

Jonas Olof Sommar

List of Publications by Year in descending order

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84
papers

5,308
citations

81743

39
h-index

91712

69
g-index

99
all docs

99
docs citations

99
times ranked

2725
citing authors

#	ARTICLE	IF	CITATIONS
1	A whole-air relaxed eddy accumulation measurement system for sampling vertical vapour exchange of elemental mercury. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 65, 19940.	0.8	24
2	Sources and Transformation Mechanisms of Atmospheric Particulate Bound Mercury Revealed by Mercury Stable Isotopes. <i>Environmental Science & Technology</i> , 2022, 56, 5224-5233.	4.6	11
3	Mercury Isotope Fractionation during the Exchange of Hg(0) between the Atmosphere and Land Surfaces: Implications for Hg(0) Exchange Processes and Controls. <i>Environmental Science & Technology</i> , 2022, 56, 1445-1457.	4.6	11
4	Canopy-Level Flux and Vertical Gradients of Hg ⁰ Stable Isotopes in Remote Evergreen Broadleaf Forest Show Year-Around Net Hg ⁰ Deposition. <i>Environmental Science & Technology</i> , 2022, 56, 5950-5959.	4.6	10
5	Characteristics, Accumulation, and Potential Health Risks of Antimony in Atmospheric Particulate Matter. <i>ACS Omega</i> , 2021, 6, 9460-9470.	1.6	26
6	Quantification of Atmospheric Mercury Deposition to and Legacy Re-emission from a Subtropical Forest Floor by Mercury Isotopes. <i>Environmental Science & Technology</i> , 2021, 55, 12352-12361.	4.6	19
7	Critical Observations of Gaseous Elemental Mercury Air–Sea Exchange. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006742.	1.9	7
8	Chemistry and Isotope Fractionation of Divalent Mercury during Aqueous Reduction Mediated by Selected Oxygenated Organic Ligands. <i>Environmental Science & Technology</i> , 2021, 55, 13376-13386.	4.6	6
9	Stable Mercury Isotope Transition during Postdepositional Decomposition of Biomass in a Forest Ecosystem over Five Centuries. <i>Environmental Science & Technology</i> , 2020, 54, 8739-8749.	4.6	38
10	Recent advances in understanding and measurement of Hg in the environment: Surface-atmosphere exchange of gaseous elemental mercury (Hg ⁰). <i>Science of the Total Environment</i> , 2020, 721, 137648.	3.9	43
11	Mercury biogeochemical cycling: A synthesis of recent scientific advances. <i>Science of the Total Environment</i> , 2020, 737, 139619.	3.9	48
12	Corn (<i>Zea mays</i> L.): A low methylmercury staple cereal source and an important biospheric sink of atmospheric mercury, and health risk assessment. <i>Environment International</i> , 2019, 131, 104971.	4.8	22
13	Process factors driving dynamic exchange of elemental mercury vapor over soil in broadleaf forest ecosystems. <i>Atmospheric Environment</i> , 2019, 219, 117047.	1.9	27
14	Assessing Air–Surface Exchange and Fate of Mercury in a Subtropical Forest Using a Novel Passive Exchange-Meter Device. <i>Environmental Science & Technology</i> , 2019, 53, 4869-4879.	4.6	6
15	Stable Isotope Evidence Shows Re-emission of Elemental Mercury Vapor Occurring after Reductive Loss from Foliage. <i>Environmental Science & Technology</i> , 2019, 53, 651-660.	4.6	107
16	Comparative study of elemental mercury flux measurement techniques over a Fennoscandian boreal peatland. <i>Atmospheric Environment</i> , 2018, 172, 16-25.	1.9	18
17	Re-emission of legacy mercury from soil adjacent to closed point sources of Hg emission. <i>Environmental Pollution</i> , 2018, 242, 718-727.	3.7	49
18	Lidar mapping of atmospheric atomic mercury in the Wanshan area, China. <i>Environmental Pollution</i> , 2018, 240, 353-358.	3.7	16

