Mae Sexauer Gustin

List of Publications by Citations

88 papers	3,637 citations	34 h-index	58 g-index
93 ext. papers	4,027 ext. citations	7.6 avg, IF	5.72 L-index

#	Paper	IF	Citations
88	Investigation of the light-enhanced emission of mercury from naturally enriched substrates. *Atmospheric Environment*, **2002**, 36, 3241-3254	5.3	185
87	Modeling the past atmospheric deposition of mercury using natural archives. *Environmental Science & Technology*, **2007**, 41, 4851-60	10.3	178
86	An update on the natural sources and sinks of atmospheric mercury. *Applied Geochemistry*, **2008**, 23, 482-493	3.5	149
85	Do we understand what the mercury speciation instruments are actually measuring? Results of RAMIX. *Environmental Science & Technology*, **2013**, 47, 7295-306	10.3	144
84	Are mercury emissions from geologic sources significant? A status report. *Science of the Total Environment*, **2003**, 304, 153-67	10.2	124
83	Quantifying natural source mercury emissions from the Ivanhoe Mining District, north-central Nevada, USA. *Atmospheric Environment*, **2001**, 35, 3987-3997	5.3	122
82	Reducing the uncertainty in measurement and understanding of mercury in the atmosphere. *Environmental Science & Technology*, **2010**, 44, 2222-7	10.3	114
81	Estimation of dry deposition of atmospheric mercury in Nevada by direct and indirect methods. *Environmental Science & Technology*, **2007**, 41, 1970-6	10.3	113
80	Effect of Watering and Soil Moisture on Mercury Emissions from Soils. *Biogeochemistry*, **2005**, 76, 215-2328	3.8	113
79	Assessing the contribution of natural sources to regional atmospheric mercury budgets. *Science of the Total Environment*, **2000**, 259, 61-71	10.2	109
78	Effect of temperature and air movement on the flux of elemental mercury from substrate to the atmosphere. *Journal of Geophysical Research*, **1997**, 102, 3891-3898		101
77	Comparison of gaseous oxidized Hg measured by KCl-coated denuders, and nylon and cation exchange membranes. *Environmental Science & Technology*, **2013**, 47, 7307-16	10.3	92
76	Climate driven release of carbon and mercury from permafrost mires increases mercury loading to sub-arctic lakes. *Science of the Total Environment*, **2010**, 408, 4778-83	10.2	92
75	Does within-bog spatial variability of mercury and lead constrain reconstructions of absolute deposition rates from single peat records? The example of Store Mosse, Sweden. *Global Biogeochemical Cycles*, **2004**, 18, n/a-n/a	5.9	85
74	Assessing the Influence of Different Atmospheric and Soil Mercury Concentrations on Foliar Mercury Concentrations in a Controlled Environment. *Water, Air, and Soil Pollution*, **2007**, 181, 373-384	2.6	76
73	Mired in the past looking to the future: Geochemistry of peat and the analysis of past environmental changes. *Global and Planetary Change*, **2006**, 53, 209-221	4.2	76
72	Mercury distribution in two Sierran forest and one desert sagebrush steppe ecosystems and the effects of fire. *Science of the Total Environment*, **2006**, 367, 222-33	10.2	72

