

# Charles C-K Chou

## List of Publications by Year in descending order

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114  
papers

3,531  
citations

117625  
34  
h-index

168389  
53  
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120  
all docs

120  
docs citations

120  
times ranked

3846  
citing authors

#	ARTICLE	IF	CITATIONS
1	Size-Resolved Anhydrosugar Composition in Smoke Aerosol from Controlled Field Burning of Rice Straw. <i>Aerosol Science and Technology</i> , 2009, 43, 662-672.	3.1	179
2	Chemical speciation, transport and contribution of biomass burning smoke to ambient aerosol in Guangzhou, a mega city of China. <i>Atmospheric Environment</i> , 2010, 44, 3187-3195.	4.1	119
3	Characterization of carbon fractions for atmospheric fine particles and nanoparticles in a highway tunnel. <i>Atmospheric Environment</i> , 2010, 44, 2668-2673.	4.1	116
4	The trend of surface ozone in Taipei, Taiwan, and its causes: Implications for ozone control strategies. <i>Atmospheric Environment</i> , 2006, 40, 3898-3908.	4.1	113
5	Long-range transport of aerosols and their impact on the air quality of Taiwan. <i>Atmospheric Environment</i> , 2005, 39, 6066-6076.	4.1	108
6	Long-range transport of Asian dust and air pollutants to Taiwan: observed evidence and model simulation. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 423-434.	4.9	96
7	Wintertime haze deterioration in Beijing by industrial pollution deduced from trace metal fingerprints and enhanced health risk by heavy metals. <i>Environmental Pollution</i> , 2016, 208, 284-293.	7.5	95
8	Air pollution "holiday effect" resulting from the Chinese New Year. <i>Atmospheric Environment</i> , 2009, 43, 2114-2124.	4.1	89
9	Long-Range Transport of Asian Dust and Air Pollutants to Taiwan. <i>Terrestrial, Atmospheric and Oceanic Sciences</i> , 2004, 15, 759.	0.6	80
10	Characterization of aerosol chemical properties from near-source biomass burning in the northern Indochina during 7-SEAS/Dongsha experiment. <i>Atmospheric Environment</i> , 2013, 78, 72-81.	4.1	73
11	Oxidant ( $O_3 + NO_2$ ) production processes and formation regimes in Beijing. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	72
12	Subchronic effects of inhaled ambient particulate matter on glucose homeostasis and target organ damage in a type 1 diabetic rat model. <i>Toxicology and Applied Pharmacology</i> , 2014, 281, 211-220.	2.8	69
13	Source and risk apportionment of selected VOCs and PM <sub>2.5</sub> species using partially constrained receptor models with multiple time resolution data. <i>Environmental Pollution</i> , 2015, 205, 121-130.	7.5	68
14	High wintertime particulate matter pollution over an offshore island (Kinmen) off southeastern China: An overview. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	64
15	Lead isotope ratios in ambient aerosols from Taipei, Taiwan: Identifying long-range transport of airborne Pb from the Yangtze Delta. <i>Atmospheric Environment</i> , 2006, 40, 5393-5404.	4.1	62
16	Photochemical production of ozone and control strategy for Southern Taiwan. <i>Atmospheric Environment</i> , 2007, 41, 9324-9340.	4.1	62
17	Seasonal variation and spatial distribution of carbonaceous aerosols in Taiwan. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 9563-9578.	4.9	62
18	Ultrafine particles at three different sampling locations in Taiwan. <i>Atmospheric Environment</i> , 2010, 44, 533-540.	4.1	62

