3539.	1.9	78
91	Sources and physicochemical characteristics of black carbon aerosol from the southeastern Tibetan Plateau: internal mixing enhances light absorption. Atmospheric Chemistry and Physics, 2018, 18, 4639-4656.	1.9	54
92	Measured in-situ mass absorption spectra for nine forms of highly-absorbing carbonaceous aerosol. Carbon, 2018, 136, 85-93.	5.4	32
93	Light absorption of black carbon is doubled at Mt. Tai and typical urban area in North China. Science of the Total Environment, 2018, 635, 1144-1151.	3.9	21
94	Mixing layer height on the North China Plain and meteorological evidence of serious air pollution in southern Hebei. Atmospheric Chemistry and Physics, 2018, 18, 4897-4910.	1.9	78
95	Role of Carbonaceous Aerosols in Catalyzing Sulfate Formation. ACS Catalysis, 2018, 8, 3825-3832.	5.5	59
96	The Optical Properties of Limonene Secondary Organic Aerosols: The Role of NO 3 , OH, and O 3 in the Oxidation Processes. Journal of Geophysical Research D: Atmospheres, 2018, 123, 3292-3303.	1.2	25
97	Climate Feedback on Aerosol Emission and Atmospheric Concentrations. Current Climate Change Reports, 2018, 4, 1-10.	2.8	32

#	Article	IF	CITATIONS
98	Multi-dimension apportionment of clean air "parade blue―phenomenon in Beijing. Journal of Environmental Sciences, 2018, 65, 29-42.	3.2	14
99	Chemical characteristics and sources of PM1 during the 2016 summer in Hangzhou. Environmental Pollution, 2018, 232, 42-54.	3.7	35
100	Relationship between aerosol and lightning over Indo-Gangetic Plain (IGP), India. Climate Dynamics, 2018, 50, 3865-3884.	1.7	21
101	On Effective Radiative Forcing of Partial Internally and Externally Mixed Aerosols and Their Effects on Global Climate. Journal of Geophysical Research D: Atmospheres, 2018, 123, 401-423.	1.2	14
102	Effect of relative humidity and the presence of aerosol particles on the α-pinene ozonolysis. Journal of Environmental Sciences, 2018, 71, 99-107.	3.2	10
103	Morphological transformation of soot: investigation of microphysical processes during the condensation of sulfuric acid and limonene ozonolysis product vapors. Atmospheric Chemistry and Physics, 2018, 18, 9845-9860.	1.9	27
104	Variability in individual particle structure and mixing states between the glacier–snowpack and atmosphere in the northeastern Tibetan Plateau. Cryosphere, 2018, 12, 3877-3890.	1.5	26
106	Effect of solubility limitation on hygroscopic growth and cloud drop activation of SOA particles produced from traffic exhausts. Journal of Atmospheric Chemistry, 2018, 75, 359-383.	1.4	5
108	Scaling Laws for Light Absorption Enhancement Due to Nonrefractory Coating of Atmospheric Black Carbon Aerosol. Physical Review Letters, 2018, 121, 218701.	2.9	48
109	Diminishing clear winter skies in Beijing towards a possible future. Environmental Research Letters, 2018, 13, 124029.	2.2	15
111	Evidence of major secondary organic aerosol contribution to lensing effect black carbon absorption enhancement. Npj Climate and Atmospheric Science, 2018, 1, .	2.6	70
112	Amplification of light absorption of black carbon associated with air pollution. Atmospheric Chemistry and Physics, 2018, 18, 9879-9896.	1.9	67
113	The influence of photochemical aging on light absorption of atmospheric black carbon and aerosol single-scattering albedo. Atmospheric Chemistry and Physics, 2018, 18, 16829-16844.	1.9	40
114	Constraining Aging Processes of Black Carbon in the Community Atmosphere Model Using Environmental Chamber Measurements. Journal of Advances in Modeling Earth Systems, 2018, 10, 2514-2526.	1.3	43
115	Diurnal Patterns in Global Fine Particulate Matter Concentration. Environmental Science and Technology Letters, 2018, 5, 687-691.	3.9	30
116	Sizing of Ambient Particles From a Singleâ€Particle Soot Photometer Measurement to Retrieve Mixing State of Black Carbon at a Regional Site of the North China Plain. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,778.	1.2	24
117	Experimental and model estimates of the contributions from biogenic monoterpenes and sesquiterpenes to secondary organic aerosol in the southeastern United States. Atmospheric Chemistry and Physics, 2018, 18, 12613-12637.	1.9	78
120	Retrieval of Atmospheric Fine Particulate Density Based on Merging Particle Size Distribution Measurements: Multiâ€instrument Observation and Quality Control at Shouxian. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,474.	1.2	8

#	Article	IF	CITATIONS
122	Factors affecting relative humidity and its relationship with the long-term variation of fog-haze events in the Yangtze River Delta. Atmospheric Environment, 2018, 193, 242-250.	1.9	20
124	Cloud droplet activation of black carbon particles coated with organic compounds of varying solubility. Atmospheric Chemistry and Physics, 2018, 18, 12477-12489.	1.9	36
127	Light Absorption Enhancement of Black Carbon Aerosol Constrained by Particle Morphology. Environmental Science & Technology, 2018, 52, 6912-6919.	4.6	81
128	Cycling and Budgets of Organic and Black Carbon in Coastal Bohai Sea, China: Impacts of Natural and Anthropogenic Perturbations. Global Biogeochemical Cycles, 2018, 32, 971-986.	1.9	24
129	Widespread air pollutants of the North China Plain during the Asian summer monsoon season: a case study. Atmospheric Chemistry and Physics, 2018, 18, 8491-8504.	1.9	29
130	Climatological study of the Boundary-layer air Stagnation Index for China and its relationship with air pollution. Atmospheric Chemistry and Physics, 2018, 18, 7573-7593.	1.9	52
131	Particle acidity and sulfate production during severe haze events in China cannot be reliably inferred by assuming a mixture of inorganic salts. Atmospheric Chemistry and Physics, 2018, 18, 10123-10132.	1.9	90
132	Reduction in black carbon light absorption due to multi-pollutant emission control during APEC China 2014. Atmospheric Chemistry and Physics, 2018, 18, 10275-10287.	1.9	20
133	Emission factors of organic carbon and elemental carbon for residential coal and biomass fuels in China- A new database for 39 fuel-stove combinations. Atmospheric Environment, 2018, 190, 241-248.	1.9	51
134	Machine Learning to Predict the Global Distribution of Aerosol Mixing State Metrics. Atmosphere, 2018, 9, 15.	1.0	21
135	Role of elemental carbon in the photochemical aging of soot. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7717-7722.	3.3	70
136	Impacts of Saharan Dust on Atlantic Regional Climate and Implications for Tropical Cyclones. Journal of Climate, 2018, 31, 7621-7644.	1.2	30
137	Significant Underestimation in the Optically Based Estimation of the Aerosol First Indirect Effect Induced by the Aerosol Swelling Effect. Geophysical Research Letters, 2018, 45, 5690-5699.	1.5	17
138	Characteristics and sources of ambient refractory black carbon aerosols: Insights from soot particle aerosol mass spectrometer. Atmospheric Environment, 2018, 185, 147-152.	1.9	16
139	Black carbon radiative effects highly sensitive to emitted particle size when resolving mixing-state diversity. Nature Communications, 2018, 9, 3446.	5.8	106
140	The absorption Ãngström exponent of black carbon: from numerical aspects. Atmospheric Chemistry and Physics, 2018, 18, 6259-6273.	1.9	158
141	Radiative absorption enhancement of dust mixed with anthropogenic pollution over East Asia. Atmospheric Chemistry and Physics, 2018, 18, 7815-7825.	1.9	52
142	Effects of black carbon and boundary layer interaction on surface ozone in Nanjing, China. Atmospheric Chemistry and Physics, 2018, 18, 7081-7094.	1.9	58

