Che-Jen Lin

List of Publications by Year
in descending order

134 papers	7,011 citations	57719 44 h-index	69214 77 g-index
160 all docs	160 docs citations	160 times ranked	4380 citing authors

#	Article	IF	Citations
1	The chemistry of atmospheric mercury: a review. Atmospheric Environment, 1999, 33, 2067-2079.	1.9	527
2	Dynamic Oxidation of Gaseous Mercury in the Arctic Troposphere at Polar Sunrise. Environmental Science & Technology, 2002, 36, 1245-1256.	4.6	526
3	Inorganic fouling of pressure-driven membrane processes â€" A critical review. Desalination, 2010, 250, 236-248.	4.0	367
4	Temporal Trend and Spatial Distribution of Speciated Atmospheric Mercury Emissions in China During 1978â€“2014. Environmental Science & Technology, 2016, 50, 13428-13435.	4.6	255
5	Scientific uncertainties in atmospheric mercury models I: Model science evaluation. Atmospheric Environment, 2006, 40, 2911-2928.	1.9	231
6	Observations of atmospheric mercury in China: a critical review. Atmospheric Chemistry and Physics, 2015, 15, 9455-9476.	1.9	152
7	Mass-Dependent and -Independent Fractionation of Mercury Isotope during Gas-Phase Oxidation of Elemental Mercury Vapor by Atomic Cl and Br. Environmental Science & Technology, 2016, 50, 9232-9241.	4.6	143
8	Isotopic Composition of Atmospheric Mercury in China: New Evidence for Sources and Transformation Processes in Air and in Vegetation. Environmental Science & Technology, 2016, 50, 9262-9269.	4.6	139
9	Assessment of Global Mercury Deposition through Litterfall. Environmental Science & Technology, 2016, 50, 8548-8557.	4.6	131
10	Mercury transformation and speciation in flue gases from anthropogenic emission sources: a critical review. Atmospheric Chemistry and Physics, 2016, 16, 2417-2433.	1.9	114
11	Health risks of heavy metal exposure through vegetable consumption near a large-scale Pb/Zn smelter in central China. Ecotoxicology and Environmental Safety, 2018, 161, 99-110.	2.9	114
12	Aqueous free radical chemistry of mercury in the presence of iron oxides and ambient aerosol. Atmospheric Environment, 1997, 31, 4125-4137.	1.9	111
13	Stable Isotope Evidence Shows Re-emission of Elemental Mercury Vapor Occurring after Reductive Loss from Foliage. Environmental Science & Technology, 2019, 53, 651-660.	4.6	107
14	Using Mercury Isotopes To Understand Mercury Accumulation in the Montane Forest Floor of the Eastern Tibetan Plateau. Environmental Science & Technology, 2017, 51, 801-809.	4.6	102
15	Global observations and modeling of atmosphereâ€"surface exchange of elemental mercury: a critical review. Atmospheric Chemistry and Physics, 2016, 16, 4451-4480.	1.9	101
16	Aqueous Photochemistry of Mercury with Organic Acids. Journal of the Air and Waste Management Association, 1998, 48, 144-150.	0.9	100
17	The influence of dynamic chamber design and operating parameters on calculated surface-to-air mercury fluxes. Atmospheric Environment, 2010, 44, 194-203.	1.9	100
18	Licklider Transmission Protocol (LTP)-Based DTN for Cislunar Communications. IEEE/ACM Transactions on Networking, 2011, 19, 359-368.	2.6	94

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19	Model estimate of mercury emission from natural sources in East Asia. Atmospheric Environment, 2008, 42, 8674-8685.	1.9	89
20	Degradation of monomethylmercury chloride by hydroxyl radicals in simulated natural waters. Water Research, 2003, 37, 2496-2504.	5.3	86
21	Assessment of air quality benefits from national air pollution control policies in China. Part II: Evaluation of air quality predictions and air quality benefits assessment. Atmospheric Environment, 2010, 44, 3449-3457.	1.9	82
22	Depletion of atmospheric gaseous elemental mercury by plant uptake at Mt. Changbai, Northeast China. Atmospheric Chemistry and Physics, 2016, 16, 12861-12873.	1.9	82
