Jeroen E Sonke

List of Publications by Year
in descending order

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124	8,138	38742 50	51608 86
papers	citations	h-index	g-index

131	131	131	6372
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Humic Ion-Binding Model VII: a revised parameterisation of cation-binding by humic substances. Environmental Chemistry, 2011, 8, 225.	1.5	344
2	Tundra uptake of atmospheric elemental mercury drives Arctic mercury pollution. Nature, 2017, 547, 201-204.	27.8	314
3	The GEOTRACES Intermediate Data Product 2017. Chemical Geology, 2018, 493, 210-223.	3.3	257
4	Mercury isotope fractionation during liquidâ€“vapor evaporation experiments. Geochimica Et Cosmochimica Acta, 2009, 73, 2693-2711.	3.9	244
5	Atmospheric Mercury Transfer to Peat Bogs Dominated by Gaseous Elemental Mercury Dry Deposition. Environmental Science & Technology, 2016, 50, 2405-2412.	10.0	218
6	Examination of the ocean as a source for atmospheric microplastics. PLoS ONE, 2020, 15, e0232746.	2.5	198
7	Evidence of Zn isotopic fractionation in a soilâ€“plant system of a pristine tropical watershed (Nsimi,) Tj ETQq1 1 0.784314 rgBT /Ove	3.3	182
8	A vegetation control on seasonal variations in global atmospheric mercury concentrations. Nature Geoscience, 2018, 11, 244-250.	12.9	180
9	Mercury emissions and stable isotopic compositions at Vulcano Island (Italy). Earth and Planetary Science Letters, 2009, 277, 236-243.	4.4	177
10	Lanthanideâ€“humic substances complexation. I. Experimental evidence for a lanthanide contraction effect. Geochimica Et Cosmochimica Acta, 2006, 70, 1495-1506.	3.9	170
11	Observational and Modeling Constraints on Global Anthropogenic Enrichment of Mercury. Environmental Science & Technology, 2015, 49, 4036-4047.	10.0	152
12	Zn isotopes as tracers of anthropogenic pollution from Zn-ore smelters The Riou Mortâ€“Lot River system. Chemical Geology, 2008, 255, 295-304.	3.3	145
13	A global model of mass independent mercury stable isotope fractionation. Geochimica Et Cosmochimica Acta, 2011, 75, 4577-4590.	3.9	144
14	Rapid neodymium release to marine waters from lithogenic sediments in the Amazon estuary. Nature Communications, 2015, 6, 7592.	12.8	140
15	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.	10.0	139
16	Sedimentary mercury stable isotope records of atmospheric and riverine pollution from two major European heavy metal refineries. Chemical Geology, 2010, 279, 90-100.	3.3	136
17	Historical variations in the isotopic composition of atmospheric zinc deposition from a zinc smelter. Chemical Geology, 2008, 252, 145-157.	3.3	133
18	Methylmercury photodegradation influenced by sea-ice cover in Arctic marine ecosystems. Nature Geoscience, 2011, 4, 188-194.	12.9	125