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19	Using Mercury Isotopes To Understand Mercury Accumulation in the Montane Forest Floor of the Eastern Tibetan Plateau. <i>Environmental Science & Technology</i> , 2017, 51, 801-809.	4.6	102
20	Seasonal variations in metallic mercury (Hg ⁰) vapor exchange over biannual wheat-corn rotation cropland in the North China Plain. <i>Biogeosciences</i> , 2016, 13, 2029-2049.	1.3	23
21	A dual-inlet, single detector relaxed eddy accumulation system for long-term measurement of mercury flux. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 509-524.	1.2	24
22	Isotopic Composition of Atmospheric Mercury in China: New Evidence for Sources and Transformation Processes in Air and in Vegetation. <i>Environmental Science & Technology</i> , 2016, 50, 9262-9269.	4.6	139
23	Mass-Dependent and -Independent Fractionation of Mercury Isotope during Gas-Phase Oxidation of Elemental Mercury Vapor by Atomic Cl and Br. <i>Environmental Science & Technology</i> , 2016, 50, 9232-9241.	4.6	143
24	Emission-dominated gas exchange of elemental mercury vapor over natural surfaces in China. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 11125-11143.	1.9	60
25	Depletion of atmospheric gaseous elemental mercury by plant uptake at Mt. Changbai, Northeast China. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 12861-12873.	1.9	82
26	Global observations and modeling of atmosphere-surface exchange of elemental mercury: a critical review. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 4451-4480.	1.9	101
27	Mercury vapor air-surface exchange measured by collocated micrometeorological and enclosure methods - Part I: Data comparability and method characteristics. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 685-702.	1.9	47
28	Mercury vapor air-surface exchange measured by collocated micrometeorological and enclosure methods - Part II: Bias and uncertainty analysis. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 5359-5376.	1.9	34
29	Highly elevated emission of mercury vapor due to the spontaneous combustion of refuse in a landfill. <i>Atmospheric Environment</i> , 2013, 79, 540-545.	1.9	14
30	Atmospheric mercury inputs in montane soils increase with elevation: evidence from mercury isotope signatures. <i>Scientific Reports</i> , 2013, 3, 3322.	1.6	126
31	Emission characteristics and air-surface exchange of gaseous mercury at the largest active landfill in Asia. <i>Atmospheric Environment</i> , 2013, 79, 188-197.	1.9	30
32	Field Approaches to Measure Hg Exchange Between Natural Surfaces and the Atmosphere - A Review. <i>Critical Reviews in Environmental Science and Technology</i> , 2013, 43, 1657-1739.	6.6	38
33	Spatial distribution of mercury deposition fluxes in Wanshan Hg mining area, Guizhou province, China. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 6207-6218.	1.9	35
34	Environmental geochemistry of an active Hg mine in Xunyang, Shaanxi Province, China. <i>Applied Geochemistry</i> , 2012, 27, 2280-2288.	1.4	53
35	Novel Dynamic Flux Chamber for Measuring Air-Surface Exchange of Hg ⁰ from Soils. <i>Environmental Science & Technology</i> , 2012, 46, 8910-8920.	4.6	49
36	A review of studies on atmospheric mercury in China. <i>Science of the Total Environment</i> , 2012, 421-422, 73-81.	3.9	188