23	Climate and Vegetation As Primary Drivers for Global Mercury Storage in Surface Soil. Environmental Science & Technology, 2019, 53, 10665-10675.	4.6	81
24	Empirical Models for Estimating Mercury Flux from Soils. Environmental Science & Technology, 2010, 44, 8522-8528.	4.6	79
25	Estimating mercury emission outflow from East Asia using CMAQ-Hg. Atmospheric Chemistry and Physics, 2010, 10, 1853-1864.	1.9	78
26	Scientific uncertainties in atmospheric mercury models II: Sensitivity analysis in the CONUS domain. Atmospheric Environment, 2007, 41, 6544-6560.	1.9	70
27	Scientific uncertainties in atmospheric mercury models III: Boundary and initial conditions, model grid resolution, and Hg(II) reduction mechanism. Atmospheric Environment, 2008, 42, 1828-1845.	1.9	68
28	A synthesis of terrestrial mercury in the western United States: Spatial distribution defined by land cover and plant productivity. Science of the Total Environment, 2016, 568, 522-535.	3.9	68
29	Accumulation and translocation of ¹⁹⁸Hg in four crop species. Environmental Toxicology and Chemistry, 2014, 33, 334-340.	2.2	65
30	Oxidation of elemental mercury by aqueous chlorine (HOCl/OClâ˜): Implications for tropospheric mercury chemistry. Journal of Geophysical Research, 1998, 103, 28093-28102.	3.3	64
31	Observation and analysis of speciated atmospheric mercury in Shangri-La, Tibetan Plateau, China. Atmospheric Chemistry and Physics, 2015, 15, 653-665.	1.9	64
32	Assessment of air quality benefits from national air pollution control policies in China. Part I: Background, emission scenarios and evaluation of meteorological predictions. Atmospheric Environment, 2010, 44, 3442-3448.	1.9	61
33	Emission-dominated gas exchange of elemental mercury vapor over natural surfaces in China. Atmospheric Chemistry and Physics, 2016, 16, 11125-11143.	1.9	60
34	Assessment of modeled mercury dry deposition over the Great Lakes region. Environmental Pollution, 2012, 161, 272-283.	3.7	59
35	Underestimated Sink of Atmospheric Mercury in a Deglaciated Forest Chronosequence. Environmental Science & Technology, 2020, 54, 8083-8093.	4.6	58
36	Aqueous phase reactions of mercury with free radicals and chlorine: Implications for atmospheric mercury chemistry. Chemosphere, 1999, 38, 1253-1263.	4.2	56

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37	Effects of air pollution control measures on air quality improvement in Guangzhou, China. Journal of Environmental Management, 2019, 244, 127-137.	3.8	56
38	Enhanced accumulation and storage of mercury on subtropical evergreen forest floor: Implications on mercury budget in global forest ecosystems. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2096-2109.	1.3	55
39	Significant Seasonal Variations in Isotopic Composition of Atmospheric Total Gaseous Mercury at Forest Sites in China Caused by Vegetation and Mercury Sources. Environmental Science & Technology, 2019, 53, 13748-13756.	4.6	55
40	The Chemical Transformations of Chromium in Natural Waters â€“ A Model Study. Water, Air, and Soil Pollution, 2002, 139, 137-158.	1.1	54
41	Atmospheric wet and litterfall mercury deposition at urban and rural sites in China. Atmospheric Chemistry and Physics, 2016, 16, 11547-11562.	1.9	54
42	Two-phase model of mercury chemistry in the atmosphere. Atmospheric Environment, 1998, 32, 2543-2558.	1.9	51
43	Global warming accelerates uptake of atmospheric mercury in regions experiencing glacier retreat. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2049-2055.	3.3	51
44	Novel Dynamic Flux Chamber for Measuring Airâ€“Surface Exchange of Hg^o from Soils. Environmental Science & Technology, 2012, 46, 8910-8920.	4.6	49
45	Re-emission of legacy mercury from soil adjacent to closed point sources of Hg emission. Environmental Pollution, 2018, 242, 718-727.	3.7	49
46	Mercury vapor airâ€“surface exchange measured by collocated micrometeorological and enclosure methods â€“ Part I: Data comparability and method characteristics. Atmospheric Chemistry and Physics, 2015, 15, 685-702.	1.9	47