#	Article	IF	CITATIONS
143	Using different assumptions of aerosol mixing state and chemical composition to predict CCN concentrations based on field measurements in urban Beijing. Atmospheric Chemistry and Physics, 2018, 18, 6907-6921.	1.9	49
144	Evolution in physiochemical and cloud condensation nuclei activation properties of crop residue burning particles during photochemical aging. Journal of Environmental Sciences, 2019, 77, 43-53.	3.2	2
145	Morphology and composition of particles emitted from a port fuel injection gasoline vehicle under real-world driving test cycles. Journal of Environmental Sciences, 2019, 76, 339-348.	3.2	22
146	Urban Trees Are Sinks for Soot: Elemental Carbon Accumulation by Two Widespread Oak Species. Environmental Science & Technology, 2019, 53, 10092-10101.	4.6	31
147	Oxidation Potential Reduction of Carbon Nanomaterials during Atmospheric-Relevant Aging: Role of Surface Coating. Environmental Science & Technology, 2019, 53, 10454-10461.	4.6	13
148	Modeling of aerosol property evolution during winter haze episodes over a megacity cluster in northern China: roles of regional transport and heterogeneous reactions of SO ₂ . Atmospheric Chemistry and Physics, 2019, 19, 9351-9370.	1.9	32
149	Emerging Asian aerosol patterns. Nature Geoscience, 2019, 12, 582-584.	5.4	64
150	Black carbon aerosols in the ambient air of Gangotri Glacier valley of north-western Himalaya in India. Atmospheric Environment, 2019, 214, 116879.	1.9	24
151	Optical properties of chain-like soot with water coatings. Particuology, 2019, 47, 94-103.	2.0	2
152	Vertical distribution of the Asian tropopause aerosols detected by CALIPSO. Environmental Pollution, 2019, 253, 207-220.	3.7	11
153	Simulations of black carbon over the Indian region: improvements and implications of diurnality in emissions. Atmospheric Chemistry and Physics, 2019, 19, 8229-8241.	1.9	10
154	Radiative Properties of Atmospheric Black Carbon (Soot) Particles with Complex Structures. Springer Series in Light Scattering, 2019, , 219-254.	1.8	10
155	The climatology and trend of black carbon in China from 12-year ground observations. Climate Dynamics, 2019, 53, 5881-5892.	1.7	40
156	Influence of functional groups on toxicity of carbon nanomaterials. Atmospheric Chemistry and Physics, 2019, 19, 8175-8187.	1.9	32
157	Method to measure the size-resolved real part of aerosol refractive index using differential mobility analyzer in tandem with single-particle soot photometer. Atmospheric Measurement Techniques, 2019, 12, 3541-3550.	1.2	14
158	Influences of Primary Emission and Secondary Coating Formation on the Particle Diversity and Mixing State of Black Carbon Particles. Environmental Science & Technology, 2019, 53, 9429-9438.	4.6	15
159	Optically effective complex refractive index of coated black carbon aerosols: from numerical aspects. Atmospheric Chemistry and Physics, 2019, 19, 7507-7518.	1.9	11
160	New Particle Formation in the Atmosphere: From Molecular Clusters to Global Climate. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7098-7146.	1.2	185

#	Article	IF	Citations
161	Carbonaceous aerosol characteristics on the Third Pole: A primary study based on the Atmospheric Pollution and Cryospheric Change (APCC) network. Environmental Pollution, 2019, 253, 49-60.	3.7	64
162	East Asian Study of Tropospheric Aerosols and their Impact on Regional Clouds, Precipitation, and Climate (EASTâ€AIR _{CPC}). Journal of Geophysical Research D: Atmospheres, 2019, 124, 13026-13054.	1.2	175
164	A study of the morphology and effective density of externally mixed black carbon aerosols in ambient air using a size-resolved single-particle soot photometer (SP2). Atmospheric Measurement Techniques, 2019, 12, 4347-4359.	1.2	20
165	A new parameterization scheme for the real part of the ambient urban aerosol refractive index. Atmospheric Chemistry and Physics, 2019, 19, 12875-12885.	1.9	19
166	Modeling the aging process of black carbon during atmospheric transport using a new approach: a case study in Beijing. Atmospheric Chemistry and Physics, 2019, 19, 9663-9680.	1.9	17
167	Role of black carbon mass size distribution in the direct aerosol radiative forcing. Atmospheric Chemistry and Physics, 2019, 19, 13175-13188.	1.9	25
168	Light Absorption by Ambient Black and Brown Carbon and its Dependence on Black Carbon Coating State for Two California, USA, Cities in Winter and Summer. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1550-1577.	1.2	99
172	Chemical and optical properties of carbonaceous aerosols in Nanjing, eastern China: regionally transported biomass burning contribution. Atmospheric Chemistry and Physics, 2019, 19, 11213-11233.	1.9	46
173	Wintertime Optical Properties of Primary and Secondary Brown Carbon at a Regional Site in the North China Plain. Environmental Science & Technology, 2019, 53, 12389-12397.	4.6	55
174	Characterization of black carbon-containing fine particles in Beijing during wintertime. Atmospheric Chemistry and Physics, 2019, 19, 447-458.	1.9	84
175	Vertical characterization of aerosol optical properties and brown carbon in winter in urban Beijing, China. Atmospheric Chemistry and Physics, 2019, 19, 165-179.	1.9	73
176	Optical Properties of Black Carbon Aggregates. Springer Series in Light Scattering, 2019, , 167-218.	1.8	4
177	Wet deposition of black carbon: A synthesis. Atmospheric Environment, 2019, 213, 558-567.	1.9	15
178	Are Changes in Atmospheric Circulation Important for Black Carbon Aerosol Impacts on Clouds, Precipitation, and Radiation?. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7930-7950.	1.2	29
179	Mixing State and Fractal Dimension of Soot Particles at a Remote Site in the Southeastern Tibetan Plateau. Environmental Science & Technology, 2019, 53, 8227-8234.	4.6	43
180	New Estimates of Aerosol Direct Radiative Effects and Forcing From Aâ€Train Satellite Observations. Geophysical Research Letters, 2019, 46, 8338-8346.	1.5	23
181	Light absorption enhancement of black carbon in urban Beijing in summer. Atmospheric Environment, 2019, 213, 499-504.	1.9	49
183	Mass absorption cross-section of flare-generated black carbon: Variability, predictive model, and implications. Carbon, 2019, 149, 760-771.	5.4	21