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19	Measurement of NO <sub>y</sub> during Campaign of Air Quality Research in Beijing 2006 (CAREBeijing2006): Implications for the ozone production efficiency of NO <sub>x</sub> . Journal of Geophysical Research, 2009, 114, .	3.3	60
20	Association of short-term exposure to fine particulate matter and nitrogen dioxide with acute cardiovascular effects. Science of the Total Environment, 2016, 569-570, 300-305.	8.0	57
21	Photochemical production of ozone in Beijing during the 2008 Olympic Games. Atmospheric Chemistry and Physics, 2011, 11, 9825-9837.	4.9	56
22	Long-range southeastward transport of Asian biosmoke pollution: Signature detected by aerosol potassium in Northern Taiwan. Journal of Geophysical Research, 2009, 114, .	3.3	55
23	Source apportionment of particulate matter and selected volatile organic compounds with multiple time resolution data. Science of the Total Environment, 2014, 472, 880-887.	8.0	51
24	Particulate matter characteristics during agricultural waste burning in Taichung City, Taiwan. Journal of Hazardous Materials, 2009, 165, 187-192.	12.4	50
25	Chemical Mass Closure and Chemical Characteristics of Ambient Ultrafine Particles and other PM Fractions. Aerosol Science and Technology, 2010, 44, 713-723.	3.1	49
26	Implications of the chemical transformation of Asian outflow aerosols for the long-range transport of inorganic nitrogen species. Atmospheric Environment, 2008, 42, 7508-7519.	4.1	48
27	Carbonaceous aerosols in the air masses transported from Indochina to Taiwan: Long-term observation at Mt. Lulin. Atmospheric Environment, 2014, 89, 507-516.	4.1	48
28	Enhanced insulin resistance in diet-induced obese rats exposed to fine particles by instillation. Inhalation Toxicology, 2011, 23, 507-519.	1.6	47
29	Characterization of ultrafine particle number concentration and new particle formation in an urban environment of Taipei, Taiwan. Atmospheric Chemistry and Physics, 2013, 13, 8935-8946.	4.9	47
30	A numerical study of an autumn high ozone episode over southwestern Taiwan. Atmospheric Environment, 2007, 41, 3684-3701.	4.1	45
31	The effect of size-segregated ambient particulate matter on Th1/Th2-like immune responses in mice. PLoS ONE, 2017, 12, e0173158.	2.5	45
32	Regional ozone pollution and key controlling factors of photochemical ozone production in Pearl River Delta during summer time. Science China Chemistry, 2010, 53, 651-663.	8.2	42
33	Satellite-Derived Correlation of SO <sub>2</sub> , NO <sub>2</sub> , and Aerosol Optical Depth with Meteorological Conditions over East Asia from 2005 to 2015. Remote Sensing, 2019, 11, 1738.	4.0	40
34	Lidar observations of the diurnal variations in the depth of urban mixing layer: A case study on the air quality deterioration in Taipei, Taiwan. Science of the Total Environment, 2007, 374, 156-166.	8.0	35
35	Temporal characteristics from continuous measurements of PM <sub>2.5</sub> and speciation at the Taipei Aerosol Supersite from 2002 to 2008. Atmospheric Environment, 2010, 44, 1088-1096.	4.1	35
36	Impact of urbanization on the air pollution "holiday effect" in Taiwan. Atmospheric Environment, 2013, 70, 361-375.	4.1	35

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37	Optical properties of Asian dusts in the free atmosphere measured by Raman lidar at Taipei, Taiwan. Atmospheric Environment, 2007, 41, 7698-7714.	4.1	34
38	The continuous field measurements of soluble aerosol compositions at the Taipei Aerosol Supersite, Taiwan. Atmospheric Environment, 2007, 41, 1936-1949.	4.1	33
39	Impact of different transport mechanisms of Asian dust and anthropogenic pollutants to Taiwan. Atmospheric Environment, 2012, 60, 403-418.	4.1	33
40	Columnar optical properties of tropospheric aerosol by combined lidar and sunphotometer measurements at Taipei, Taiwan. Atmospheric Environment, 2009, 43, 2700-2708.	4.1	32
41	A Simulation Study on PM <sub>2.5</sub> Sources and Meteorological Characteristics at the Northern Tip of Taiwan in the Early Stage of the Asian Haze Period. Aerosol and Air Quality Research, 2017, 17, 3166-3178.	2.1	32
42	The Characteristics of PM <sub>2.5</sub> and Its Chemical Compositions between Different Prevailing Wind Patterns in Guangzhou. Aerosol and Air Quality Research, 2013, 13, 1373-1383.	2.1	31
43	Influence of Long-Range Transport Dust Particles on Local Air Quality: A Case Study on Asian Dust Episodes in Taipei during the Spring of 2002. Terrestrial, Atmospheric and Oceanic Sciences, 2004, 15, 881.	0.6	29
44	Chemical Characterization of Wintertime Aerosols over Islands and Mountains in East Asia: Impacts of the Continental Asian Outflow. Aerosol and Air Quality Research, 2017, 17, 3006-3036.	2.1	29
45	Effect of typhoon on atmospheric particulates in autumn in central Taiwan. Atmospheric Environment, 2009, 43, 6039-6048.	4.1	28
46	Dust transport from non-East Asian sources to the North Pacific. Geophysical Research Letters, 2012, 39, .	4.0	27
47	Source apportionment of urban air pollutants using constrained receptor models with a priori profile information. Environmental Pollution, 2017, 227, 323-333.	7.5	27
48	Size-segregated characterization of atmospheric aerosols in Taipei during Asian outflow episodes. Atmospheric Research, 2005, 75, 89-109.	4.1	26
49	Asian dust and pollution transport—A comprehensive observation in the downwind Taiwan in 2006. Atmospheric Research, 2010, 95, 19-31.	4.1	26
50	Analysis of the major factors affecting the visibility degradation in two stations. Journal of the Air and Waste Management Association, 2013, 63, 433-441.	1.9	26
51	Aerosol Chemical Profile of Near-Source Biomass Burning Smoke in Sonla, Vietnam during 7-SEAS Campaigns in 2012 and 2013. Aerosol and Air Quality Research, 2016, 16, 2603-2617.	2.1	26
52	Compositions and source apportionments of atmospheric aerosol during Asian dust storm and local pollution in central Taiwan. Journal of Atmospheric Chemistry, 2008, 61, 155-173.	3.2	25
53	The Health Effects of a Forest Environment on Subclinical Cardiovascular Disease and Health-Related Quality of Life. PLoS ONE, 2014, 9, e103231.	2.5	25
54	Enhancement of the hygroscopicity parameter kappa of rural aerosols in northern Taiwan by anthropogenic emissions. Atmospheric Environment, 2014, 84, 78-87.	4.1	23

