Feiyue Wang

List of Publications by Citations

134 papers	6,302 citations	45 h-index	75 g-index
150 ext. papers	7,081 ext. citations	6.6 avg, IF	5.82 L-index

#	Paper	IF	Citations
134	Assessing sediment contamination in estuaries. *Environmental Toxicology and Chemistry*, **2001**, 20, 3-22	3.8	388
133	Ecotoxicology of metals in aquatic sediments: binding and release, bioavailability, risk assessment, and remediation. *Canadian Journal of Fisheries and Aquatic Sciences*, **1998**, 55, 2221-2243	2.4	361
132	Mercury-selenium compounds and their toxicological significance: toward a molecular understanding of the mercury-selenium antagonism. *Environmental Toxicology and Chemistry*, **2009**, 28, 1567-77	3.8	314
131	Major element chemistry of the Changjiang (Yangtze River). *Chemical Geology*, **2002**, 187, 231-255	4.2	267
130	How does climate change influence Arctic mercury?. *Science of the Total Environment*, **2012**, 414, 22-42	10.2	169
129	A mass balance inventory of mercury in the Arctic Ocean. *Environmental Chemistry*, **2008**, 5, 89	3.2	139
128	Spatial and temporal analysis of water chemistry records (1958□2000) in the Huanghe (Yellow River) basin. *Global Biogeochemical Cycles*, **2005**, 19,	5.9	120
127	Conducting Ecological Risk Assessments of Inorganic Metals and Metalloids: Current Status. *Human and Ecological Risk Assessment (HERA)*, **2003**, 9, 641-697	4.9	120
126	Biological implications of sulfide in sediment□ review focusing on sediment toxicity. *Environmental Toxicology and Chemistry*, **1999**, 18, 2526-2532	3.8	118
125	Increasing contaminant burdens in an arctic fish, Burbot (Lota lota), in a warming climate. *Environmental Science & Technology*, **2010**, 44, 316-22	10.3	116
124	Pore water testing and analysis: the good, the bad, and the ugly. *Marine Pollution Bulletin*, **2002**, 44, 359-66	6.7	107
123	The delivery of mercury to the Beaufort Sea of the Arctic Ocean by the Mackenzie River. *Science of the Total Environment*, **2007**, 373, 178-95	10.2	100
122	. *Environmental Toxicology and Chemistry*, **1999**, 18, 2526	3.8	100
121	Modeling Sorption of Trace Metals on Natural Sediments by Surface Complexation Model. *Environmental Science & Technology*, **1997**, 31, 448-453	10.3	99
120	Thiols in wetland interstitial waters and their role in mercury and methylmercury speciation. *Limnology and Oceanography*, **2004**, 49, 2276-2286	4.8	97
119	Atmospheric transport of mercury to the Tibetan Plateau. *Environmental Science & Technology*, **2007**, 41, 7632-8	10.3	95
118	Appropriate Applications of Sediment Quality Values for Metals and Metalloids. *Environmental Science & Technology*, **1999**, 33, 3937-3941	10.3	95