#	Article	IF	CITATIONS
184	Observation-based estimates of the mass absorption cross-section of black and brown carbon and their contribution to aerosol light absorption in East Asia. Atmospheric Environment, 2019, 212, 65-74.	1.9	46
185	Severe haze in northern China: A synergy of anthropogenic emissions and atmospheric processes. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8657-8666.	3.3	609
186	Optical Properties of Laboratory and Ambient Biomass Burning Aerosols: Elucidating Black, Brown, and Organic Carbon Components and Mixing Regimes. Journal of Geophysical Research D: Atmospheres, 2019, 124, 5088-5105.	1.2	21
187	A Review of the Representation of Aerosol Mixing State in Atmospheric Models. Atmosphere, 2019, 10, 168.	1.0	29
188	Source attribution of black carbon affecting regional air quality, premature mortality and glacial deposition in 2000. Atmospheric Environment, 2019, 206, 144-155.	1.9	5
189	Microscopic comparison of aerosol particles collected at an urban site in North China and a coastal site in Japan. Science of the Total Environment, 2019, 669, 948-954.	3.9	13
190	Modelling black carbon absorption of solar radiation: combining external and internal mixing assumptions. Atmospheric Chemistry and Physics, 2019, 19, 181-204.	1.9	24
191	Measurement of aerosol optical properties and their potential source origin in urban Beijing from 2013-2017. Atmospheric Environment, 2019, 206, 293-302.	1.9	21
192	Optical Properties and Radiative Forcing of Aged BC due to Hygroscopic Growth: Effects of the Aggregate Structure. Journal of Geophysical Research D: Atmospheres, 2019, 124, 4620-4633.	1.2	27
193	Intra-regional transport of black carbon between the south edge of the North China Plain and central China during winter haze episodes. Atmospheric Chemistry and Physics, 2019, 19, 4499-4516.	1.9	58
194	Performance of a new coaxial ion–molecule reaction region for low-pressure chemical ionization mass spectrometry with reduced instrument wall interactions. Atmospheric Measurement Techniques, 2019, 12, 5829-5844.	1.2	20
196	Optical Modeling of Black Carbon With Different Coating Materials: The Effect of Coating Configurations. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13230-13253.	1.2	25
197	Review of Chinese atmospheric science research over the past 70 years: Atmospheric physics and atmospheric environment. Science China Earth Sciences, 2019, 62, 1903-1945.	2.3	18
198	Wintertime aerosol properties in Beijing. Atmospheric Chemistry and Physics, 2019, 19, 14329-14338.	1.9	23
199	Effective densities of soot particles and their relationships with the mixing state at an urban site in the Beijing megacity in the winter of 2018. Atmospheric Chemistry and Physics, 2019, 19, 14791-14804.	1.9	13
200	Characteristics of carbonaceous aerosols analyzed using a multiwavelength thermal/optical carbon analyzer: A case study in Lanzhou City. Science China Earth Sciences, 2019, 62, 389-402.	2.3	13
201	Study on pollution behavior and sulfate formation during the typical haze event in Nanjing with water soluble inorganic ions and sulfur isotopes. Atmospheric Research, 2019, 217, 198-207.	1.8	29
202	Comparing black and brown carbon absorption from AERONET and surface measurements at wintertime Fresno. Atmospheric Environment, 2019, 199, 164-176.	1.9	20

#	Article	IF	CITATIONS
203	Springer Series in Light Scattering. Springer Series in Light Scattering, 2019, , .	1.8	3
204	Formation and Optical Properties of Brown Carbon from Small α-Dicarbonyls and Amines. Environmental Science & Technology, 2019, 53, 117-126.	4.6	62
205	Black carbon in Xiamen, China: Temporal variations, transport pathways and impacts of synoptic circulation. Chemosphere, 2020, 241, 125133.	4.2	20
206	Integration of field observation and air quality modeling to characterize Beijing aerosol in different seasons. Chemosphere, 2020, 242, 125195.	4.2	10
207	Seasonality of carbonaceous aerosol composition and light absorption properties in Karachi, Pakistan. Journal of Environmental Sciences, 2020, 90, 286-296.	3.2	20
208	Reply to Comment by Peng and Bi on "Retrieval of Atmospheric Fine Particulate Density Based on Merging Particle Size Distribution Measurements: Multiâ€instrument Observation and Quality Control at Shouxianâ€i Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032303.	1.2	0
209	Enhanced Lightâ€Absorption of Black Carbon in Rainwater Compared With Aerosols Over the Northern Indian Ocean. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031246.	1.2	8
210	Enhanced aqueous-phase formation of secondary organic aerosols due to the regional biomass burning over North China Plain. Environmental Pollution, 2020, 256, 113401.	3.7	30
211	Mixing state and light absorption enhancement of black carbon aerosols in summertime Nanjing, China. Atmospheric Environment, 2020, 222, 117141.	1.9	29
212	Characterization of optically effective complex refractive index of black carbon composite aerosols. Journal of Atmospheric and Solar-Terrestrial Physics, 2020, 198, 105180.	0.6	7
213	Impact of secondary and primary particulate matter (PM) sources on the enhanced light absorption by brown carbon (BrC) particles in central Los Angeles. Science of the Total Environment, 2020, 705, 135902.	3.9	45
214	Laboratory study of bioaerosols: Traditional test systems, modern approaches, and environmental control. Aerosol Science and Technology, 2020, 54, 585-600.	1.5	16
215	Future warming exacerbated by aged-soot effect on cloud formation. Nature Geoscience, 2020, 13, 674-680.	5.4	44
216	Vehicular non-exhaust particulate emissions in Chinese megacities: Source profiles, real-world emission factors, and inventories. Environmental Pollution, 2020, 266, 115268.	3.7	57
217	Lifecycle of light-absorbing carbonaceous aerosols in the atmosphere. Npj Climate and Atmospheric Science, 2020, 3, .	2.6	77
218	A review of black carbon in snow and ice and its impact on the cryosphere. Earth-Science Reviews, 2020, 210, 103346.	4.0	139
219	Effects of Regional Transport on Haze in the North China Plain: Transport of Precursors or Secondary Inorganic Aerosols. Geophysical Research Letters, 2020, 47, e2020GL087461.	1.5	26
220	Global Radiative Impacts of Black Carbon Acting as Ice Nucleating Particles. Geophysical Research Letters, 2020, 47, e2020GL089056.	1.5	18