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55	Three month inhalation exposure to low-level PM <sub>2.5</sub> induced brain toxicity in an Alzheimer's disease mouse model. PLoS ONE, 2021, 16, e0254587.	2.5	23
56	Aerosol transport from Chiang Mai, Thailand to Mt. Lulin, Taiwan – Implication of aerosol aging during long-range transport. Atmospheric Environment, 2016, 137, 101-112.	4.1	22
57	Study of relationship between water-soluble Ca <sup>2+</sup> and lidar depolarization ratio for spring aerosol in the boundary layer. Atmospheric Environment, 2007, 41, 1440-1455.	4.1	20
58	Analysis of semi-volatile materials (SVM) in fine particulate matter. Atmospheric Environment, 2014, 95, 288-295.	4.1	20
59	Source identifications of PM <sub>10</sub> aerosols depending on hourly measurements of soluble components characterization among different events in Taipei Basin during spring season of 2004. Chemosphere, 2006, 65, 792-801.	8.2	19
60	Recent improvement in air quality as evidenced by the island-wide monitoring network in Taiwan. Atmospheric Environment, 2014, 96, 70-77.	4.1	19
61	Seasonality of the mass concentration and chemical composition of aerosols around an urbanized basin in East Asia. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2026-2042.	3.3	19
62	Hygroscopic properties and cloud condensation nuclei activity of atmospheric aerosols under the influences of Asian continental outflow and new particle formation at a coastal site in eastern Asia. Atmospheric Chemistry and Physics, 2020, 20, 5911-5922.	4.9	19
63	Radiative Absorption Capability of Asian Dust with Black Carbon Contamination. Geophysical Research Letters, 2003, 30, .	4.0	18
64	Continued increase of CFC-113a (CCl <sub>3</sub> CF <sub>3</sub> ) mixing ratios in the global atmosphere: emissions, occurrence and potential sources. Atmospheric Chemistry and Physics, 2018, 18, 4737-4751.	4.9	18
65	Impacts of holiday characteristics and number of vacation days on "holiday effect" in Taipei: Implications on ozone control strategies. Atmospheric Environment, 2019, 202, 357-369.	4.1	18
66	Seasonal variation of chemical characteristics of fine particulate matter at a high-elevation subtropical forest in East Asia. Environmental Pollution, 2019, 246, 668-677.	7.5	18
67	Strong deviations from the NO-NO <sub>2</sub> -O <sub>3</sub> photostationary state in the Pearl River Delta: Indications of active peroxy radical and chlorine radical chemistry. Atmospheric Environment, 2017, 163, 22-34.	4.1	17
68	Concepts and New Implements for Modified Physiologically Equivalent Temperature. Atmosphere, 2020, 11, 694.	2.3	17
69	Chemical compositions and radiative properties of dust and anthropogenic air masses study in Taipei Basin, Taiwan, during spring of 2004. Atmospheric Environment, 2006, 40, 7796-7809.	4.1	16
70	Dynamic variations of ultrafine, fine and coarse particles at the Lu-Lin background site in East Asia. Atmospheric Environment, 2013, 78, 154-162.	4.1	16
71	Spatial Correlation of Satellite-Derived PM <sub>2.5</sub> with Hospital Admissions for Respiratory Diseases. Remote Sensing, 2016, 8, 914.	4.0	16
72	Characterization of the organic matter in submicron urban aerosols using a Thermo-Desorption Proton-Transfer-Reaction Time-of-Flight Mass Spectrometer (TD-PTR-TOF-MS). Atmospheric Environment, 2016, 140, 565-575.	4.1	15