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19	Mercury Stable Isotope Signatures of World Coal Deposits and Historical Coal Combustion Emissions. Environmental Science & Technology, 2014, 48, 7660-7668.	10.0	118
20	Anomalous Mercury Isotopic Compositions of Fish and Human Hair in the Bolivian Amazon. Environmental Science & Technology, 2009, 43, 8985-8990.	10.0	117
21	Effects of in situ remediation on the speciation and bioavailability of zinc in a smelter contaminated soil. Geochimica Et Cosmochimica Acta, 2005, 69, 4649-4664.	3.9	116
22	Tracing Sources and Bioaccumulation of Mercury in Fish of Lake Baikalâ˜' Angara River Using Hg Isotopic Composition. Environmental Science & Technology, 2010, 44, 8030-8037.	10.0	113
23	A mass budget for mercury and methylmercury in the Arctic Ocean. Global Biogeochemical Cycles, 2016, 30, 560-575.	4.9	110
24	Odd Isotope Deficits in Atmospheric Hg Measured in Lichens. Environmental Science & Technology, 2009, 43, 5660-5664.	10.0	109
25	Measuring Hg Isotopes in Bioâ€Geoâ€Environmental Reference Materials. Geostandards and Geoanalytical Research, 2010, 34, 79-93.	3.1	108
26	Photoreduction of gaseous oxidized mercury changes global atmospheric mercury speciation, transport and deposition. Nature Communications, 2018, 9, 4796.	12.8	107
27	Evidence of free tropospheric and long-range transport of microplastic at Pic du Midi Observatory. Nature Communications, 2021, 12, 7242.	12.8	106
28	Hg Speciation and Stable Isotope Signatures in Human Hair As a Tracer for Dietary and Occupational Exposure to Mercury. Environmental Science & Technology, 2011, 45, 9910-9916.	10.0	101
29	Simultaneous Determination of Species-Specific Isotopic Composition of Hg by Gas Chromatography Coupled to Multicollector ICPMS. Analytical Chemistry, 2008, 80, 3530-3538.	6.5	99
30	Modelling the mercury stable isotope distribution of Earth surface reservoirs: Implications for global Hg cycling. Geochimica Et Cosmochimica Acta, 2019, 246, 156-173.	3.9	96
31	A double-stage tube furnaceâ€"acid-trapping protocol for the pre-concentration of mercury from solid samples for isotopic analysis. Analytical and Bioanalytical Chemistry, 2013, 405, 6771-6781.	3.7	92
32	A Compilation of Silicon, Rare Earth Element and Twentyâ€One other Trace Element Concentrations in the Natural River Water Reference Material <scp>SLRS</scp>â€5 (<scp>NRC</scp>â€<scp>CNRC</scp>). Geostandards and Geoanalytical Research, 2013, 37, 449-467.	3.1	92
33	Mercury stable isotopes constrain atmospheric sources to the ocean. Nature, 2021, 597, 678-682.	27.8	92
34	Mercury stable isotope fractionation in six utility boilers of two large coal-fired power plants. Chemical Geology, 2013, 336, 103-111.	3.3	91
35	Progress on Understanding Atmospheric Mercury Hampered by Uncertain Measurements. Environmental Science & Technology, 2014, 48, 7204-7206.	10.0	90
36	Isotopic Composition of Gaseous Elemental Mercury in the Free Troposphere of the Pic du Midi Observatory, France. Environmental Science & Technology, 2016, 50, 5641-5650.	10.0	85

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37	Collection of atmospheric gaseous mercury for stable isotope analysis using iodine- and chlorine-impregnated activated carbon traps. Journal of Analytical Atomic Spectrometry, 2014, 29, 841.	3.0	81
38	Holocene Atmospheric Mercury Levels Reconstructed from Peat Bog Mercury Stable Isotopes. Environmental Science & Technology, 2017, 51, 5899-5906.	10.0	81
39	The Transpolar Drift as a Source of Riverine and Shelfâ€Derived Trace Elements to the Central Arctic Ocean. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015920.	2.6	80
40	Evidence for Zn isotopic fractionation at Merapi volcano. Chemical Geology, 2008, 253, 74-82.	3.3	78
41	A capillary electrophoresis-ICP-MS study of rare earth element complexation by humic acids. Chemical Geology, 2007, 246, 170-180.	3.3	77
42	Shallow methylmercury production in the marginal sea ice zone of the central Arctic Ocean. Scientific Reports, 2015, 5, 10318.	3.3	70
43	Eurasian river spring flood observations support net Arctic Ocean mercury export to the atmosphere and Atlantic Ocean. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11586-E11594.	7.1	68
44	Seasonal and Annual Variations in Atmospheric Hg and Pb Isotopes in Xiâ€™an, China. Environmental Science & Technology, 2017, 51, 3759-3766.	10.0	67
45	Historical (1850â€“2010) mercury stable isotope inventory from anthropogenic sources to the atmosphere. Elementa, 2016, 4, .	3.2	64
46	Rare earth element analysis in natural waters by multiple isotope dilution â€“ sector field ICP-MS. Journal of Analytical Atomic Spectrometry, 2013, 28, 573.	3.0	58
47	Use of Mercury Isotopes to Quantify Mercury Exposure Sources in Inland Populations, China. Environmental Science & Technology, 2018, 52, 5407-5416.	10.0	58
48	Insights from mercury stable isotopes on terrestrialâ€“atmosphere exchange of Hg(0) in the Arctic tundra. Biogeosciences, 2019, 16, 4051-4064.	3.3	57
49	Lanthanideâ”Humic Substances Complexation. II. Calibration of Humic Ion-Binding Model Vâ€. Environmental Science & Technology, 2006, 40, 7481-7487.	10.0	54
50	Application of a selective extraction method for methylmercury compound specific stable isotope analysis (MeHg-CSIA) in biological materials. Journal of Analytical Atomic Spectrometry, 2013, 28, 1620.	3.0	54
51	A chemical and mineralogical reconstruction of Zn-smelter emissions in the Kempen region (Belgium), based on organic pool sediment cores. Science of the Total Environment, 2002, 292, 101-119.	8.0	53
52	Mercury(II) trace detection by a gold nanoparticle-modified glassy carbon electrode using square-wave anodic stripping voltammetry including a chloride desorption step. Talanta, 2015, 141, 26-32.	5.5	51
53	Mass-Independent Fractionation of Even and Odd Mercury Isotopes during Atmospheric Mercury Redox Reactions. Environmental Science & Technology, 2021, 55, 10164-10174.	10.0	51
54	Natural Hg isotopic composition of different Hg compounds in mammal tissues as a proxy for in vivo breakdown of toxic methylmercury. Metallomics, 2016, 8, 170-178.	2.4	50