117	Atmospheric Mercury Depositional Chronology Reconstructed from Lake Sediments and Ice Core in the Himalayas and Tibetan Plateau. *Environmental Science & Technology*, **2016**, 50, 2859-69	10.3	93
116	Fluorotelomer carboxylic acids and PFOS in rainwater from an urban center in Canada. *Environmental Science & Technology*, **2005**, 39, 2944-51	10.3	93
115	The fate of mercury in Arctic terrestrial and aquatic ecosystems, a review. *Environmental Chemistry*, **2012**, 9, 321	3.2	92
114	Chemical demethylation of methylmercury by selenoamino acids. *Chemical Research in Toxicology*, **2010**, 23, 1202-6	4	91
113	Assessing and managing sediment contamination in transitional waters. *Environment International*, **2013**, 55, 71-91	12.9	88
112	Effects of acute and subchronic exposures to waterborne selenite on the physiological stress response and oxidative stress indicators in juvenile rainbow trout. *Aquatic Toxicology*, **2007**, 83, 263-71	5.1	81
111	Mercury distribution and deposition in glacier snow over western China. *Environmental Science & Technology*, **2012**, 46, 5404-13	10.3	79
110	Enhanced production of oxidised mercury over the tropical Pacific Ocean: a key missing oxidation pathway. *Atmospheric Chemistry and Physics*, **2014**, 14, 1323-1335	6.8	70
109	Comparison of mercury concentrations measured at several sites in the Southern Hemisphere. *Atmospheric Chemistry and Physics*, **2015**, 15, 3125-3133	6.8	69
108	Fluorescence characterization of dissolved organic matter in an urban river and its complexation with Hg(II). *Applied Geochemistry*, **2007**, 22, 1668-1679	3.5	67
107	In situ two-dimensional high-resolution profiling of sulfide in sediment interstitial waters. *Environmental Science & Technology*, **2003**, 37, 792-7	10.3	67
106	Methylmercury speciation in fish muscle by HPLC-ICP-MS following enzymatic hydrolysis. *Journal of Analytical Atomic Spectrometry*, **2009**, 24, 663	3.7	66
105	Photoreduction of gaseous oxidized mercury changes global atmospheric mercury speciation, transport and deposition. *Nature Communications*, **2018**, 9, 4796	17.4	66
104	Updated Global and Oceanic Mercury Budgets for the United Nations Global Mercury Assessment 2018. *Environmental Science & Technology*, **2018**, 52, 11466-11477	10.3	66
103	Issues in Ecological Risk Assessment of Inorganic Metals and Metalloids. *Human and Ecological Risk Assessment (HERA)*, **2000**, 6, 965-988	4.9	65
102	Dramatic loss of glacier accumulation area on the Tibetan Plateau revealed by ice core tritium and mercury records. *Cryosphere*, **2015**, 9, 1213-1222	5.5	63
101	Ikaite crystal distribution in winter sea ice and implications for CO₂ system dynamics. *Cryosphere*, **2013**, 7, 707-718	5.5	63
100	Testing sediment biological effects with the freshwater amphipod Hyalella azteca: the gap between laboratory and nature. *Chemosphere*, **2004**, 57, 1713-24	8.4	63

99	Relation of sediment characteristics to trace metal concentrations: a statistical study. *Water Research*, **2000**, 34, 694-698	12.5	60
98	Metal speciation measurement by diffusive gradients in thin films technique with different binding phases. *Analytica Chimica Acta*, **2005**, 533, 193-202	6.6	58
97	Mercury biomagnification in marine zooplankton food webs in Hudson Bay. *Environmental Science & Technology*, **2012**, 46, 12952-9	10.3	57
96	The relation between amyotrophic lateral sclerosis and inorganic selenium in drinking water: a population-based case-control study. *Environmental Health*, **2010**, 9, 77	6	54
95	Mercury transformations and fluxes in sediments of a riverine wetland. *Geochimica Et Cosmochimica Acta*, **2007**, 71, 3393-3406	5.5	54
94	Wet deposition mercury fluxes in the Canadian sub-Arctic and southern Alberta, measured using an automated precipitation collector adapted to cold regions. *Atmospheric Environment*, **2010**, 44, 1672-1681	5.3	53
93	Total and methylated mercury in the Beaufort Sea: the role of local and recent organic remineralization. *Environmental Science & Technology*, **2012**, 46, 11821-8	10.3	52
92	Geographical variations of trace elements in sediments of the major rivers in eastern China. *Environmental Geology*, **2000**, 39, 1334-1340		51
91	Zero-valent sulfur and metal speciation in sediment porewaters of freshwater lakes. *Environmental Science & Technology*, **2009**, 43, 7252-7	10.3	47
90	Altitudinal transect of atmospheric and aqueous fluorinated organic compounds in Western Canada. *Environmental Science & Technology*, **2008**, 42, 2374-9	10.3	46
89	Trace metal speciation measurements in waters by the liquid binding phase DGT device. *Talanta*, **2005**, 67, 571-8	6.2	45
88	Persistent organic pollutants and mercury in the Himalaya. *Aquatic Ecosystem Health and Management*, **2005**, 8, 223-233	1.4	45
87	Metal-sulfide species in oxic waters. *Analytica Chimica Acta*, **2005**, 528, 183-195	6.6	44
86	Oxygen measurements in the burrows of freshwater insects. *Freshwater Biology*, **2001**, 46, 317-327	3.1	43
85	Mercury distribution and transport across the ocean-sea-ice-atmosphere interface in the Arctic Ocean. *Environmental Science & Technology*, **2011**, 45, 1866-72	10.3	41
84	Speciation of methylmercury in rice grown from a mercury mining area. *Environmental Pollution*, **2010**, 158, 3103-7	9.3	40
83	How closely do mercury trends in fish and other aquatic wildlife track those in the atmosphere? - Implications for evaluating the effectiveness of the Minamata Convention. *Science of the Total Environment*, **2019**, 674, 58-70	10.2	39
82	Distribution and impacts of microplastic incorporation within sea ice. *Marine Pollution Bulletin*, **2019** , 145, 463-473	6.7	38