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73	Assessment of Traffic Contribution to Hydrocarbons Using 2,2-Dimethylbutane as a Vehicular Indicator. <i>Terrestrial, Atmospheric and Oceanic Sciences</i> , 2004, 15, 697.	0.6	13
74	Specific absorption cross-section and elemental carbon content of urban aerosols. <i>Geophysical Research Letters</i> , 2005, 32, .	4.0	12
75	Effect of wastewater composition on the calcium carbonate precipitation in upflow anaerobic sludge blanket reactors. <i>Frontiers of Environmental Science and Engineering in China</i> , 2010, 4, 142-149.	0.8	12
76	Investigation of East Asian Emissions of CFC-11 Using Atmospheric Observations in Taiwan. <i>Environmental Science &amp; Technology</i> , 2020, 54, 3814-3822.	10.0	12
77	C-Sr-Pb isotopic characteristics of PM <sub>2.5</sub> transported on the East-Asian continental outflows. <i>Atmospheric Research</i> , 2019, 223, 88-97.	4.1	11
78	Measurements of submicron organonitrate particles: Implications for the impacts of NO <sub>x</sub> pollution in a subtropical forest. <i>Atmospheric Research</i> , 2020, 245, 105080.	4.1	11
79	Impact of particle formation on atmospheric ions and particle number concentrations in an urban environment. <i>Atmospheric Research</i> , 2015, 157, 127-136.	4.1	10
80	Seasonal variations of ultra-fine and submicron aerosols in Taipei, Taiwan: implications for particle formation processes in a subtropical urban area. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 1317-1330.	4.9	10
81	Investigation of long-range transported PM <sub>2.5</sub> events over Northern Taiwan during 2005–2015 winter seasons. <i>Atmospheric Environment</i> , 2019, 217, 116920.	4.1	10
82	Water-soluble Ions of Aerosols in Taipei in Spring 2002. <i>Terrestrial, Atmospheric and Oceanic Sciences</i> , 2004, 15, 901.	0.6	10
83	Source apportionment of PM 2.5 size distribution and composition data from multiple stationary sites using a mobile platform. <i>Atmospheric Research</i> , 2017, 190, 21-28.	4.1	9
84	Alterations in cardiovascular function by particulate matter in rats using a crossover design. <i>Environmental Pollution</i> , 2017, 231, 812-820.	7.5	9
85	Correction to “Oxidant (O <sub>3</sub> +NO <sub>2</sub> ) production processes and formation regimes in Beijing”. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	8
86	Characteristics of major secondary ions in typical polluted atmospheric aerosols during autumn in central Taiwan. <i>Journal of Environmental Management</i> , 2011, 92, 1520-1527.	7.8	8
87	Numerical investigation of the coagulation mixing between dust and hygroscopic aerosol particles and its impacts. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 4213-4233.	3.3	8
88	Real-time measurements of PM <sub>2.5</sub> water-soluble inorganic ions at a high-altitude mountain site in the western North Pacific: Impact of upslope wind and long-range transported biomass-burning smoke. <i>Atmospheric Research</i> , 2021, 260, 105686.	4.1	8
89	A numerical study of reducing the concentration of O <sub>3</sub> and PM <sub>2.5</sub> simultaneously in Taiwan. <i>Journal of Environmental Management</i> , 2022, 318, 115614.	7.8	8
90	Long-term (2003–2018) trends in aerosol chemical components at a high-altitude background station in the western North Pacific: Impact of long-range transport from continental Asia. <i>Environmental Pollution</i> , 2020, 265, 114813.	7.5	7