#	Article	IF	CITATIONS
221	Size-resolved mixing state and optical properties of black carbon at an urban site in Beijing. Science of the Total Environment, 2020, 749, 141523.	3.9	15
222	Changes in light absorption by brown carbon in soot particles due to heterogeneous ozone aging in a smog chamber. Environmental Pollution, 2020, 266, 115273.	3.7	8
223	Long-Term Variation of Black Carbon Aerosol in China Based on Revised Aethalometer Monitoring Data. Atmosphere, 2020, 11, 684.	1.0	23
224	Biomass-burning-derived particles from a wide variety of fuels – Part 2: Effects of photochemical aging on particle optical and chemical properties. Atmospheric Chemistry and Physics, 2020, 20, 8511-8532.	1.9	41
225	Black Carbon Absorption Efficiency Under Preindustrial and Presentâ€Day Conditions Simulated by a Size†and Mixingâ€Stateâ€Resolved Global Aerosol Model. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032316.	1.2	8
226	Recent Progress in Impacts of Mixing State on Optical Properties of Black Carbon Aerosol. Current Pollution Reports, 2020, 6, 380-398.	3.1	9
227	Can nitrous acid contribute to atmospheric new particle formation from nitric acid and water?. New Journal of Chemistry, 2020, 44, 15625-15635.	1.4	6
228	The role of biomass burning states in light absorption enhancement of carbonaceous aerosols. Scientific Reports, 2020, 10, 12829.	1.6	4
229	Long-Term Variation of Black Carbon Absorption Aerosol Optical Depth from AERONET Data over East Asia. Remote Sensing, 2020, 12, 3551.	1.8	6
230	Technical note: Mismeasurement of the core-shell structure of black carbon-containing ambient aerosols by SP2 measurements. Atmospheric Environment, 2020, 243, 117885.	1.9	7
231	Study on the characteristics of black carbon during atmospheric pollution conditions in Beijing. Science of the Total Environment, 2020, 733, 139112.	3.9	4
232	Characteristics and Sources of Black Carbon Aerosol in a Mega-City in the Western Yangtze River Delta, China. Atmosphere, 2020, 11, 315.	1.0	2
233	Identifying airborne transmission as the dominant route for the spread of COVID-19. Proceedings of the United States of America, 2020, 117, 14857-14863.	3.3	956
234	Mixing characteristics of refractory black carbon aerosols at an urban site in Beijing. Atmospheric Chemistry and Physics, 2020, 20, 5771-5785.	1.9	37
235	Relative role of black carbon and sea-salt aerosols as cloud condensation nuclei over a high altitude urban atmosphere in eastern Himalaya. Science of the Total Environment, 2020, 742, 140468.	3.9	19
236	Particle Size and Mixing State of Freshly Emitted Black Carbon from Different Combustion Sources in China. Environmental Science & Technology, 2020, 54, 7766-7774.	4.6	19
237	Effects of SO ₂ on optical properties of secondary organic aerosol generated from photooxidation of toluene under different relative humidity conditions. Atmospheric Chemistry and Physics, 2020, 20, 4477-4492.	1.9	18
238	Characterising mass-resolved mixing state of black carbon in Beijing using a morphology-independent measurement method. Atmospheric Chemistry and Physics, 2020, 20, 3645-3661.	1.9	26

#	Article	IF	CITATIONS
239	The characteristics of atmospheric brown carbon in Xi'an, inland China: sources, size distributions and optical properties. Atmospheric Chemistry and Physics, 2020, 20, 2017-2030.	1.9	47
240	Black carbon and mineral dust on two glaciers on the central Tibetan Plateau: sources and implications. Journal of Glaciology, 2020, 66, 248-258.	1.1	13
241	Contrasting trends of PM2.5 and surface-ozone concentrations in China from 2013 to 2017. National Science Review, 2020, 7, 1331-1339.	4.6	284
242	Modelling the Optical Properties of Soot Particles under Various Aging Conditions. Atmosphere, 2020, 11, 86.	1.0	2
244	Contrasting size-resolved hygroscopicity of fine particles derived by HTDMA and HR-ToF-AMS measurements between summer and winter in Beijing: the impacts of aerosol aging and local emissions. Atmospheric Chemistry and Physics, 2020, 20, 915-929.	1.9	33
245	Effects of black carbon and mineral dust on glacial melting on the Muz Taw glacier, Central Asia. Science of the Total Environment, 2020, 740, 140056.	3.9	37
246	Contrasting mixing state of black carbon-containing particles in summer and winter in Beijing. Environmental Pollution, 2020, 263, 114455.	3.7	21
247	Photochemical aging of Beijing urban PM2.5: Production of oxygenated volatile organic compounds. Science of the Total Environment, 2020, 743, 140751.	3.9	7
248	Remarkable nucleation and growth of ultrafine particles from vehicular exhaust. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3427-3432.	3.3	122
249	Effect of organic coatings derived from the OH-initiated oxidation of amines on soot morphology and cloud activation. Atmospheric Research, 2020, 239, 104905.	1.8	8
250	An unexpected catalyst dominates formation and radiative forcing of regional haze. Proceedings of the United States of America, 2020, 117, 3960-3966.	3.3	132
251	Biomass-burning-derived particles from a wide variety of fuels – Part 1: Properties of primary particles. Atmospheric Chemistry and Physics, 2020, 20, 1531-1547.	1.9	62
252	Significant restructuring and light absorption enhancement of black carbon particles by ammonium nitrate coating. Environmental Pollution, 2020, 262, 114172.	3.7	18
253	Severe air pollution and characteristics of light-absorbing particles in a typical rural area of the Indo-Gangetic Plain. Environmental Science and Pollution Research, 2020, 27, 10617-10628.	2.7	15
254	Optical and microphysical properties of the columnar Aerosol burden over the Eastern Mediterranean: Discrimination of Aerosol types. Atmospheric Environment, 2020, 229, 117463.	1.9	10
255	Review of aircraft measurements over China: aerosol, atmospheric photochemistry, and cloud. Atmospheric Research, 2020, 243, 104972.	1.8	8
256	The large proportion of black carbon (BC)-containing aerosols in the urban atmosphere. Environmental Pollution, 2020, 263, 114507.	3.7	19
257	Radiative absorption enhancements by black carbon controlled by particle-to-particle heterogeneity in composition. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 5196-5203.	3.3	84