81	Methylmercury and selenium speciation in different tissues of beluga whales (Delphinapterus leucas) from the western Canadian Arctic. *Environmental Toxicology and Chemistry*, **2011**, 30, 2732-8	3.8	38
80	Field and satellite observations of the formation and distribution of Arctic atmospheric bromine above a rejuvenated sea ice cover. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		38
79	pH evolution in sea ice grown at an outdoor experimental facility. *Marine Chemistry*, **2013**, 154, 46-54	3.7	36
78	Major Ion Geochemistry of Nam Co Lake and its Sources, Tibetan Plateau. *Aquatic Geochemistry*, **2008**, 14, 321-336	1.7	36
77	Natural and anthropogenic mercury distribution in marine sediments from Hudson Bay, Canada. *Environmental Science & Technology*, **2010**, 44, 5805-11	10.3	35
76	Windows in Arctic sea ice: Light transmission and ice algae in a refrozen lead. *Journal of Geophysical Research G: Biogeosciences*, **2017**, 122, 1486-1505	3.7	34
75	Contemporary and preindustrial mass budgets of mercury in the Hudson Bay Marine System: the role of sediment recycling. *Science of the Total Environment*, **2008**, 406, 190-204	10.2	33
74	Voltammetric determination of elemental sulfur in pore waters. *Limnology and Oceanography*, **1998**, 43, 1353-1361	4.8	33
73	Evaluation of a titanium dioxide-based DGT technique for measuring inorganic uranium species in fresh and marine waters. *Talanta*, **2012**, 97, 550-6	6.2	31
72	Rare earth elements in the surface sediments of the Yarlung Tsangbo (Upper Brahmaputra River) sediments, southern Tibetan Plateau. *Quaternary International*, **2009**, 208, 151-157	2	31
71	Speciated atmospheric mercury on haze and non-haze days in an inland city in China. *Atmospheric Chemistry and Physics*, **2016**, 16, 13807-13821	6.8	30
70	Characterization of organic matter in surface sediments of the Mackenzie River Basin, Canada. *International Journal of Coal Geology*, **2009**, 77, 416-423	5.5	30
69	700 years reconstruction of mercury and lead atmospheric deposition in the Pyrenees (NE Spain). *Atmospheric Environment*, **2017**, 155, 97-107	5.3	28
68	Total and methylated mercury in Arctic multiyear sea ice. *Environmental Science & Technology*, **2014**, 48, 5575-82	10.3	28
67	Transformation of mercury at the bottom of the Arctic food web: an overlooked puzzle in the mercury exposure narrative. *Environmental Science & Technology*, **2014**, 48, 7280-8	10.3	28
66	Measurement of stable and radioactive cesium in natural waters by the diffusive gradients in thin films technique with new selective binding phases. *Analytical Chemistry*, **2009**, 81, 5889-95	7.8	27
65	Characterization of sedimentary organic matter in recent marine sediments from Hudson Bay, Canada, by Rock-Eval pyrolysis. *Organic Geochemistry*, **2014**, 68, 52-60	3.1	26
64	Mercury distribution and speciation in different brain regions of beluga whales (Delphinapterus leucas). *Science of the Total Environment*, **2013**, 456-457, 278-86	10.2	26