47	Evaluation of health benefit using BenMAP-CE with an integrated scheme of model and monitor data during Guangzhou Asian Games. Journal of Environmental Sciences, 2016, 42, 9-18.	3.2	47
48	Monsoon-facilitated characteristics and transport of atmospheric mercury at a high-altitude background site in southwestern China. Atmospheric Chemistry and Physics, 2016, 16, 13131-13148.	1.9	46
49	Health benefit assessment of PM2.5 reduction in Pearl River Delta region of China using a model-monitor data fusion approach. Journal of Environmental Management, 2019, 233, 489-498.	3.8	44
50	Mercury Isotope Signatures of Methylmercury in Rice Samples from the Wanshan Mercury Mining Area, China: Environmental Implications. Environmental Science & Technology, 2017, 51, 12321-12328.	4.6	43
51	Isotopic Composition of Gaseous Elemental Mercury in the Marine Boundary Layer of East China Sea. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7656-7669.	1.2	43
52	Receptor modeling for smoke of 1998 biomass burning in Central America. Journal of Geophysical Research, 2001, 106, 22871-22886.	3.3	41
53	Sensitivity analysis of an updated bidirectional airâ€“surface exchange model for elemental mercury vapor. Atmospheric Chemistry and Physics, 2014, 14, 6273-6287.	1.9	41
54	Effects of operational parameters on cake formation of CaSO4 in nanofiltration. Water Research, 2006, 40, 806-816.	5.3	40

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55	Field Approaches to Measure Hg Exchange Between Natural Surfaces and the Atmosphereâ€"A Review. Critical Reviews in Environmental Science and Technology, 2013, 43, 1657-1739.	6.6	38
56	Stable Mercury Isotope Transition during Postdepositional Decomposition of Biomass in a Forest Ecosystem over Five Centuries. Environmental Science & Technology, 2020, 54, 8739-8749.	4.6	38
57	Surface-air mercury fluxes across Western North America: A synthesis of spatial trends and controlling variables. Science of the Total Environment, 2016, 568, 651-665.	3.9	36
58	Development of a processor in BEIS3 for estimating vegetative mercury emission in the continental United States. Atmospheric Environment, 2005, 39, 7529-7540.	1.9	35
59	Study of atmospheric mercury budget in East Asia using STEM-Hg modeling system. Science of the Total Environment, 2010, 408, 3277-3291.	3.9	35
60	Mechanistic Model for CaSO4 Fouling on Nanofiltration Membrane. Journal of Environmental Engineering, ASCE, 2005, 131, 1387-1392.	0.7	34
61	Mercury vapor airâ€"surface exchange measured by collocated micrometeorological and enclosure methods â€" Part II: Bias and uncertainty analysis. Atmospheric Chemistry and Physics, 2015, 15, 5359-5376.	1.9	34
62	Combined processes of two-stage Fenton-biological anaerobic filterâ€"biological aerated filter for advanced treatment of landfill leachate. Waste Management, 2012, 32, 2401-2405.	3.7	33
63	Investigation of processes controlling summertime gaseous elemental mercury oxidation at midlatitudinal marine, coastal, and inland sites. Atmospheric Chemistry and Physics, 2016, 16, 8461-8478.	1.9	33
64	A synthesis of research needs for improving the understanding of atmospheric mercury cycling. Atmospheric Chemistry and Physics, 2017, 17, 9133-9144.	1.9	33
65	Enhancing biodegradation of wastewater by microbial consortia with fractional factorial design. Journal of Hazardous Materials, 2009, 171, 948-953.	6.5	32
66	Response surface modeling-based source contribution analysis and VOC emission control policy assessment in a typical ozone-polluted urban Shunde, China. Journal of Environmental Sciences, 2017, 51, 294-304.	3.2	31
67	Evaluation and optimization of electrocoagulation for treating Kraft paper mill wastewater. Journal of Environmental Chemical Engineering, 2020, 8, 103595.	3.3	31