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37	Air-sea exchange of volatile mercury in the North Atlantic Ocean. <i>Marine Chemistry</i> , 2011, 125, 1-7.	0.9	58
38	Circumpolar measurements of speciated mercury, ozone and carbon monoxide in the boundary layer of the Arctic Ocean. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5031-5045.	1.9	42
39	Influence of Eutrophication on the Distribution of Total Mercury and Methylmercury in Hydroelectric Reservoirs. <i>Journal of Environmental Quality</i> , 2010, 39, 1624-1635.	1.0	26
40	Distribution Patterns of Inorganic Mercury and Methylmercury in Tissues of Rice (<i>Oryza sativa</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2010, 58, 4951-4958.	2.4	183
41	Mercury in the marine boundary layer and seawater of the South China Sea: Concentrations, sea/air flux, and implication for land outflow. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	104
42	Atmospheric mercury at mediterranean coastal stations. <i>Environmental Fluid Mechanics</i> , 2008, 8, 101-116.	0.7	40
43	Enhanced concentrations of dissolved gaseous mercury in the surface waters of the Arctic Ocean. <i>Marine Chemistry</i> , 2008, 110, 190-194.	0.9	121
44	Short-time variation of mercury speciation in the urban of Gästeborg during GÅ-TE-2005. <i>Atmospheric Environment</i> , 2008, 42, 8382-8388.	1.9	46
45	A synthesis of atmospheric mercury depletion event chemistry in the atmosphere and snow. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 1445-1482.	1.9	426
46	Circumpolar transport and air-surface exchange of atmospheric mercury at Ny-Ålesund (79° N), Svalbard, spring 2002. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 151-166.	1.9	58
47	New insights into the Jahn-Teller effect in NO ₃ via the dark \tilde{A}^2E^3 state. <i>Physica Scripta</i> , 2006, 73, C64-C70.	1.2	29
48	Emissions, dispersion and human exposure of mercury from a Swedish chlor-alkali plant. <i>Atmospheric Environment</i> , 2005, 39, 7451-7458.	1.9	21
49	Application of Relaxed Eddy Accumulation Technique to Quantify Hg ₀ Fluxes Over Modified Soil Surfaces. <i>Water, Air, and Soil Pollution</i> , 2005, 167, 331-352.	1.1	23
50	Cavity ringdown spectrum of the forbidden $\tilde{A}^2E^3 \rightarrow \tilde{X}^1A^2$ transition of NO ₃ : Evidence for static Jahn-Teller distortion in the \tilde{A}^2E^3 state. <i>Journal of Chemical Physics</i> , 2005, 122, 224305.	1.2	28
51	Distribution of atmospheric mercury species in Northern Europe: final results from the MOE project. <i>Atmospheric Environment</i> , 2003, 37, 9-20.	1.9	67
52	Mercury speciation in the marine boundary layer along a 6000km cruise path around the Mediterranean Sea. <i>Atmospheric Environment</i> , 2003, 37, 63-71.	1.9	124
53	Evasion of mercury from coastal and open waters of the Atlantic Ocean and the Mediterranean Sea. <i>Atmospheric Environment</i> , 2003, 37, 73-84.	1.9	126
54	Profiles of dissolved gaseous mercury concentration in the Mediterranean seawater. <i>Atmospheric Environment</i> , 2003, 37, 85-92.	1.9	48