63	Gypsum crystals observed in experimental and natural sea ice. *Geophysical Research Letters*, **2013**, 40, 6362-6367	4.9	26
62	Subsurface seawater methylmercury maximum explains biotic mercury concentrations in the Canadian Arctic. *Scientific Reports*, **2018**, 8, 14465	4.9	26
61	Selenium concentration, speciation and behavior in surface waters of the Canadian prairies. *Science of the Total Environment*, **2009**, 407, 5869-76	10.2	25
60	Environmental Mercury Chemistry - In Silico. *Accounts of Chemical Research*, **2019**, 52, 379-388	24.3	24
59	Consequences of change and variability in sea ice on marine ecosystem and biogeochemical processes during the 2007–2008 Canadian International Polar Year program. *Climatic Change*, **2012**, 115, 135-159	4.5	24
58	Mercury contamination in aquatic ecosystems under a changing environment: Implications for the Three Gorges Reservoir. *Science Bulletin*, **2013**, 58, 141-149		23
57	Theoretical study of the reduction of uranium(VI) aquo complexes on titania particles and by alcohols. *Chemistry - A European Journal*, **2012**, 18, 7117-27	4.8	23
56	Total suspended particulate matter and toxic elements indoors during cooking with yak dung. *Atmospheric Environment*, **2009**, 43, 4243-4246	5.3	23
55	Underestimated Sink of Atmospheric Mercury in a Deglaciated Forest Chronosequence. *Environmental Science & Technology*, **2020**, 54, 8083-8093	10.3	22
54	Temporal dynamics of ikaite in experimental sea ice. *Cryosphere*, **2014**, 8, 1469-1478	5.5	22
53	Reversible dissolution of glutathione-mediated HgSe(x)S(1-x) nanoparticles and possible significance in Hg-Se antagonism. *Chemical Research in Toxicology*, **2009**, 22, 1827-32	4	22
52	Synthesis, characterization and structures of methylmercury complexes with selenoamino acids. *Dalton Transactions*, **2009**, 5766-72	4.3	22
51	Inorganic sulfur and mercury speciation in the water level fluctuation zone of the Three Gorges Reservoir, China: The role of inorganic reduced sulfur on mercury methylation. *Environmental Pollution*, **2018**, 237, 1112-1123	9.3	22
50	p-type conductivity in silicon nanowires induced by heterojunction interface charge transfer. *Applied Physics Letters*, **2010**, 97, 153126	3.4	21
49	Computational studies of structural, electronic, spectroscopic, and thermodynamic properties of methylmercury-amino acid complexes and their Se analogues. *Inorganic Chemistry*, **2010**, 49, 870-8	5.1	20
48	Sediment toxicity testing with the freshwater amphipod Hyalella azteca: relevance and application. *Chemosphere*, **2005**, 61, 1740-3; author reply 1744-5	8.4	20
47	Determination of mercury biogeochemical fluxes in the remote Mackenzie River Basin, northwest Canada, using speciation of sulfur and organic carbon. *Applied Geochemistry*, **2012**, 27, 815-824	3.5	19
46	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	11.5	17

45	Surface properties of natural aquatic sediments. *Water Research*, **1997**, 31, 1796-1800	12.5	16
44	Spring production of mycosporine-like amino acids and other UV-absorbing compounds in sea ice-associated algae communities in the Canadian Arctic. *Marine Ecology - Progress Series*, **2015**, 541, 91-104	2.6	16
43	Photochemistry of oxidized Hg(I) and Hg(II) species suggests missing mercury oxidation in the troposphere. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 30949-30956	11.5	16
42	Mercury methylation and demethylation potentials in Arctic lake sediments. *Chemosphere*, **2020**, 248, 126001	8.4	15
41	Cadmium Complexation with Bisulfide. *Environmental Science & Technology*, **1999**, 33, 4270-4277	10.3	14
40	Accumulation of Atmospheric Mercury in Glacier Cryoconite over Western China. *Environmental Science & Technology*, **2019**, 53, 6632-6639	10.3	13
39	Does otolith chemistry indicate the natal habitat of Newfoundland capelin Mallotus villosus?. *Journal of Experimental Marine Biology and Ecology*, **2015**, 464, 88-95	2.1	13
38	Theoretical study of the formation of mercury (Hg2+) complexes in solution using an explicit solvation shell in implicit solvent calculations. *Journal of Physical Chemistry B*, **2014**, 118, 11271-83	3.4	12
37	Decoupling Natural and Anthropogenic Mercury and Lead Transport from South Asia to the Himalayas. *Environmental Science & Technology*, **2020**, 54, 5429-5436	10.3	11
36	Under-ice eddy covariance flux measurements of heat, salt, momentum, and dissolved oxygen in an artificial sea ice pool. *Cold Regions Science and Technology*, **2015**, 119, 158-169	3.8	11
35	The overlooked role of the ocean in mercury cycling in the Arctic. *Marine Pollution Bulletin*, **2008**, 56, 1963-5	6.7	11
34	Gaseous elemental mercury in the marine boundary layer and air-sea flux in the Southern Ocean in austral summer. *Science of the Total Environment*, **2017**, 603-604, 510-518	10.2	10
33	Quantum-Chemical Study of the Diffusion of Hg(0, I, II) into the Ice(Ih). *Journal of Physical Chemistry C*, **2012**, 116, 5151-5154	3.8	10
32	On the unusual holocene carbonate sediment in lake Nam Co, central Tibet. *Journal of Mountain Science*, **2009**, 6, 346-353	2.1	10
31	Global health effects of future atmospheric mercury emissions. *Nature Communications*, **2021**, 12, 3035	17.4	10
30	Fifty years of volcanic mercury emission research: Knowledge gaps and future directions. *Science of the Total Environment*, **2021**, 757, 143800	10.2	10
29	Density functional study of substituted (□H, □, □H, □l) hydrated ions of Hg2+. *Theoretical Chemistry Accounts*, **2012**, 131, 1	1.9	9
28	Mercury uptake within an ice algal community during the spring bloom in first-year Arctic sea ice. *Journal of Geophysical Research: Oceans*, **2013**, 118, 4746-4754	3.3	8

