Charles C-K Chou

List of Publications by Year
in descending order

114 papers	3,531 citations	117625 34 h-index	168389 53 g-index
120 all docs	120 docs citations	120 times ranked	3846 citing authors

#	Article	IF	Citations
1	Isotopic signatures and source apportionment of Pb in ambient PM2.5. Scientific Reports, 2022, 12, 4343.	3.3	4
2	Distinct brain lipid signatures in response to low-level PM2.5 exposure in a 3xTg-Alzheimer's disease mouse inhalation model. Science of the Total Environment, 2022, 838, 156456.	8.0	2
3	A Machine-learning-Aided Visual Analysis Workflow for Investigating Air Pollution Data. , 2022, , .		1
4	White matter pathology in alzheimerâ€™s transgenic mice with chronic exposure to low-level ambient fine particulate matter. Particle and Fibre Toxicology, 2022, 19, .	6.2	5
5	A numerical study of reducing the concentration of O3 and PM2.5 simultaneously in Taiwan. Journal of Environmental Management, 2022, 318, 115614.	7.8	8
6	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
7	The influence of upslope fog on hygroscopicity and chemical composition of aerosols at a forest site in Taiwan. Atmospheric Environment, 2021, 246, 118150.	4.1	5
8	Three month inhalation exposure to low-level PM2.5 induced brain toxicity in an Alzheimerâ€™s disease mouse model. PLoS ONE, 2021, 16, e0254587.	2.5	23
9	Real-time measurements of PM2.5 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. Atmospheric Research, 2021, 260, 105686.	4.1	8
10	Analyzing the increasing importance of nitrate in Taiwan from long-term trend of measurements. Atmospheric Environment, 2021, 267, 118749.	4.1	7
11	Vertical distribution of source apportioned PM2.5 using particulate-bound elements and polycyclic aromatic hydrocarbons in an urban area. Journal of Exposure Science and Environmental Epidemiology, 2020, 30, 659-669.	3.9	4
12	Impact of Mineral Dust on Summertime Precipitation Over the Taiwan Region. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033120.	3.3	6
13	Contribution of Terpenes to Ozone Formation and Secondary Organic Aerosols in a Subtropical Forest Impacted by Urban Pollution. Atmosphere, 2020, 11, 1232.	2.3	6
14	Water Adsorption vs Phase Transition of Aerosols Monitored by a Quartz Crystal Microbalance. ACS Omega, 2020, 5, 31858-31866.	3.5	3
15	Concepts and New Implements for Modified Physiologically Equivalent Temperature. Atmosphere, 2020, 11, 694.	2.3	17
16	Measurements of submicron organonitrate particles: Implications for the impacts of NOx pollution in a subtropical forest. Atmospheric Research, 2020, 245, 105080.	4.1	11
17	Investigation of East Asian Emissions of CFC-11 Using Atmospheric Observations in Taiwan. Environmental Science & Technology, 2020, 54, 3814-3822.	10.0	12
18	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