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55	Methods to Investigate the Global Atmospheric Microbiome. Frontiers in Microbiology, 2019, 10, 243.	3.5	50
56	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.	7.1	50
57	Disequilibrium effects in metal speciation by capillary electrophoresis inductively coupled plasma mass spectrometry (CE-ICP-MS); theory, simulations and experimentsElectronic supplementary information (ESI) available: Computer simulations of Sm-Cit (Animation 1, corresponding with Fig. 3), Sm-HA (Animation 2, corresponding with Fig. 4) and Sm-HA-EDTA (Animation 3) separations. See http://www.rsc.org/suppdata/an/b4/b407163j/. Analyst, The, 2004, 129, 731.	3.5	49
58	Indirect gold trapâ€“MC-ICP-MS coupling for Hg stable isotope analysis using a syringe injection interface. Journal of Analytical Atomic Spectrometry, 2008, 23, 569.	3.0	49
59	Biogeochemical controls on mercury stable isotope compositions of world coal deposits: A review. Earth-Science Reviews, 2016, 152, 1-13.	9.1	49
60	Quantifying the impacts of artisanal gold mining on a tropical river system using mercury isotopes. Chemosphere, 2019, 219, 684-694.	8.2	48
61	Methylmercury produced in upper oceans accumulates in deep Mariana Trench fauna. Nature Communications, 2020, 11, 3389.	12.8	46
62	Capillary electrophoresisâ€“high resolution sector field inductively coupled plasma mass spectrometry. Journal of Chromatography A, 2007, 1159, 63-74.	3.7	45
63	Mercury fluxes from volcanic and geothermal sources: an update. Geological Society Special Publication, 2015, 410, 263-285.	1.3	43
64	Mercury Isotope Signatures of Methylmercury in Rice Samples from the Wanshan Mercury Mining Area, China: Environmental Implications. Environmental Science & Technology, 2017, 51, 12321-12328.	10.0	43
65	Atmospheric mercury speciation dynamics at the high-altitude Pic du Midi Observatory, southern France. Atmospheric Chemistry and Physics, 2016, 16, 5623-5639.	4.9	42
66	Mercury biogeochemistry: Paradigm shifts, outstanding issues and research needs. Comptes Rendus - Geoscience, 2013, 345, 213-224.	1.2	41
67	Hg-Stable Isotope Variations in Marine Top Predators of the Western Arctic Ocean. ACS Earth and Space Chemistry, 2018, 2, 479-490.	2.7	38
68	Mercury in tundra vegetation of Alaska: Spatial and temporal dynamics and stable isotope patterns. Science of the Total Environment, 2019, 660, 1502-1512.	8.0	38
69	Determination of neodymiumâ€“fulvic acid binding constants by capillary electrophoresis inductively coupled plasma mass spectrometry (CE-ICP-MS). Journal of Analytical Atomic Spectrometry, 2004, 19, 235-240.	3.0	37
70	Geochemistry of CO2-Rich Gases Venting From Submarine Volcanism: The Case of Kolumbo (Hellenic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.8	36
71	Humic acid complexation of Th, Hf and Zr in ligand competition experiments: Metal loading and pH effects. Chemical Geology, 2014, 363, 241-249.	3.3	35
72	Reconstructing historical atmospheric mercury deposition in Western Europe using: Misten peat bog cores, Belgium. Science of the Total Environment, 2013, 442, 290-301.	8.0	34