71	Observations of speciated atmospheric mercury at three sites in Nevada: Evidence for a free tropospheric source of reactive gaseous mercury. *Journal of Geophysical Research*, **2009**, 114,		71
70	Gaseous elemental mercury exchange with low mercury containing soils: Investigation of controlling factors. *Applied Geochemistry*, **2007**, 22, 1451-1466	3.5	71
69	Mercury exchange between the atmosphere and low mercury containing substrates. *Applied Geochemistry*, **2006**, 21, 1913-1923	3.5	71
68	Assessing the stability of mercury and methylmercury in a varved lake sediment deposit. *Environmental Science & Technology*, **2008**, 42, 4391-6	10.3	65
67	Uncertainties of Gaseous Oxidized Mercury Measurements Using KCl-Coated Denuders, Cation-Exchange Membranes, and Nylon Membranes: Humidity Influences. *Environmental Science & Technology*, **2015**, 49, 6102-8	10.3	61
66	Atmospheric mercury concentrations and speciation measured from 2004 to 2007 in Reno, Nevada, USA. *Atmospheric Environment*, **2009**, 43, 4646-4654	5.3	57
65	Atmospheric Mercury Concentrations Associated with Geologically and Anthropogenically Enriched Sites in Central Western Nevada. *Environmental Science & Technology*, **1996**, 30, 2572-2579	10.3	54
64	Importance of Integration and Implementation of Emerging and Future Mercury Research into the Minamata Convention. *Environmental Science & Technology*, **2016**, 50, 2767-70	10.3	52
63	Determinants of atmospheric mercury concentrations in Reno, Nevada, U.S.A. *Science of the Total Environment*, **2009**, 408, 431-8	10.2	48
62	Speciation of atmospheric mercury at two sites in northern Nevada, USA. *Atmospheric Environment*, **2008**, 42, 927-939	5.3	45
61	Evidence for Nonstomatal Uptake of Hg by Aspen and Translocation of Hg from Foliage to Tree Rings in Austrian Pine. *Environmental Science & Technology*, **2018**, 52, 1174-1182	10.3	42
60	A review of passive sampling systems for ambient air mercury measurements. *Environmental Sciences: Processes and Impacts*, **2014**, 16, 374-92	4.3	42
59	Atmospheric mercury emissions and speciation at the sulphur bank mercury mine superfund site, Northern California. *Environmental Science & Technology*, **2004**, 38, 1977-83	10.3	42
58	Atmospheric mercury emissions from substrates and fumaroles associated with three hydrothermal systems in the western United States. *Journal of Geophysical Research*, **2006**, 111,		41
57	Scaling of atmospheric mercury emissions from three naturally enriched areas: Flowery Peak, Nevada; Peavine Peak, Nevada; and Long Valley Caldera, California. *Science of the Total Environment* , **2002**, 290, 91-104	10.2	41
56	Application of tree rings [dendrochemistry] for detecting historical trends in air Hg concentrations across multiple scales. *Biogeochemistry*, **2014**, 120, 149-162	3.8	37
55	Building upon the Conceptual Model for Soil Mercury Flux: Evidence of a Link Between Moisture Evaporation and Hg Evasion. *Water, Air, and Soil Pollution*, **2013**, 224, 1	2.6	36
54	Laboratory investigation of Hg release from flue gas desulfurization products. *Environmental Science & Technology*, **2010**, 44, 4012-8	10.3	34