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19	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
20	Long-term (2003â€“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. Environmental Pollution, 2020, 265, 114813.	7.5	7
21	Trends and emissions of six perfluorocarbons in the Northern Hemisphere and Southern Hemisphere. Atmospheric Chemistry and Physics, 2020, 20, 4787-4807.	4.9	5
22	Validation of XCO₂ and XCH₄ retrieved from a portable Fourier transform spectrometer with those from in situ profiles from aircraft-borne instruments. Atmospheric Measurement Techniques, 2020, 13, 5149-5163.	3.1	3
23	Satellite-Derived Correlation of SO2, NO2, and Aerosol Optical Depth with Meteorological Conditions over East Asia from 2005 to 2015. Remote Sensing, 2019, 11, 1738.	4.0	40
24	Investigation of long-range transported PM2.5 events over Northern Taiwan during 2005â€“2015 winter seasons. Atmospheric Environment, 2019, 217, 116920.	4.1	10
25	Impacts of holiday characteristics and number of vacation days on â€œholiday effectâ€•in Taipei: Implications on ozone control strategies. Atmospheric Environment, 2019, 202, 357-369.	4.1	18
26	The hourly characteristics of aerosol chemical compositions under fog and high particle pollution events in Kinmen. Atmospheric Research, 2019, 223, 132-141.	4.1	4
27	C-Sr-Pb isotopic characteristics of PM2.5 transported on the East-Asian continental outflows. Atmospheric Research, 2019, 223, 88-97.	4.1	11
28	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
29	Continued increase of CFC-113a (CCl₃CF₃) mixing ratios in the global atmosphere: emissions, occurrence and potential sources. Atmospheric Chemistry and Physics, 2018, 18, 4737-4751.	4.9	18
30	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
31	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
32	Source apportionment of PM 2.5 size distribution and composition data from multiple stationary sites using a mobile platform. Atmospheric Research, 2017, 190, 21-28.	4.1	9
33	Source apportionment of urban air pollutants using constrained receptor models with a priori profile information. Environmental Pollution, 2017, 227, 323-333.	7.5	27
34	Strong deviations from the NO-NO2-O3 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
35	Alterations in cardiovascular function by particulate matter in rats using a crossover design. Environmental Pollution, 2017, 231, 812-820.	7.5	9
36	The effect of size-segregated ambient particulate matter on Th1/Th2-like immune responses in mice. PLoS ONE, 2017, 12, e0173158.	2.5	45

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37	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
38	A Simulation Study on PM2.5 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
39	Spatial Correlation of Satellite-Derived PM2.5 with Hospital Admissions for Respiratory Diseases. Remote Sensing, 2016, 8, 914.	4.0	16
40	Aerosol transport from Chiang Mai, Thailand to Mt. Lulin, Taiwan â€“ Implication of aerosol aging during long-range transport. Atmospheric Environment, 2016, 137, 101-112.	4.1	22
41	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
42	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
43	Seasonal variations of ultra-fine and submicron aerosols in Taipei, Taiwan: implications for particle formation processes in a subtropical urban area. Atmospheric Chemistry and Physics, 2016, 16, 1317-1330.	4.9	10
44	Wintertime haze deterioration in Beijing by industrial pollution deduced from trace metal fingerprints and enhanced health risk by heavy metals. Environmental Pollution, 2016, 208, 284-293.	7.5	95
45	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
46	Numerical investigation of the coagulation mixing between dust and hygroscopic aerosol particles and its impacts. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4213-4233.	3.3	8
47	Impact of particle formation on atmospheric ions and particle number concentrations in an urban environment. Atmospheric Research, 2015, 157, 127-136.	4.1	10
48	Source and risk apportionment of selected VOCs and PM2.5 species using partially constrained receptor models with multiple time resolution data. Environmental Pollution, 2015, 205, 121-130.	7.5	68
49	The Health Effects of a Forest Environment on Subclinical Cardiovascular Disease and Heath-Related Quality of Life. PLoS ONE, 2014, 9, e103231.	2.5	25
50	Subchronic effects of inhaled ambient particulate matter on glucose homeostasis and target organ damage in a type 1 diabetic rat model. Toxicology and Applied Pharmacology, 2014, 281, 211-220.	2.8	69
51	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
52	Analysis of semi-volatile materials (SVM) in fine particulate matter. Atmospheric Environment, 2014, 95, 288-295.	4.1	20
53	Recent improvement in air quality as evidenced by the island-wide monitoring network in Taiwan. Atmospheric Environment, 2014, 96, 70-77.	4.1	19
54	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