68	Mercury cycling and isotopic fractionation in global forests. Critical Reviews in Environmental Science and Technology, 2022, 52, 3763-3786.	6.6	31
69	Emission characteristics and airâ€"surface exchange of gaseous mercury at the largest active landfill in Asia. Atmospheric Environment, 2013, 79, 188-197.	1.9	30
70	Correlation slopes of GEM / CO, GEM / CO₂, and GEM / CH₄ and estimated mercury emissions in China, South Asia, the Indochinese Peninsula, and Central Asia derived from observations in northwestern and southwestern China. Atmospheric Chemistry and Physics, 2015, 15, 1013-1028.	1.9	30
71	Multi-model study of mercury dispersion in the atmosphere: vertical and interhemispheric distribution of mercury species. Atmospheric Chemistry and Physics, 2017, 17, 6925-6955.	1.9	30
72	Effects of Precipitation on Mercury Accumulation on Subtropical Montane Forest Floor: Implications on Climate Forcing. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 959-972.	1.3	30

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73	Source attribution for mercury deposition in the contiguous United States: Regional difference and seasonal variation. Journal of the Air and Waste Management Association, 2012, 62, 52-63.	0.9	28
74	Design and demonstration of a next-generation air quality attainment assessment system for PM2.5 and O3. Journal of Environmental Sciences, 2015, 29, 178-188.	3.2	28
75	Assessment of Regional Mercury Deposition and Emission Outflow in Mainland China. Journal of Geophysical Research D: Atmospheres, 2018, 123, 9868-9890.	1.2	28
76	Atmospheric mercury near Salmon Falls Creek Reservoir in southern Idaho. Applied Geochemistry, 2008, 23, 438-453.	1.4	27
77	Process factors driving dynamic exchange of elemental mercury vapor over soil in broadleaf forest ecosystems. Atmospheric Environment, 2019, 219, 117047.	1.9	27
78	Spatial distribution and accumulation of Hg in soil surrounding a Zn/Pb smelter. Science of the Total Environment, 2014, 496, 668-677.	3.9	26
79	Effect of operating parameters on permeate flux decline caused by cake formation â€" a model study. Desalination, 2005, 171, 95-105.	4.0	25
80	Cultivation of Biogranules in a Continuous Flow Reactor at Low Dissolved Oxygen. Water, Air and Soil Pollution, 2009, 9, 213-221.	0.8	25
81	Transboundary transport and deposition of Hg emission from springtime biomass burning in the Indoâ€China Peninsula. Journal of Geophysical Research D: Atmospheres, 2015, 120, 9758-9771.	1.2	25
82	An improved method for recovering and preconcentrating mercury in natural water samples for stable isotope analysis. Journal of Analytical Atomic Spectrometry, 2019, 34, 2303-2313.	1.6	25
83	Decreasing mercury levels in consumer fish over the three decades of increasing mercury emissions in China. , 2022, 1, 46-52.		25
84	A whole-air relaxed eddy accumulation measurement system for sampling vertical vapour exchange of elemental mercury. Tellus, Series B: Chemical and Physical Meteorology, 2022, 65, 19940.	0.8	24
85	Seasonal variations in metallic mercury (Hg⁰) vapor exchange over biannual wheatâ€"corn rotation cropland in the North China Plain. Biogeosciences, 2016, 13, 2029-2049.	1.3	23
86	Biogas production from brown grease using a pilot-scale high-rate anaerobic digester. Renewable Energy, 2014, 68, 304-313.	4.3	22
87	Characteristics and potential sources of atmospheric mercury at a subtropical nearâ€coastal site in East China. Journal of Geophysical Research D: Atmospheres, 2015, 120, 8563-8574.	1.2	22
88	Modeling of mercury sorption by activated carbon in a confined, a semi-fluidized, and a fluidized bed. Waste Management, 2002, 22, 391-398.	3.7	21
89	Sensitivity analysis of ground-level ozone concentration to emission changes in two urban regions of southeast Texas. Journal of Environmental Management, 2005, 75, 315-323.	3.8	21