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91	Increase of Ambient PCDD/F Concentrations in Northern Taiwan during Asian Dust Storm and Winter Monsoon Episodes. <i>Aerosol and Air Quality Research</i> , 2014, 14, 1279-1291.	2.1	7
92	Analyzing the increasing importance of nitrate in Taiwan from long-term trend of measurements. <i>Atmospheric Environment</i> , 2021, 267, 118749.	4.1	7
93	Impact of Mineral Dust on Summertime Precipitation Over the Taiwan Region. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD033120.	3.3	6
94	Contribution of Terpenes to Ozone Formation and Secondary Organic Aerosols in a Subtropical Forest Impacted by Urban Pollution. <i>Atmosphere</i> , 2020, 11, 1232.	2.3	6
95	The influence of upslope fog on hygroscopicity and chemical composition of aerosols at a forest site in Taiwan. <i>Atmospheric Environment</i> , 2021, 246, 118150.	4.1	5
96	Trends and emissions of six perfluorocarbons in the Northern Hemisphere and Southern Hemisphere. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 4787-4807.	4.9	5
97	White matter pathology in alzheimer's transgenic mice with chronic exposure to low-level ambient fine particulate matter. <i>Particle and Fibre Toxicology</i> , 2022, 19, .	6.2	5
98	Application of Fractal Geometry in Quantitative Characterization of Aerosol Morphology. <i>Particle and Particle Systems Characterization</i> , 1994, 11, 436-441.	2.3	4
99	Total scatter-to-backscatter ratio of aerosol derived from aerosol size distribution measurement. <i>International Journal of Environment and Pollution</i> , 2009, 37, 45.	0.2	4
100	The hourly characteristics of aerosol chemical compositions under fog and high particle pollution events in Kinmen. <i>Atmospheric Research</i> , 2019, 223, 132-141.	4.1	4
101	Vertical distribution of source apportioned PM <sub>2.5</sub> using particulate-bound elements and polycyclic aromatic hydrocarbons in an urban area. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2020, 30, 659-669.	3.9	4
102	Isotopic signatures and source apportionment of Pb in ambient PM <sub>2.5</sub> . <i>Scientific Reports</i> , 2022, 12, 4343.	3.3	4
103	Water Adsorption vs Phase Transition of Aerosols Monitored by a Quartz Crystal Microbalance. <i>ACS Omega</i> , 2020, 5, 31858-31866.	3.5	3
104	Validation of XCO <sub>2</sub> and XCH <sub>4</sub> retrieved from a portable Fourier transform spectrometer with those from in situ profiles from aircraft-borne instruments. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 5149-5163.	3.1	3
105	Distinct brain lipid signatures in response to low-level PM <sub>2.5</sub> exposure in a 3xTg-Alzheimer's disease mouse inhalation model. <i>Science of the Total Environment</i> , 2022, 838, 156456.	8.0	2
106	Effects of Monomer Size Distribution on the fractal dimensionality of diffusion-limited aggregates. <i>Particle and Particle Systems Characterization</i> , 1996, 13, 245-248.	2.3	1
107	A modified high-output, size-selective aerosol generator. <i>Particle and Particle Systems Characterization</i> , 1997, 14, 290-294.	2.3	1
108	Correlation between aerosol optical depth derived from CIMEL sunphotometer and surface particulate concentration in Northern and Southern Taiwan. , 2006, , .		1

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109	Application of lidar in the observation of atmospheric particulate pollutants in Taipei. , 2006, , .		1
110	Mixing State of Black Carbon Particles in Asian Outflow Observed at a Remote Site in Taiwan in the Spring of 2017. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032526.	3.3	1
111	Enhanced Receptor Modeling Using Expanded Equations with Parametric Variables for Secondary Components of PM2.5. Aerosol and Air Quality Research, 2021, 21, 200549.	2.1	1
112	Contribution of Indoor- and Outdoor-Generated Fine and Coarse Particles to Indoor Air in Taiwanese Hospitals. Aerosol and Air Quality Research, 2018, 18, 3234-3242.	2.1	1
113	A Machine-learning-Aided Visual Analysis Workflow for Investigating Air Pollution Data. , 2022, , .		1
114	Applying hourly measurements of meteorological data and aerosol soluble ions in Taipei Basin, Taiwan. International Journal of Environment and Pollution, 2009, 37, 55.	0.2	0