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55	Enhancement of the hygroscopicity parameter kappa of rural aerosols in northern Taiwan by anthropogenic emissions. Atmospheric Environment, 2014, 84, 78-87.	4.1	23
56	Increase of Ambient PCDD/F Concentrations in Northern Taiwan during Asian Dust Storm and Winter Monsoon Episodes. Aerosol and Air Quality Research, 2014, 14, 1279-1291.	2.1	7
57	Characterization of aerosol chemical properties from near-source biomass burning in the northern Indochina during 7-SEAS/Dongsha experiment. Atmospheric Environment, 2013, 78, 72-81.	4.1	73
58	Impact of urbanization on the air pollution â€œholiday effectâ€•in Taiwan. Atmospheric Environment, 2013, 70, 361-375.	4.1	35
59	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
60	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
61	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
62	The Characteristics of PM2.5 and Its Chemical Compositions between Different Prevailing Wind Patterns in Guangzhou. Aerosol and Air Quality Research, 2013, 13, 1373-1383.	2.1	31
63	Impact of different transport mechanisms of Asian dust and anthropogenic pollutants to Taiwan. Atmospheric Environment, 2012, 60, 403-418.	4.1	33
64	Dust transport from nonâ€East Asian sources to the North Pacific. Geophysical Research Letters, 2012, 39, .	4.0	27
65	Enhanced insulin resistance in diet-induced obese rats exposed to fine particles by instillation. Inhalation Toxicology, 2011, 23, 507-519.	1.6	47
66	Photochemical production of ozone in Beijing during the 2008 Olympic Games. Atmospheric Chemistry and Physics, 2011, 11, 9825-9837.	4.9	56
67	Characteristics of major secondary ions in typical polluted atmospheric aerosols during autumn in central Taiwan. Journal of Environmental Management, 2011, 92, 1520-1527.	7.8	8
68	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
69	Seasonal variation and spatial distribution of carbonaceous aerosols in Taiwan. Atmospheric Chemistry and Physics, 2010, 10, 9563-9578.	4.9	62
70	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
71	Effect of wastewater composition on the calcium carbonate precipitation in upflow anaerobic sludge blanket reactors. Frontiers of Environmental Science and Engineering in China, 2010, 4, 142-149.	0.8	12
72	Ultrafine particles at three different sampling locations in Taiwan. Atmospheric Environment, 2010, 44, 533-540.	4.1	62

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73	Temporal characteristics from continuous measurements of PM2.5 and speciation at the Taipei Aerosol Supersite from 2002 to 2008. Atmospheric Environment, 2010, 44, 1088-1096.	4.1	35
74	Characterization of carbon fractions for atmospheric fine particles and nanoparticles in a highway tunnel. Atmospheric Environment, 2010, 44, 2668-2673.	4.1	116
75	Chemical speciation, transport and contribution of biomass burning smoke to ambient aerosol in Guangzhou, a mega city of China. Atmospheric Environment, 2010, 44, 3187-3195.	4.1	119
76	Oxidant (O₃ + NO₂) production processes and formation regimes in Beijing. Journal of Geophysical Research, 2010, 115, .	3.3	72
77	High wintertime particulate matter pollution over an offshore island (Kinmen) off southeastern China: An overview. Journal of Geophysical Research, 2010, 115, .	3.3	64
78	Correction to â€œOxidant (O3+NO2) production processes and formation regimes in Beijingâ€• Journal of Geophysical Research, 2010, 115, .	3.3	8
79	Asian dust and pollution transportâ€”A comprehensive observation in the downwind Taiwan in 2006. Atmospheric Research, 2010, 95, 19-31.	4.1	26
80	Size-Resolved Anhydrosugar Composition in Smoke Aerosol from Controlled Field Burning of Rice Straw. Aerosol Science and Technology, 2009, 43, 662-672.	3.1	179
81	Air pollution â€œholiday effectâ€•resulting from the Chinese New Year. Atmospheric Environment, 2009, 43, 2114-2124.	4.1	89
82	Columnar optical properties of tropospheric aerosol by combined lidar and sunphotometer measurements at Taipei, Taiwan. Atmospheric Environment, 2009, 43, 2700-2708.	4.1	32
83	Effect of typhoon on atmospheric particulates in autumn in central Taiwan. Atmospheric Environment, 2009, 43, 6039-6048.	4.1	28
84	Particulate matter characteristics during agricultural waste burning in Taichung City, Taiwan. Journal of Hazardous Materials, 2009, 165, 187-192.	12.4	50
85	Longâ€range southeastward transport of Asian biosmoke pollution: Signature detected by aerosol potassium in Northern Taiwan. Journal of Geophysical Research, 2009, 114, .	3.3	55
86	Measurement of NO_y during Campaign of Air Quality Research in Beijing 2006 (CAREBeijingâ€2006): Implications for the ozone production efficiency of NO_x. Journal of Geophysical Research, 2009, 114, .	3.3	60
87	Total scatter-to-backscatter ratio of aerosol derived from aerosol size distribution measurement. International Journal of Environment and Pollution, 2009, 37, 45.	0.2	4
88	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
89	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
90	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