90	Mercury pollution in China: implications on the implementation of the Minamata Convention. Environmental Sciences: Processes and Impacts, 2022, 24, 634-648.	1.7	21

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91	Comparison of in vitro digestion methods for determining bioaccessibility of Hg in rice of China. Journal of Environmental Sciences, 2018, 68, 185-193.	3.2	20
92	Fate of mercury in two CFB utility boilers with different fueled coals and air pollution control devices. Fuel, 2019, 251, 651-659.	3.4	20
93	Quantification of Atmospheric Mercury Deposition to and Legacy Re-emission from a Subtropical Forest Floor by Mercury Isotopes. Environmental Science & Technology, 2021, 55, 12352-12361.	4.6	19
94	Stable mercury isotopes stored in Masson Pinus tree rings as atmospheric mercury archives. Journal of Hazardous Materials, 2021, 415, 125678.	6.5	17
95	Simulation of mercury emission control by activated carbon under confined-bed operations. Powder Technology, 2008, 180, 332-338.	2.1	16
96	A case study of development and application of a streamlined control and response modeling system for PM2.5 attainment assessment in China. Journal of Environmental Sciences, 2016, 41, 69-80.	3.2	16
97	Evolution of four-decade atmospheric mercury release from a coal-fired power plant in North China. Atmospheric Environment, 2019, 213, 526-533.	1.9	16
98	Active Regeneration of Diesel Particulate Filter Employing Microwave Heating. Industrial & Engineering Chemistry Research, 2009, 48, 69-79.	1.8	15
99	Highly elevated emission of mercury vapor due to the spontaneous combustion of refuse in a landfill. Atmospheric Environment, 2013, 79, 540-545.	1.9	14
100	Development of an integrated policy making tool for assessing air quality and human health benefits of air pollution control. Frontiers of Environmental Science and Engineering, 2015, 9, 1056-1065.	3.3	13
101	Development and case study of a science-based software platform to support policy making on air quality. Journal of Environmental Sciences, 2015, 27, 97-107.	3.2	13
102	Source contribution analysis of mercury deposition using an enhanced CALPUFF-Hg in the central Pearl River Delta, China. Environmental Pollution, 2019, 250, 1032-1043.	3.7	13
103	Source attribution for mercury deposition with an updated atmospheric mercury emission inventory in the Pearl River Delta Region, China. Frontiers of Environmental Science and Engineering, 2019, 13, 1.	3.3	13
104	Elevated cadmium pollution since 1890s recorded by forest chronosequence in deglaciated region of Gongga, China. Environmental Pollution, 2020, 260, 114082.	3.7	13
105	Modeling of mercury desorption from activated carbon at elevated temperatures under fluidized/fixed bed operations. Powder Technology, 2005, 151, 54-60.	2.1	11
106	Effect of oxygen availability on the removal efficiency and sludge characteristics during pentachlorophenol (PCP) biodegradation in a coupled granular sludge system. Water Science and Technology, 2010, 61, 1885-1893.	1.2	11
107	Pilotâ€scale sequential anaerobicâ€“aerobic biological treatment of waste streams from a paper mill. Environmental Progress and Sustainable Energy, 2014, 33, 359-368.	1.3	10
108	Development of a novel composite resin for dissolved divalent mercury measurement using diffusive gradients in thin films. Chemosphere, 2020, 251, 126231.	4.2	10

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109	Canopy-Level Flux and Vertical Gradients of Hg⁰ Stable Isotopes in Remote Evergreen Broadleaf Forest Show Year-Around Net Hg⁰ Deposition. Environmental Science & Technology, 2022, 56, 5950-5959.	4.6	10
110	Rapid Waterborne Pathogen Detection with Mobile Electronics. Sensors, 2017, 17, 1348.	2.1	9
111	Soilâ€“atmosphere exchange flux of total gaseous mercury (TGM) at subtropical and temperate forest catchments. Atmospheric Chemistry and Physics, 2020, 20, 16117-16133.	1.9	9