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73	Tropospheric GOM at the Pic du Midi Observatoryâ€"Correcting Bias in Denuder Based Observations. Environmental Science & Technology, 2017, 51, 863-869.	10.0	34
74	Spatial and temporal distribution of mercury and methylmercury in bivalves from the French coastline. Marine Pollution Bulletin, 2017, 114, 1096-1102.	5.0	34
75	Unequal Anthropogenic Enrichment of Mercury in Earthâ€™s Northern and Southern Hemispheres. ACS Earth and Space Chemistry, 2020, 4, 2073-2081.	2.7	34
76	Mercury speciation analysis in human hair by species-specific isotope-dilution using GCâ€"ICPâ€"MS. Analytical and Bioanalytical Chemistry, 2013, 405, 3001-3010.	3.7	31
77	Variations in the stable isotope composition of mercury in coal-bearing sequences: Indications for its provenance and geochemical processes. International Journal of Coal Geology, 2014, 133, 13-23.	5.0	31
78	Mediterranean Mercury Assessment 2022: An Updated Budget, Health Consequences, and Research Perspectives. Environmental Science & Technology, 2022, 56, 3840-3862.	10.0	31
79	Mercury stable isotope compositions of Chinese urban fine particulates in winter haze days: Implications for Hg sources and transformations. Chemical Geology, 2019, 504, 267-275.	3.3	30
80	Mercury distribution and transport in the North Atlantic Ocean along the GEOTRACES-GA01 transect. Biogeosciences, 2018, 15, 2309-2323.	3.3	29
81	Hg Stable Isotope Time Trend in Ringed Seals Registers Decreasing Sea Ice Cover in the Alaskan Arctic. Environmental Science & Technology, 2015, 49, 8977-8985.	10.0	26
82	AÂrevised pan-Arctic permafrost soil Hg pool based on Western Siberian peat Hg and carbon observations. Biogeosciences, 2020, 17, 3083-3097.	3.3	26
83	Overview: Integrative and Comprehensive Understanding on Polar Environments (iCUPE) â€" concept and initial results. Atmospheric Chemistry and Physics, 2020, 20, 8551-8592.	4.9	26
84	Mercury in the Black Sea: New Insights From Measurements and Numerical Modeling. Global Biogeochemical Cycles, 2018, 32, 529-550.	4.9	25
85	Carbon and nitrogen elemental and isotopic ratios of filter-feeding bivalves along the French coasts: An assessment of specific, geographic, seasonal and multi-decadal variations. Science of the Total Environment, 2018, 613-614, 196-207.	8.0	25
86	Enhanced particulate Hg export at the permafrost boundary, western Siberia. Environmental Pollution, 2019, 254, 113083.	7.5	25
87	Mercury isotopes as tracers of ecology and metabolism in two sympatric shark species. Environmental Pollution, 2020, 265, 114931.	7.5	25
88	Evidence that Pacific tuna mercury levels are driven by marine methylmercury production and anthropogenic inputs. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	25
89	Seasonal dissolved rare earth element dynamics of the Amazon River main stem, its tributaries, and the CuruaÃ-floodplain. Geochemistry, Geophysics, Geosystems, 2006, 7, n/a-n/a.	2.5	24
90	The effect of atmospheric mercury depletion events on the net deposition flux around Hudson Bay, Canada. Atmospheric Environment, 2010, 44, 4372-4379.	4.1	24

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91	Mercury Export Flux in the Arctic Ocean Estimated from ²³⁴Th/²³⁸U Disequilibria. ACS Earth and Space Chemistry, 2020, 4, 795-801.	2.7	22
92	Dispersion effects of laminar flow and spray chamber volume in capillary electrophoresisâ€“inductively coupled plasma-mass spectrometry: a numerical and experimental approach. Journal of Chromatography A, 2003, 1015, 205-218.	3.7	21
93	Nanogold-Decorated Silica Monoliths as Highly Efficient Solid-Phase Adsorbent for Ultratrace Mercury Analysis in Natural Waters. Analytical Chemistry, 2015, 87, 11122-11129.	6.5	21
94	Sources, cycling and transfer of mercury in the Labrador Sea (Geotraces-Geovide cruise). Marine Chemistry, 2018, 198, 64-69.	2.3	21
95	Marine versus Continental Sources of Iodine and Selenium in Rainfall at Two European High-Altitude Locations. Environmental Science & Technology, 2019, 53, 1905-1917.	10.0	20
96	The Twilight Zone as a Major Foraging Habitat and Mercury Source for the Great White Shark. Environmental Science & Technology, 2020, 54, 15872-15882.	10.0	20
97	Concentrations and stable isotopes of mercury in sharks of the Galapagos Marine Reserve: Human health concerns and feeding patterns. Ecotoxicology and Environmental Safety, 2021, 215, 112122.	6.0	20
98	Mercury species export from the Arctic to the Atlantic Ocean. Marine Chemistry, 2020, 225, 103855.	2.3	19
99	Comment on â€œThe biosphere: A homogeniser of Pb-isotope signalsâ€•by C. Reimann, B. Flem, A. Arnoldussen, P. Englmaier, T.E. Finne, F. Koller and Ã˜. Nordgulen. Applied Geochemistry, 2008, 23, 2789-2792.	3.0	18
100	Mercury stable isotope compositions in magmatic-affected coal deposits: New insights to mercury sources, migration and enrichment. Chemical Geology, 2018, 479, 86-101.	3.3	18
101	Mercury in flux. Nature Geoscience, 2012, 5, 447-448.	12.9	17
102	Recent 210Pb, 137Cs and 241Am accumulation in an ombrotrophic peatland from Amsterdam Island (Southern Indian Ocean). Journal of Environmental Radioactivity, 2017, 175-176, 164-169.	1.7	17
103	The Solomon Sea: its circulation, chemistry, geochemistry and biology explored during two oceanographic cruises. Elementa, 2017, 5, .	3.2	17
104	Carbon Stable Isotope Analysis of Methylmercury Toxin in Biological Materials by Gas Chromatography Isotope Ratio Mass Spectrometry. Analytical Chemistry, 2015, 87, 11732-11738.	6.5	15
105	Automated Stable Isotope Sampling of Gaseous Elemental Mercury (ISO-GEM): Insights into GEM Emissions from Building Surfaces. Environmental Science & Technology, 2019, 53, 4346-4354.	10.0	15
106	Holocene dynamics of the southern westerly winds over the Indian Ocean inferred from a peat dust deposition record. Quaternary Science Reviews, 2020, 231, 106169.	3.0	15
107	Title is missing!. Journal of Paleolimnology, 2003, 29, 95-107.	1.6	12
108	Transfer of marine mercury to mountain lakes. Scientific Reports, 2017, 7, 12719.	3.3	12