53	Testing the use of passive sampling systems for understanding air mercury concentrations and dry deposition across Florida, USA. *Science of the Total Environment*, **2012**, 424, 297-307	10.2	32
52	Evidence for a free troposphere source of mercury in wet deposition in the Western United States. *Environmental Science & Technology*, **2012**, 46, 6621-9	10.3	32
51	Environmental archives of atmospheric Hg deposition - A review. *Science of the Total Environment*, **2020**, 709, 134800	10.2	32
50	A synthesis of research needs for improving the understanding of atmospheric mercury cycling. *Atmospheric Chemistry and Physics*, **2017**, 17, 9133-9144	6.8	29
49	Investigation of mercury deposition and potential sources at six sites from the Pacific Coast to the Great Basin, USA. *Science of the Total Environment*, **2014**, 470-471, 1099-113	10.2	27
48	Mining, metallurgy and the historical origin of mercury pollution in lakes and watercourses in Central Sweden. *Environmental Science & Technology*, **2012**, 46, 7984-91	10.3	26
47	Importance of vegetation type for mercury sequestration in the northern Swedish mire, R□mossamyran. *Geochimica Et Cosmochimica Acta*, **2010**, 74, 7116-7126	5.5	26
46	Deciphering potential chemical compounds of gaseous oxidized mercury in Florida, USA. *Atmospheric Chemistry and Physics*, **2017**, 17, 1689-1698	6.8	25
45	Mercury pollution trends in subarctic lakes in the northern Swedish mountains. *Ambio*, **2007**, 36, 401-5	6.5	24
44	An assessment of the significance of mercury release from coal fly ash. *Journal of the Air and Waste Management Association*, **2004**, 54, 320-30	2.4	24
43	Automated Calibration of Atmospheric Oxidized Mercury Measurements. *Environmental Science & Technology*, **2016**, 50, 12921-12927	10.3	23
42	Evaluating paleoproxies for peat decomposition and their relationship to peat geochemistry. *Holocene*, **2013**, 23, 1666-1671	2.6	23
41	Use of passive sampling methods and models to understand sources of mercury deposition to high elevation sites in the Western United States. *Environmental Science & Technology*, **2015**, 49, 432-41	10.3	22
40	Evidence for Different Reactive Hg Sources and Chemical Compounds at Adjacent Valley and High Elevation Locations. *Environmental Science & Technology*, **2016**, 50, 12225-12231	10.3	21
39	Investigation of mercury accumulation in cattails growing in constructed wetland mesocosms. *Wetlands*, **2007**, 27, 1056-1065	1.7	21
38	Comparison of 4 Methods for Measurement of Reactive, Gaseous Oxidized, and Particulate Bound Mercury. *Environmental Science & Technology*, **2019**, 53, 14489-14495	10.3	21
37	The Nevada Rural Ozone Initiative (NVROI): Insights to understanding air pollution in complex terrain. *Science of the Total Environment*, **2015**, 530-531, 455-470	10.2	20
36	Assessment of the Suitability of Tree Rings as Archives of Global and Regional Atmospheric Mercury Pollution. *Environmental Science & Technology*, **2019**, 53, 3663-3671	10.3	19

35	Variability and sources of surface ozone at rural sites in Nevada, USA: Results from two years of the Nevada Rural Ozone Initiative. *Science of the Total Environment*, **2015**, 530-531, 471-482	10.2	19
34	Incorporation of radiometric tracers in peat and implications for estimating accumulation rates. *Science of the Total Environment*, **2014**, 493, 170-7	10.2	19
33	Exchange of Mercury between the Atmosphere and Terrestrial Ecosystems **2011**, 423-451		19
32	Mercury biogeochemical cycling: A synthesis of recent scientific advances. *Science of the Total Environment*, **2020**, 737, 139619	10.2	18
31	Beryllium-7 as a natural tracer for short-term downwash in peat. *Biogeochemistry*, **2014**, 119, 329-339	3.8	17
30	Investigation of the potential for mercury release from flue gas desulfurization solids applied as an agricultural amendment. *Journal of Environmental Quality*, **2014**, 43, 253-62	3.4	17
29	Results of a controlled field experiment to assess the use of tree tissue concentrations as bioindicators of air Hg. *Biogeochemistry*, **2019**, 142, 265-279	3.8	17
28	Human bones tell the story of atmospheric mercury and lead exposure at the edge of Roman World. *Science of the Total Environment*, **2020**, 710, 136319	10.2	16
27	Downwash of atmospherically deposited trace metals in peat and the influence of rainfall intensity: an experimental test. *Science of the Total Environment*, **2015**, 506-507, 95-101	10.2	14
26	Industrial-era lead and mercury contamination in southern Greenland implicates North American sources. *Science of the Total Environment*, **2018**, 613-614, 919-930	10.2	14
25	Identification of sources contributing to PM2.5 and ozone at elevated sites in the western U.S. by receptor analysis: Lassen Volcanic National Park, California, and Great Basin National Park, Nevada. *Science of the Total Environment*, **2015**, 530-531, 505-518	10.2	13
24	Improvement of quantification and identification of atmospheric reactive mercury. *Atmospheric Environment*, **2020**, 224, 117307	5.3	12
23	Development of a Particulate Mass Measurement System for Quantification of Ambient Reactive Mercury. *Environmental Science & Technology*, **2017**, 51, 436-445	10.3	11
22	Evaluation of cation exchange membrane performance under exposure to high Hg⁰ and HgBr₂ concentrations. *Atmospheric Measurement Techniques*, **2019**, 12, 1207-1217	4	11
21	What caused Earth's largest mass extinction event? New evidence from the Permian-Triassic boundary in northeastern Utah. *Global and Planetary Change*, **2019**, 177, 81-100	4.2	11
20	Investigating the influence of long-range transport on surface O3 in Nevada, USA, using observations from multiple measurement platforms. *Science of the Total Environment*, **2015**, 530-531, 493-504	10.2	9
19	Development of an Understanding of Reactive Mercury in Ambient Air: A Review. *Atmosphere*, **2021**, 12, 73	2.7	9
18	Use of Multiple Lines of Evidence to Understand Reactive Mercury Concentrations and Chemistry in Hawai'i, Nevada, Maryland, and Utah, USA. *Environmental Science & Technology*, **2020**, 54, 7922-7931	10.3	8