#	Article	IF	CITATIONS
258	Seasonal contrast in size distributions and mixing state of black carbon and its association with PM _{1.0} chemical composition from the eastern coast of India. Atmospheric Chemistry and Physics, 2020, 20, 3965-3985.	1.9	36
259	Amplification of black carbon light absorption induced by atmospheric aging: temporal variation at seasonal and diel scales in urban Guangzhou. Atmospheric Chemistry and Physics, 2020, 20, 2445-2470.	1.9	38
260	Aerosol–photolysis interaction reduces particulate matter during wintertime haze events. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9755-9761.	3.3	57
261	Light scattering matrix for soot aerosol: Comparisons between experimental measurements and numerical simulations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 246, 106946.	1.1	10
262	Secondary aerosol formation in winter haze over the Beijing-Tianjin-Hebei Region, China. Frontiers of Environmental Science and Engineering, 2021, 15, 1.	3.3	55
263	Simulated aging processes of black carbon and its impact during a severe winter haze event in the Beijing-Tianjin-Hebei region. Science of the Total Environment, 2021, 755, 142712.	3.9	11
264	Light absorption enhancement of particulate matters and their source apportionment over the Asian continental outflow site and South Yellow Sea. Environmental Science and Pollution Research, 2021, 28, 8022-8035.	2.7	6
265	The single scattering albedo Angstrom exponent of black carbon with brown coatings. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 259, 107429.	1.1	5
266	Elucidating the importance of semi-volatile organic compounds to secondary organic aerosol formation at a regional site during the EXPLORE-YRD campaign. Atmospheric Environment, 2021, 246, 118043.	1.9	17
267	Effects of primary particle size on light absorption enhancement of black carbon aerosols using the superposition T-matrix method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 258, 107388.	1.1	5
268	Filter-based absorption enhancement measurement for internally mixed black carbon particles over southern China. Science of the Total Environment, 2021, 762, 144194.	3.9	8
269	Effect of source variation on the size and mixing state of black carbon aerosol in urban Beijing from 2013 to 2019: Implication on light absorption. Environmental Pollution, 2021, 270, 116089.	3.7	17
270	Variations in physicochemical properties of airborne particles during a heavy haze-to-dust episode in Beijing. Science of the Total Environment, 2021, 762, 143081.	3.9	12
271	Spectral absorption properties of organic carbon aerosol during a polluted winter in Beijing, China. Science of the Total Environment, 2021, 755, 142600.	3.9	13
272	The impact of organic carbon on soot light absorption. Carbon, 2021, 172, 742-749.	5.4	35
273	Single particle diversity and mixing state of carbonaceous aerosols in Guangzhou, China. Science of the Total Environment, 2021, 754, 142182.	3.9	14
274	Lensing Effect of Black Carbon With Brown Coatings: Dominant Microphysics and Parameterization. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033549.	1.2	2
275	Absorbing aerosols over Asia – an inter-model and model-observation comparison study using CAM5.3-Oslo. Tellus, Series B: Chemical and Physical Meteorology, 2021, 73, 1-25.	0.8	0

#	ARTICLE	IF	CITATIONS
276	Aging of atmospheric aerosols and the role of iron in catalyzing brown carbon formation. Environmental Science Atmospheres, 2021, 1, 297-345.	0.9	16
277	Introductory lecture: air quality in megacities. Faraday Discussions, 2021, 226, 9-52.	1.6	34
278	Investigation of Aeolian Dust Deposition Rates in Different Climate Zones of Southwestern Iran. Atmosphere, 2021, 12, 229.	1.0	10
279	Significant Influence of Carbonates on Determining Organic Carbon and Black Carbon: A Case Study in Tajikistan, Central Asia. Environmental Science & Technology, 2021, 55, 2839-2846.	4.6	9
280	Determination of equivalent black carbon mass concentration from aerosol light absorption using variable mass absorption cross section. Atmospheric Measurement Techniques, 2021, 14, 1319-1331.	1.2	6
281	Explosive Secondary Aerosol Formation during Severe Haze in the North China Plain. Environmental Science & Technology, 2021, 55, 2189-2207.	4.6	96
282	Wintertime aerosol optical properties in Lanzhou, Northwest China: Emphasis on the rapid increase of aerosol absorption under high particulate pollution. Atmospheric Environment, 2021, 246, 118081.	1.9	20
283	Measurement report: Distinct emissions and volatility distribution of intermediate-volatility organic compounds from on-road Chinese gasoline vehicles: implication of high secondary organic aerosol formation potential. Atmospheric Chemistry and Physics, 2021, 21, 2569-2583.	1.9	45
284	Bias in quantification of light absorption enhancement of black carbon aerosol coated with low-volatility brown carbon. Aerosol Science and Technology, 2021, 55, 539-551.	1.5	7
285	Effects of biomass burning and photochemical oxidation on the black carbon mixing state and light absorption in summer season. Atmospheric Environment, 2021, 248, 118230.	1.9	12
286	Quantification and implication of measurement bias of ambient atmospheric BC concentration. Atmospheric Environment, 2021, 249, 118244.	1.9	2
287	Characteristics of BrC and BC emissions from controlled diffusion flame and diesel engine combustion. Aerosol Science and Technology, 2021, 55, 769-784.	1.5	7
288	Technical note: Measurement of chemically resolved volume equivalent diameter and effective density of particles by AAC-SPAMS. Atmospheric Chemistry and Physics, 2021, 21, 5605-5613.	1.9	7
289	Measurement report: Comparison of wintertime individual particles at ground level and above the mixed layer in urban Beijing. Atmospheric Chemistry and Physics, 2021, 21, 5301-5314.	1.9	8
290	Elemental analysis of oxygenated organic coating on black carbon particles using a soot-particle aerosol mass spectrometer. Atmospheric Measurement Techniques, 2021, 14, 2799-2812.	1.2	5
291	Evolution of Aerosol Optical Properties from Wood Smoke in Real Atmosphere Influenced by Burning Phase and Solar Radiation. Environmental Science & Technology, 2021, 55, 5677-5688.	4.6	22
292	A Systematic Approach to Comprehend the Role of Atmospheric Black Carbon in Different Environmental Segments. Aerosol Science and Engineering, 2021, 5, 253-274.	1.1	2
293	Role of Lightning NOx in Ozone Formation: A Review. Pure and Applied Geophysics, 2021, 178, 1425-1443.	0.8	7