27	Metallomics of Mercury: Role of Thiol- and Selenol-Containing Biomolecules **2011**, 517-544		8
26	Misapplication of Equilibrium Partitioning Coefficients to Derive Metals Sediment Quality Values. *Marine Pollution Bulletin*, **1999**, 38, 423-425	6.7	7
25	Determining seawater mercury methylation and demethylation rates by the seawater incubation approach: A critique. *Marine Chemistry*, **2020**, 219, 103753	3.7	6
24	Spatial and temporal variability of seawater pCO2 within the Canadian Arctic Archipelago and Baffin Bay during the summer and autumn 2011. *Continental Shelf Research*, **2018**, 156, 1-10	2.4	6
23	Chemical composition of river particulates in eastern China. *Geo Journal*, **1996**, 40, 31	2.2	6
22	Climate change and mercury in the Arctic: Abiotic interactions.. *Science of the Total Environment*, **2022**, 824, 153715	10.2	6
21	Comparison of mercury concentrations measured at several sites in the Southern Hemisphere		5
20	Decapitation of high-altitude glaciers on the Tibetan Plateau revealed by ice core tritium and mercury records		5
19	The Stability of Metal Profiles in Freshwater and Marine Sediments. *Developments in Paleoenvironmental Research*, **2015**, 35-60		5
18	Bromide and chloride distribution across the snow-sea ice-ocean interface: A comparative study between an Arctic coastal marine site and an experimental sea ice mesocosm. *Journal of Geophysical Research: Oceans*, **2016**, 121, 5535-5548	3.3	5
17	Henry Law constant for CO2 in aqueous sodium chloride solutions at 1 atm and sub-zero (Celsius) temperatures. *Marine Chemistry*, **2018**, 207, 26-32	3.7	5
16	A mixture model approach to analyzing major element chemistry data of the Changjiang (Yangtze River). *Environmetrics*, **2005**, 16, 305-318	1.3	4
15	High mercury accumulation in deep-ocean hadal sediments. *Scientific Reports*, **2021**, 11, 10970	4.9	4
14	Transport and transformation of contaminants in sea ice **2016**, 472-491		3
13	Assessment and improvement of the sea ice processing for dissolved inorganic carbon analysis. *Limnology and Oceanography: Methods*, **2018**, 16, 83-91	2.6	2
12	Response to Borgmann et al. (2005)Sediment toxicity testing with Hyalella azteca. *Chemosphere*, **2005**, 61, 1744-1745	8.4	2
11	Effect of ikaite precipitation on phosphate removal in sea ice. *Polar Research*, **2020**, 39,	2	2
10	Reproducing Arctic springtime tropospheric ozone and mercury depletion events in an outdoor mesocosm sea ice facility. *Atmospheric Chemistry and Physics*, **2022**, 22, 1811-1824	6.8	1

List of Publications

9	Ikaite crystal distribution in Arctic winter sea ice and implications for CO₂ system dynamics		1
8	Dynamic ikaite production and dissolution in sea ice control by temperature, salinity and <i>p</i>CO₂ conditions		1
7	Anthropogenic and natural drivers of seesaw-like spatial patterns in precipitation mercury over western China. *Environmental Pollution*, **2022**, 307, 119525	9.3	1
6	Evaluation of the Chelex-DGT technique for the measurement of rare earth elements in the porewater of estuarine and arine sediments. *Talanta*, **2021**, 230, 122315	6.2	0
5	Elemental mercury in the marine boundary layer of North America: Temporal and spatial patterns. *Marine Chemistry*, **2020**, 220, 103755	3.7	
4	Water Chemistry of Major Rivers of China **2014**,		
3	ZnO and ZnOSiO2 coreshell structured fillers on properties of polycarbonate nanocomposites. *Plastics, Rubber and Composites*, **2010**, 39, 419-424	1.5	
2	Mercury in the Arctic: are we overlooking the ocean?. *Integrated Environmental Assessment and Management*, **2009**, 5, 178-80	2.5	
1	Asia Eastern Asia **2009**, 306-317		