112	Experimental and Kinetic Study of Mercury Adsorption on Various Activated Carbons in a Fixed-Bed Adsorber. Environmental Engineering Science, 2004, 21, 21-27.	0.8	8
113	Water-Related Matrix Isolation Phenomena during NO2 Photolysis in Argon Matrix. Applied Spectroscopy, 2004, 58, 528-534.	1.2	8
114	Changes in pentachlorophenol (PCP) metabolism and physicochemical characteristics by granules responding to different oxygen availability. Environmental Progress and Sustainable Energy, 2010, 29, 307-312.	1.3	7
115	Application of statistical design for the optimization of microbial community of synthetic domestic wastewater. Biodegradation, 2011, 22, 205-213.	1.5	7
116	Sources and Dynamic Processes Controlling Background and Peak Concentrations of TGM in Nanjing, China. Atmosphere, 2014, 5, 124-155.	1.0	7
117	Translocation and distribution of mercury in biomasses from subtropical forest ecosystems: evidence from stable mercury isotopes. Acta Geochimica, 2021, 40, 42-50.	0.7	7
118	A comparative study of US EPA 1996 and 1999 emission inventories in the west Gulf of Mexico coast region, USA. Journal of Environmental Management, 2005, 75, 303-313.	3.8	6
119	Atmospheric Aerosol over a Southeastern Region of Texas: Chemical Composition and Possible Sources. Environmental Modeling and Assessment, 2009, 14, 333-350.	1.2	6
120	Effects of process factors on the performance of electrochemical disinfection for wastewater in a continuous-flow cell reactor. Environmental Science and Pollution Research, 2021, 28, 36573-36584.	2.7	6
121	Chemistry and Isotope Fractionation of Divalent Mercury during Aqueous Reduction Mediated by Selected Oxygenated Organic Ligands. Environmental Science & Technology, 2021, 55, 13376-13386.	4.6	6
122	Water Quality Evaluation on an Urban Stormwater Retention Pond Using Wireless Sensor Networks and Hydrodynamic Modeling. Journal of Irrigation and Drainage Engineering - ASCE, 2019, 145, .	0.6	5
123	Microwave-Assisted Noncatalytic Destruction of Volatile Organic Compounds Using Ceramic-Based Microwave Absorbing Media. Industrial & Engineering Chemistry Research, 2010, 49, 8461-8469.	1.8	4
124	Closure to â€œMechanistic Model for CaSO4 Fouling on Nanofiltration Membraneâ€•by Che-Jen Lin, Saqib Shirazi, and Pritesh Rao. Journal of Environmental Engineering, ASCE, 2007, 133, 942-943.	0.7	3
125	Evaluation of kinetic parameters and mass transfer of glucose-fed granules under hypoxic conditions. Biotechnology and Bioprocess Engineering, 2010, 15, 931-936.	1.4	3
126	Cost optimization of a real-time GIS-based management system for hazardous waste transportation. Waste Management and Research, 2010, 28, 723-730.	2.2	3

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127	A deployable decentralized biofilm system for degrading organic carbon and benzene in wastewater. Environmental Progress and Sustainable Energy, 2013, 32, 505-511.	1.3	3
128	Mercury cycling and bioaccumulation in a changing environment. Science of the Total Environment, 2019, 670, 345.	3.9	3
129	Fourier Transform Infrared-Probed O(3P) Microreactor: Demonstration with Ethylene Reactions in Argon Matrix. Applied Spectroscopy, 2004, 58, 1236-1242.	1.2	2
130	Atmospheric aerosols over two sites in a southeastern region of Texas. Canadian Journal of Chemical Engineering, 2008, 86, 421-435.	0.9	1
131	Atmospheric Aerosols over a Southwestern Region of Texas. Environmental Modeling and Assessment, 2009, 14, 645-659.	1.2	1
132	Development and case study of a new-generation model-VAT for analyzing the boundary conditions influence on atmospheric mercury simulation. Frontiers of Environmental Science and Engineering, 2018, 12, 1.	3.3	1
133	A comparison of two bidirectional air-surface exchange models for gaseous elemental mercury over vegetated surfaces. Atmospheric Environment, 2021, 246, 118096.	1.9	0
134	POTENTIAL SOURCES OF OZONE IN BEAUMONT, TEXAS, USA. , 2000, , .		0