#	Article	IF	CITATIONS
294	Captive Aerosol Growth and Evolution (CAGE) chamber system to investigate particle growth due to secondary aerosol formation. Atmospheric Measurement Techniques, 2021, 14, 3351-3370.	1.2	1
295	Enhancement of snow albedo reduction and radiative forcing due to coated black carbon in snow. Cryosphere, 2021, 15, 2255-2272.	1.5	9
296	Constructing Shapes and Mixing Structures of Black Carbon Particles With Applications to Optical Calculations. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034620.	1.2	22
297	Comparing the Radiative Forcings of the Anthropogenic Aerosol Emissions From Chile and Mexico. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033364.	1.2	3
298	Light-absorption enhancement of black carbon in the Asian outflow inferred from airborne SP2 and in-situ measurements during KORUS-AQ. Science of the Total Environment, 2021, 773, 145531.	3.9	9
299	Multigeneration Production of Secondary Organic Aerosol from Toluene Photooxidation. Environmental Science & Technology, 2021, 55, 8592-8603.	4.6	29
300	Mixing state of refractory black carbon aerosol in the South Asian outflow over the northern Indian Ocean during winter. Atmospheric Chemistry and Physics, 2021, 21, 9173-9199.	1.9	16
301	Measurement report: Strong light absorption induced by aged biomass burning black carbon over the southeastern Tibetan Plateau in pre-monsoon season. Atmospheric Chemistry and Physics, 2021, 21, 8499-8510.	1.9	9
302	A review of measurement techniques for aerosol effective density. Science of the Total Environment, 2021, 778, 146248.	3.9	15
303	Reduced light absorption of black carbon (BC) and its influence on BC-boundary-layer interactions during "APEC Blueâ€. Atmospheric Chemistry and Physics, 2021, 21, 11405-11421.	1.9	10
304	Impact of deliquescence of aerosol on mass absorption efficiency of elemental carbon in fine particles in urban Guangzhou in south China. Atmospheric Environment, 2021, 256, 118476.	1.9	7
305	Comprehensive evaluations of diurnal NO ₂ measurements during DISCOVER-AQ 2011: effects of resolution-dependent representation of NO _{<i>x</i>} emissions. Atmospheric Chemistry and Physics. 2021. 21. 11133-11160.	1.9	7
306	Long-term variations of aerosol optical properties over Wuhan with polarization lidar. Atmospheric Environment, 2021, 259, 118508.	1.9	15
307	Inferring Polluted Asian Absorbing Aerosol Properties Using Decadal Scale AERONET Measurements and a MIE Model. Geophysical Research Letters, 2021, 48, e2021GL094300.	1.5	9
308	A method to dynamically constrain black carbon aerosol sources with online monitored potassium. Npj Climate and Atmospheric Science, 2021, 4, .	2.6	6
309	Black Carbon Involved Photochemistry Enhances the Formation of Sulfate in the Ambient Atmosphere: Evidence From In Situ Individual Particle Investigation. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035226.	1.2	15
310	Sensitivity of Carbonaceous Aerosol Properties to the Implementation of a Dynamic Aging Parameterization in the Regional Climate Model RegCM. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033613.	1.2	1
311	Black Carbon over Wuhan, China: Seasonal Variations in Its Optical Properties, Radiative Forcing and Contribution to Atmospheric Aerosols. Remote Sensing, 2021, 13, 3620.	1.8	4

#	Article	IF	CITATIONS
312	Mixing characteristics of black carbon aerosols in a coastal city using the CPMA-SP2 system. Atmospheric Research, 2022, 265, 105867.	1.8	4
313	"SARS-CoV-2 is transmitted by particulate air pollutionâ€: Misinterpretations of statistical data, skewed citation practices, and misuse of specific terminology spreading the misconception. Environmental Research, 2022, 204, 112116.	3.7	20
314	Effects of aerosols on the atmospheric boundary layer temperature inversion over the Sichuan Basin, China. Atmospheric Environment, 2021, 262, 118647.	1.9	17
315	Comparative analysis of non-exhaust airborne particles from electric and internal combustion engine vehicles. Journal of Hazardous Materials, 2021, 420, 126626.	6.5	31
316	Increasing atmospheric oxidizing capacity weakens emission mitigation effort in Beijing during autumn haze events. Chemosphere, 2021, 281, 130855.	4.2	16
317	Fabrication of WO3/Bi2MoO6 heterostructures with efficient and highly selective photocatalytic degradation of tetracycline hydrochloride. Journal of Colloid and Interface Science, 2021, 602, 544-552.	5.0	44
318	The state of science on severe air pollution episodes: Quantitative and qualitative analysis. Environment International, 2021, 156, 106732.	4.8	26
319	Sizeâ [~] 'resolved source apportionment of particulate matter from a megacity in northern China based on one-year measurement of inorganic and organic components. Environmental Pollution, 2021, 289, 117932.	3.7	10
320	Enhanced mixing state of black carbon with nitrate in single particles during haze periods in Zhengzhou, China. Journal of Environmental Sciences, 2022, 111, 185-196.	3.2	4
322	Measurements of aerosol optical properties using spectroscopic techniques. , 2021, , 345-412.		0
323	Variability in the mass absorption cross section of black carbon (BC) aerosols is driven by BC internal mixing state at a central European background site (Melpitz, Germany) in winter. Atmospheric Chemistry and Physics, 2021, 21, 635-655.	1.9	20
324	Light absorption of black carbon aerosols strongly influenced by particle morphology distribution. Environmental Research Letters, 2020, 15, 094051.	2.2	11
325	Does optically effective complex refractive index of internal-mixed aerosols have a physically-based meaning?. Optics Express, 2019, 27, A1216.	1.7	6
326	Black Carbon Aerosol in the Industrial City of Xuzhou, China: Temporal Characteristics and Source Appointment. Aerosol and Air Quality Research, 2019, 19, 794-811.	0.9	16
327	Absorption closure in highly aged biomass burning smoke. Atmospheric Chemistry and Physics, 2020, 20, 11201-11221.	1.9	29
328	Impact of biomass burning aerosols on radiation, clouds, and precipitation over the Amazon: relative importance of aerosol–cloud and aerosol–radiation interactions. Atmospheric Chemistry and Physics, 2020, 20, 13283-13301.	1.9	59
329	Source apportionment of black carbon aerosols from light absorption observation and source-oriented modeling: an implication in a coastal city in China. Atmospheric Chemistry and Physics, 2020, 20, 14419-14435.	1.9	24
330	Research and Policy Directions against Ambient Fine Particles. Journal of Korean Society for Atmospheric Environment, 2017, 33, 191-204.	0.2	17