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109	Experimental rainwater divalent mercury speciation and photoreduction rates in the presence of halides and organic carbon. Science of the Total Environment, 2019, 697, 133821.	8.0	11
110	Compound-Specific Stable Isotope Analysis Provides New Insights for Tracking Human Monomethylmercury Exposure Sources. Environmental Science & Technology, 2021, 55, 12493-12503.	10.0	11
111	Metallic elements and Pb isotopes in PM_{2.5} in three Chinese typical megacities: spatial distribution and source apportionment. Environmental Sciences: Processes and Impacts, 2020, 22, 1718-1730.	3.5	8
112	Fate of Springtime Atmospheric Reactive Mercury: Concentrations and Deposition at Zeppelin, Svalbard. ACS Earth and Space Chemistry, 2021, 5, 3234-3246.	2.7	8
113	ENSO Climate Forcing of the Marine Mercury Cycle in the Peruvian Upwelling Zone Does Not Affect Methylmercury Levels of Marine Avian Top Predators. Environmental Science & Technology, 2021, 55, 15754-15765.	10.0	8
114	Geochemistry of terricolous lichens in the White Sea catchment area. Doklady Earth Sciences, 2013, 450, 514-520.	0.7	7
115	Climatic Controls on a Holocene Mercury Stable Isotope Sediment Record of Lake Titicaca. ACS Earth and Space Chemistry, 2022, 6, 346-357.	2.7	7
116	Fostering multidisciplinary research on interactions between chemistry, biology, and physics within the coupled cryosphere-atmosphere system. Elementa, 2019, 7, .	3.2	6
117	Foraging plasticity diversifies mercury exposure sources and bioaccumulation patterns in the world's largest predatory fish. Journal of Hazardous Materials, 2022, 425, 127956.	12.4	6
118	Arctic observations and sustainable development goals â€“ Contributions and examples from ERA-PLANET iCUPE data. Environmental Science and Policy, 2022, 132, 323-336.	4.9	6
119	Tin stable isotopes in magmatic-affected coal deposits: Insights in the geochemical behavior of tin. Applied Geochemistry, 2020, 119, 104641.	3.0	5
120	Hg concentrations and stable isotope variations in tropical fish species of a gold-mining-impacted watershed in French Guiana. Environmental Science and Pollution Research, 2021, 28, 60609-60621.	5.3	4
121	Mercury stable isotopes suggest reduced foraging depth in oxygen minimum zones for blue sharks. Marine Pollution Bulletin, 2022, 181, 113892.	5.0	3
122	Evidence for interhemispheric mercury exchange in the Pacific Ocean upper troposphere. Journal of Geophysical Research D: Atmospheres, 0, , .	3.3	2
123	Geochemical and isotopic record of anthropogenic activitiesÂâ€“ Thematic issue dedicated to Jean Carignan (1965â€“2012). Part 1: Radiogenic isotopes and elemental geochemistry. Comptes Rendus - Geoscience, 2015, 347, 213-214.	1.2	1
124	Atmospheric formaldehyde at El Teide and Pic du Midi remote high-altitude sites. Atmospheric Environment, 2020, 234, 117618.	4.1	1