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91	Long-range transport of Asian dust and air pollutants to Taiwan: observed evidence and model simulation. Atmospheric Chemistry and Physics, 2007, 7, 423-434.	4.9	96
92	Study of relationship between water-soluble Ca2+ and lidar depolarization ratio for spring aerosol in the boundary layer. Atmospheric Environment, 2007, 41, 1440-1455.	4.1	20
93	The continuous field measurements of soluble aerosol compositions at the Taipei Aerosol Supersite, Taiwan. Atmospheric Environment, 2007, 41, 1936-1949.	4.1	33
94	A numerical study of an autumn high ozone episode over southwestern Taiwan. Atmospheric Environment, 2007, 41, 3684-3701.	4.1	45
95	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
96	Photochemical production of ozone and control strategy for Southern Taiwan. Atmospheric Environment, 2007, 41, 9324-9340.	4.1	62
97	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
98	Source identifications of PM10 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
99	Correlation between aerosol optical depth derived from CIMEL sunphotometer and surface particulate concentration in Northern and Southern Taiwan. , 2006, , .		1
100	The trend of surface ozone in Taipei, Taiwan, and its causes: Implications for ozone control strategies. Atmospheric Environment, 2006, 40, 3898-3908.	4.1	113
101	Lead isotope ratios in ambient aerosols from Taipei, Taiwan: Identifying long-range transport of airborne Pb from the Yangtze Delta. Atmospheric Environment, 2006, 40, 5393-5404.	4.1	62
102	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
103	Application of lidar in the observation of atmospheric particulate pollutants in Taipei. , 2006, , .		1
104	Long-range transport of aerosols and their impact on the air quality of Taiwan. Atmospheric Environment, 2005, 39, 6066-6076.	4.1	108
105	Size-segregated characterization of atmospheric aerosols in Taipei during Asian outflow episodes. Atmospheric Research, 2005, 75, 89-109.	4.1	26
106	Specific absorption cross-section and elemental carbon content of urban aerosols. Geophysical Research Letters, 2005, 32, .	4.0	12
107	Assessment of Traffic Contribution to Hydrocarbons Using 2,2-Dimethylbutane as a Vehicular Indicator. Terrestrial, Atmospheric and Oceanic Sciences, 2004, 15, 697.	0.6	13
108	Long-Range Transport of Asian Dust and Air Pollutants to Taiwan. Terrestrial, Atmospheric and Oceanic Sciences, 2004, 15, 759.	0.6	80

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109	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
110	Water-soluble Ions of Aerosols in Taipei in Spring 2002. Terrestrial, Atmospheric and Oceanic Sciences, 2004, 15, 901.	0.6	10
111	Radiative Absorption Capability of Asian Dust with Black Carbon Contamination. Geophysical Research Letters, 2003, 30, .	4.0	18
112	A modified high-output, size-selective aerosol generator. Particle and Particle Systems Characterization, 1997, 14, 290-294.	2.3	1
113	Effects of Monomer Size Distribution on the fractal dimensionality of diffusion-limited aggregates. Particle and Particle Systems Characterization, 1996, 13, 245-248.	2.3	1
114	Application of Fractal Geometry in Quantitative Characterization of Aerosol Morphology. Particle and Particle Systems Characterization, 1994, 11, 436-441.	2.3	4