#	Article	IF	CITATIONS
331	Sensitivity of Mixing States on Absorption of Black Carbon Aerosols with Diverse Monomer Sizes. , 2021, , .		0
332	Light absorption enhancement due to mixing in black carbon and organic carbon generated during biomass burning. Atmospheric Pollution Research, 2021, 12, 101236.	1.8	5
333	Assessment of Aliphatic Based Soot Inception in Laminar Diffusion Flames. , 2018, , .		0
334	Significance of Absorbing Fraction of Coating on Absorption Enhancement of Partially Coated Black Carbon Aerosols. Atmosphere, 2021, 12, 1422.	1.0	2
335	Evolution in physicochemical properties of fine particles emitted from residential coal combustion based on chamber experiment. Gondwana Research, 2022, 110, 252-263.	3.0	9
337	Aqueous aging of secondary organic aerosol coating onto black carbon: Insights from simultaneous L-ToF-AMS and SP-AMS measurements at an urban site in southern China. Journal of Cleaner Production, 2022, 330, 129888.	4.6	8
338	Hourly emission estimation of black carbon and brown carbon absorption from domestic coal burning in China. Science of the Total Environment, 2022, 814, 151950.	3.9	6
339	Exhaust and non-exhaust emissions from conventional and electric vehicles: A comparison of monetary impact values. Journal of Cleaner Production, 2022, 331, 129965.	4.6	33
340	Modeling and experimental validation of dust impact on solar cell performance. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-17.	1.2	9
341	A comparative study on effective density, shape factor, and volatile mixing of non-spherical particles using tandem aerodynamic diameter, mobility diameter, and mass measurements. Journal of Aerosol Science, 2022, 161, 105930.	1.8	13
342	Investigation of sources and formation mechanisms of fine particles and organic aerosols in cold season in Fenhe Plain, China. Atmospheric Research, 2022, 268, 106018.	1.8	8
343	Intercomparison of equivalent black carbon (eBC) and elemental carbon (EC) concentrations with three-year continuous measurement in Beijing, China. Environmental Research, 2022, 209, 112791.	3.7	15
344	Role of essential climate variables and black carbon in climate change: Possible mitigation strategies. , 2022, , 31-53.		0
345	Alternative Approach for the <i>In Situ</i> Measurement of Absorption Enhancement of Atmospheric Black Carbon Due to Atmospheric Mixing. ACS Earth and Space Chemistry, 2022, 6, 261-267.	1.2	6
346	Absorption Enhancement of Black Carbon Aerosols Constrained by Mixing-State Heterogeneity. Environmental Science & Technology, 2022, 56, 1586-1593.	4.6	18
347	Smog chamber simulation on heterogeneous reaction of O3 and NO2 on black carbon under various relative humidity conditions. Science of the Total Environment, 2022, 823, 153649.	3.9	1
348	Nonlinear Enhancement of Radiative Absorption by Black Carbon in Response to Particle Mixing Structure. Geophysical Research Letters, 2021, 48, .	1.5	30
349	Evolution under dark conditions of particles from old and modern diesel vehicles in a new environmental chamber characterized with fresh exhaust emissions. Atmospheric Measurement Techniques, 2021, 14, 7627-7655.	1.2	3

#	Article	IF	CITATIONS
350	Visible Light Driven S-Scheme Heterojunction Zn3in2s6/Bi2moo6ÂFor Efficient Degradation of Metronidazole. SSRN Electronic Journal, 0, , .	0.4	0
351	Characteristics and Source Apportionment of Black Carbon in the North China Plain. SSRN Electronic Journal, 0, , .	0.4	0
352	Bimodal distribution of size-resolved particle effective density: results from a short campaign in a rural environment over the North China Plain. Atmospheric Chemistry and Physics, 2022, 22, 2029-2047.	1.9	7
353	Quantifying the Fractal Dimension and Morphology of Individual Atmospheric Soot Aggregates. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	14
354	Identifying the Fraction of Core–Shell Black Carbon Particles in a Complex Mixture to Constrain the Absorption Enhancement by Coatings. Environmental Science and Technology Letters, 2022, 9, 272-279.	3.9	9
355	Aerodynamic size-resolved composition and cloud condensation nuclei properties of aerosols in a Beijing suburban region. Atmospheric Chemistry and Physics, 2022, 22, 4375-4391.	1.9	9
356	The effect of black carbon aging from NO2 oxidation of SO2 on its morphology, optical and hygroscopic properties. Environmental Research, 2022, 212, 113238.	3.7	7
357	Method to quantify black carbon aerosol light absorption enhancement with a mixing state index. Atmospheric Chemistry and Physics, 2021, 21, 18055-18063.	1.9	12
358	Formation, radiative forcing, and climatic effects of severe regional haze. Atmospheric Chemistry and Physics, 2022, 22, 4951-4967.	1.9	5
359	A novel method of identifying and analysing oil smoke plumes based on MODIS and CALIPSO satellite data. Atmospheric Chemistry and Physics, 2022, 22, 5071-5098.	1.9	1
360	Seasonal variations of mass absorption efficiency of elemental carbon in PM2.5 in urban Guangzhou of South China. Journal of Environmental Sciences, 2023, 133, 83-92.	3.2	1
361	Characteristics of PM2.5 emitted from the combustion of vehicular fuel and solid biomass: Thermally fractionated carbon, δ13C values, and filter-based light absorption. Atmospheric Pollution Research, 2022, 13, 101443.	1.8	4
362	Characteristics and source apportionment of black carbon aerosol in the North China Plain. Atmospheric Research, 2022, 276, 106246.	1.8	5
363	Importance of Semivolatile/Intermediate-Volatility Organic Compounds to Secondary Organic Aerosol Formation from Chinese Domestic Cooking Emissions. Environmental Science and Technology Letters, 2022, 9, 507-512.	3.9	17
364	Liquid-liquid phase separation reduces radiative absorption by aged black carbon aerosols. Communications Earth & Environment, 2022, 3, .	2.6	16
365	Enhanced Light Absorption and Radiative Forcing by Black Carbon Agglomerates. Environmental Science & Technology, 2022, 56, 8610-8618.	4.6	21
366	An overview on atmospheric carbonaceous particulate matter into carbon nanomaterials: A new approach for air pollution mitigation. Chemosphere, 2022, 303, 135027.	4.2	10
367	Evolution of light absorption properties during photochemical aging of straw open burning aerosols. Science of the Total Environment, 2022, 838, 156431.	3.9	4