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55	Atmospheric mercury near a chlor-alkali plant in Sweden. <i>Science of the Total Environment</i> , 2003, 304, 29-41.	3.9	52
56	Distribution of TPM in Northern Europe. <i>Science of the Total Environment</i> , 2003, 304, 53-59.	3.9	32
57	Total gaseous mercury in the atmosphere of Guiyang, PR China. <i>Science of the Total Environment</i> , 2003, 304, 61-72.	3.9	100
58	Interpretation of mercury depletion events observed at Ny-Å...lesund, Svalbard during spring 2002. <i>European Physical Journal Special Topics</i> , 2003, 107, 1353-1356.	0.2	7
59	Arctic mercury depletion events at two elevations as observed at the Zeppelin Station and Dirigibile Italia, Ny-Å...lesund, spring 2002. <i>European Physical Journal Special Topics</i> , 2003, 107, 151-154.	0.2	10
60	Exchange flux of total gaseous mercury between air and natural water surfaces in summer season. <i>Science in China Series D: Earth Sciences</i> , 2002, 45, 211-220.	0.9	11
61	Reply to discussion on "Total gaseous mercury exchange between air and water at river and sea surfaces in Swedish coastal regions" <i>Atmospheric Environment</i> , 2002, 36, 1405-1406.	1.9	1
62	Comparison of procedures for measurements of dissolved gaseous mercury in seawater performed on a Mediterranean cruise. <i>Analytical and Bioanalytical Chemistry</i> , 2002, 374, 1002-1008.	1.9	30
63	Title is missing!. <i>Water, Air, and Soil Pollution</i> , 2002, 139, 311-324.	1.1	97
64	Intercomparison of methods for sampling and analysis of atmospheric mercury species. <i>Atmospheric Environment</i> , 2001, 35, 3007-3017.	1.9	154
65	Atmospheric mercury distribution in Northern Europe and in the Mediterranean region. <i>Atmospheric Environment</i> , 2001, 35, 3019-3025.	1.9	115
66	Total gaseous mercury exchange between air and water at river and sea surfaces in Swedish coastal regions. <i>Atmospheric Environment</i> , 2001, 35, 3027-3038.	1.9	94
67	Oxidation of atomic mercury by hydroxyl radicals and photoinduced decomposition of methylmercury in the aqueous phase. <i>Atmospheric Environment</i> , 2001, 35, 3039-3047.	1.9	120
68	A kinetic study of the gas-phase reaction between the hydroxyl radical and atomic mercury. <i>Atmospheric Environment</i> , 2001, 35, 3049-3054.	1.9	214
69	Modified on-line monitoring of total gaseous mercury in flue gases using Semtech 1/2 Hg 2000 analyzer. <i>Fresenius' Journal of Analytical Chemistry</i> , 2000, 368, 528-533.	1.5	6
70	Improved determination of gaseous divalent mercury in ambient air using KCl coated denuders. <i>Fresenius' Journal of Analytical Chemistry</i> , 2000, 366, 423-428.	1.5	35
71	Distribution Equilibrium of Mercury (II) Chloride between Water and Air Applied to Flue Gas Scrubbing. <i>Journal of the Air and Waste Management Association</i> , 2000, 50, 1663-1666.	0.9	11
72	International field intercomparison measurements of atmospheric mercury species at Mace Head, Ireland. <i>Atmospheric Environment</i> , 1999, 33, 3063-3073.	1.9	197

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73	Speciation of volatile mercury species present in digester and deposit gases. <i>Applied Organometallic Chemistry</i> , 1999, 13, 441-445.	1.7	21
74	Measurements of fractionated gaseous mercury concentrations over northwestern and central Europe, 1995-99. <i>Journal of Environmental Monitoring</i> , 1999, 1, 435-439.	2.1	19
75	Increases in mercury emissions from desert soils in response to rainfall and irrigation. <i>Journal of Geophysical Research</i> , 1999, 104, 21879-21888.	3.3	127
76	Factors affecting the measurement of mercury emissions from soils with flux chambers. <i>Journal of Geophysical Research</i> , 1999, 104, 21859-21871.	3.3	70
77	Nevada STORMS project: Measurement of mercury emissions from naturally enriched surfaces. <i>Journal of Geophysical Research</i> , 1999, 104, 21831-21844.	3.3	180
78	Atmospheric mercury deposition on Fanjing Mountain Nature Reserve, Guizhou, China. <i>Chemosphere</i> , 1998, 36, 2191-2200.	4.2	25
79	Atmospheric mercury deposition to grass in southern Sweden. <i>Science of the Total Environment</i> , 1998, 213, 85-94.	3.9	20
80	Mercury pollution in a mining area of Guizhou, China: Fluxes over contaminated surfaces and concentrations in air, biological and geological samples. <i>Toxicological and Environmental Chemistry</i> , 1998, 67, 225-236.	0.6	9
81	On the Gas Phase Reactions Between Volatile Biogenic Mercury Species and the Nitrate Radical. <i>Journal of Atmospheric Chemistry</i> , 1997, 27, 233-247.	1.4	66
82	Sampling and determination of gas phase divalent mercury in the air using a KCl coated denuder. <i>Fresenius' Journal of Analytical Chemistry</i> , 1997, 358, 386-391.	1.5	50
83	Airborne concentrations and deposition fluxes of major and trace species at marine stations in Southern Scandinavia. <i>Atmospheric Environment</i> , 1996, 30, 3857-3872.	1.9	39
84	Rate of reaction between the nitrate radical and dimethyl mercury in the gas phase. <i>Chemical Physics Letters</i> , 1996, 257, 434-438.	1.2	22