17	Comparison of co-located ice-core and tree-ring mercury records indicates potential radial translocation of mercury in whitebark pine. *Science of the Total Environment*, **2020**, 743, 140695	10.2	8
16	Use of multiple tools including lead isotopes to decipher sources of ozone and reactive mercury to urban and rural locations in Nevada, USA. *Science of the Total Environment*, **2018**, 615, 1411-1427	10.2	8
15	Historical trends of mercury and spheroidal carbonaceous particle deposition in sub-alpine lakes in the Great Basin, United States. *Journal of Paleolimnology*, **2014**, 52, 405-418	2.1	8
14	Gas-exchange chamber analysis of elemental mercury deposition/emission to alluvium, ore, and mine tailings. *Chemosphere*, **2015**, 131, 209-16	8.4	7
13	Improvements to the Accuracy of Atmospheric Oxidized Mercury Measurements. *Environmental Science & Technology*, **2020**, 54, 13379-13388	10.3	7
12	Influence of Natural Sources on Mercury in Water, Sediment and Aquatic Biota in Seven Tributary Streams of the East Fork of the Upper Carson River, California. *Water, Air, and Soil Pollution*, **2002**, 133, 283-295	2.6	7
11	What is in commercial cat and dog food? The case for mercury and ingredient testing. *Science of the Total Environment*, **2019**, 684, 276-280	10.2	6
10	Evidence for sites of methylmercury formation in a flowing water system: impact of anthropogenic barriers and water management. *Science of the Total Environment*, **2014**, 478, 58-69	10.2	6
9	Use of Membranes and Detailed HYSPLIT Analyses to Understand Atmospheric Particulate, Gaseous Oxidized, and Reactive Mercury Chemistry. *Environmental Science & Technology*, **2021**, 55, 893-901	10.3	6
8	Evaluation of sorption surface materials for reactive mercury compounds. *Atmospheric Environment* , **2020**, 242, 117836	5.3	5
7	Determination of the potential for release of mercury from combustion product amended soils: Part 1--Simulations of beneficial use. *Journal of the Air and Waste Management Association*, **2008**, 58, 673-83	2.4	3
6	Mercury biogeochemical cycling and processes: implications for human and ecosystem health. *Science of the Total Environment*, **2014**, 496, 635	10.2	2
5	Fate of Springtime Atmospheric Reactive Mercury: Concentrations and Deposition at Zeppelin, Svalbard. *ACS Earth and Space Chemistry*,	3.2	2
4	Determination of the potential for release of mercury from combustion product amended soils: part 2--coal fly ash generated stabilized soil and degradation products. *Journal of the Air and Waste Management Association*, **2008**, 58, 1495-508	2.4	1
3	Further investigations into the use of tree rings as archives of atmospheric mercury concentrations. *Biogeochemistry*, **2022**, 158, 167	3.8	1
2	Structural equation modeling of long-term controls on mercury and bromine accumulation in Pinheiro mire (Minas Gerais, Brazil). *Science of the Total Environment*, **2021**, 757, 143940	10.2	0
1	Development of a statistical model to identify spatial and meteorological drivers of elevated O3 in Nevada and its application to other rural mountainous regions. *Science of the Total Environment*, **2015**, 530-531, 526-533	10.2	