#	Article	IF	CITATIONS
368	Chemical properties, sources and size-resolved hygroscopicity of submicron black-carbon-containing aerosols in urban Shanghai. Atmospheric Chemistry and Physics, 2022, 22, 8073-8096.	1.9	7
369	Impact of atmospheric thermodynamic structures and aerosol radiation feedback on winter regional persistent heavy particulate pollution in the Sichuan-Chongqing region, China. Science of the Total Environment, 2022, 842, 156575.	3.9	9
370	Emission Reduction of Traffic-Related Light-Absorbing Aerosols in a Megacity in China: A Case Study Via Tunnel Measurements. SSRN Electronic Journal, 0, , .	0.4	0
371	Seasonal variations in fire conditions are important drivers in the trend of aerosol optical properties over the south-eastern Atlantic. Atmospheric Chemistry and Physics, 2022, 22, 8767-8785.	1.9	6
372	Light absorption by brown carbon over the South-East Atlantic Ocean. Atmospheric Chemistry and Physics, 2022, 22, 9199-9213.	1.9	4
373	Characteristics of PM2.5 and PM10 Spatio-Temporal Distribution and Influencing Meteorological Conditions in Beijing. Atmosphere, 2022, 13, 1120.	1.0	7
374	Absorption enhancement of black carbon particles in a Mediterranean city and countryside: effect of particulate matter chemistry, ageing and trend analysis. Atmospheric Chemistry and Physics, 2022, 22, 8439-8456.	1.9	10
375	Highly oxygenated organic molecules with high unsaturation formed upon photochemical aging of soot. CheM, 2022, 8, 2688-2699.	5.8	10
376	Wildfire Smoke Demonstrates Significant and Predictable Black Carbon Light Absorption Enhancements. Geophysical Research Letters, 2022, 49, .	1.5	5
377	Secondary inorganic aerosol dominated the light absorption enhancement of black carbon aerosol in Wuhan, Central China. Atmospheric Environment, 2022, 287, 119288.	1.9	9
378	Microscopic observation of a liquid-liquid-(semi)solid phase in polluted PM2.5. Frontiers in Environmental Science, 0, 10, .	1.5	3
379	A perspective on iron (Fe) in the atmosphere: air quality, climate, and the ocean. Environmental Sciences: Processes and Impacts, 2023, 25, 151-164.	1.7	3
380	Changes in the Fluorescence of Biological Particles Exposed to Environmental Conditions in the National Capitol Region. Atmosphere, 2022, 13, 1358.	1.0	2
381	Measurement report: Large contribution of biomass burning and aqueous-phase processes to the wintertime secondary organic aerosol formation in Xi'an, Northwest China. Atmospheric Chemistry and Physics, 2022, 22, 10139-10153.	1.9	10
382	Mixing state of black carbon at different atmospheres in north and southwest China. Atmospheric Chemistry and Physics, 2022, 22, 10861-10873.	1.9	9
383	Water droplets embedded with nascent carbon particles hold higher photo-thermal efficiency than aged ones. Chemical Physics Letters, 2022, 806, 140057.	1.2	0
384	Diesel soot photooxidation enhances the heterogeneous formation of H2SO4. Nature Communications, 2022, 13, .	5.8	15
385	The impact of atmospheric motions on source-specific black carbon and the induced direct radiative effects over a river-valley region. Atmospheric Chemistry and Physics, 2022, 22, 11739-11757.	1.9	5

#	Article	IF	CITATIONS
386	Tunnel measurements reveal significant reduction in traffic-related light-absorbing aerosol emissions in China. Science of the Total Environment, 2022, , 159212.	3.9	0
387	Direct measurement of the deposition of submicron soot particles on leaves of <i>Platanus acerifolia</i> tree. Environmental Sciences: Processes and Impacts, 2022, 24, 2336-2344.	1.7	2
388	Investigation on Change in Accumulation Mode Size Distributions of Secondary Inorganic Salts with PM2.5/PM10 during Late Fall at an Urban Site in Gwangju. Journal of Korean Society for Atmospheric Environment, 2022, 38, 641-652.	0.2	0
389	An integrated analysis of air pollution from US coal-fired power plants. Geoscience Frontiers, 2023, 14, 101498.	4.3	13
390	An improved representation of aerosol mixing state for air quality–weather interactions. Atmospheric Chemistry and Physics, 2022, 22, 13527-13549.	1.9	2
391	Mechanisms of soot-aggregate restructuring and compaction. Aerosol Science and Technology, 2023, 57, 89-111.	1.5	10
392	Mass Spectrometry Imaging Strategy for In Situ Quantification of Soot in Size-Segregated Air Samples. Analytical Chemistry, 2022, 94, 15189-15197.	3.2	4
393	Impact of Cloud Process in the Mixing State and Microphysical Properties of Soot Particles: Implications in Light Absorption Enhancement. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	4
394	Different effects of anthropogenic emissions and aging processes on the mixing state of soot particles in the nucleation and accumulation modes. Atmospheric Chemistry and Physics, 2022, 22, 14133-14146.	1.9	0
395	Impacts of Cloudâ€Processing on Ice Nucleation of Soot Particles Internally Mixed With Sulfate and Organics. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	3
396	Characterizing formation mechanisms of secondary aerosols on black carbon in a megacity in South China. Science of the Total Environment, 2023, 859, 160290.	3.9	5
397	Mixing state of refractory black carbon in the residual layer over megacity. Atmospheric Environment, 2023, 295, 119558.	1.9	1
398	Aggravated chemical production of aerosols by regional transport and basin terrain in a heavy PM2.5 pollution episode over central China. Atmospheric Environment, 2023, 294, 119489.	1.9	4
399	Carbonaceous aerosol transport from the Indo-Gangetic Plain to the Himalayas: Carbon isotope evidence and light absorption characteristics. Geoscience Frontiers, 2023, 14, 101516.	4.3	4
400	Constraining the particle-scale diversity of black carbon light absorption using a unified framework. Atmospheric Chemistry and Physics, 2022, 22, 14825-14836.	1.9	7
401	Interaction between different mixing aerosol direct effects and East Asian summer monsoon. Climate Dynamics, 2023, 61, 1157-1176.	1.7	2
402	Chemical Compositions, Sources, and Intraâ€Regional Transportation of Submicron Particles Between North China Plain and Twainâ€Hu Basin of Central China in Winter. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	0
403	Direct Observation of the Transitional Stage of Mixingâ€Stateâ€Related Absorption Enhancement for Atmospheric Black Carbon. Geophysical Research Letters, 2022, 49, .	1.5	1

#	Article	IF	CITATIONS
404	Optical properties of vehicular brown carbon emissions: Road tunnel and chassis dynamometer tests. Environmental Pollution, 2023, 320, 121037.	3.7	3
405	Evaluating BC Aging Processes in the Community Atmosphere Model Version 6 (CAM6). Journal of Geophysical Research D: Atmospheres, 2023, 128, .	1.2	2
406	Insight into the Mechanism and Kinetics of the Heterogeneous Reaction between SO ₂ and NO ₂ on Diesel Black Carbon under Light Irradiation. Environmental Science & Technology, 0, , .	4.6	0
407	Size–resolved mixing state of ambient refractory black carbon aerosols in Beijing during the XXIV Olympic winter games. Atmospheric Environment, 2023, 301, 119672.	1.9	1
408	Heterogeneous characteristics and absorption enhancement of refractory black carbon in an urban city of China. Science of the Total Environment, 2023, 879, 162997.	3.9	2
409	Extremely low-volatility organic coating leads to underestimation of black carbon climate impact. One Earth, 2023, 6, 158-166.	3.6	5
410	Morphology and Fractal Dimension of Sizeâ€Resolved Soot Particles Emitted From Combustion Sources. Journal of Geophysical Research D: Atmospheres, 2023, 128, .	1.2	5
411	The density of ambient black carbon retrieved by a new method: implications for cloud condensation nuclei prediction. Atmospheric Chemistry and Physics, 2023, 23, 4327-4342.	1.9	1
412	Solubility Considerations for Cloud Condensation Nuclei (CCN) Activity Analysis of Pure and Mixed Black Carbon Species. Journal of Physical Chemistry A, 0, , .	1.1	0