Matthew Landis

List of Publications by Citations

88 papers	4,003 citations	34 h-index	62 g-index
92 ext. papers	4,429 ext. citations	6.8 avg, IF	5.34 L-index

#	Paper	IF	Citations
88	Dynamic oxidation of gaseous mercury in the Arctic troposphere at polar sunrise. *Environmental Science & Technology*, **2002**, 36, 1245-56	10.3	484
87	Development and characterization of an annular denuder methodology for the measurement of divalent inorganic reactive gaseous mercury in ambient air. *Environmental Science & Technology*, **2002**, 36, 3000-9	10.3	373
86	Atmospheric mercury deposition to Lake Michigan during the Lake Michigan Mass Balance Study. *Environmental Science & Technology*, **2002**, 36, 4518-24	10.3	154
85	Field evaluation of low-cost particulate matter sensors in high- and low-concentration environments. *Atmospheric Measurement Techniques*, **2018**, 11, 4823-4846	4	143
84	Sources of mercury wet deposition in Eastern Ohio, USA. *Environmental Science & Technology*, **2006**, 40, 5874-81	10.3	140
83	Atmospheric mercury concentrations observed at ground-based monitoring sites globally distributed in the framework of the GMOS network. *Atmospheric Chemistry and Physics*, **2016**, 16, 11915-11935	6.8	122
82	Gaseous elemental mercury in the marine boundary layer: evidence for rapid removal in anthropogenic pollution. *Environmental Science & Technology*, **2003**, 37, 3755-63	10.3	119
81	Atmospheric mercury in the Lake Michigan basin: influence of the Chicago/Gary urban area. *Environmental Science & Technology*, **2002**, 36, 4508-17	10.3	119
80	Critical Evaluation of a Modified Automatic Wet-Only Precipitation Collector for Mercury and Trace Element Determinations. *Environmental Science & Technology*, **1997**, 31, 2610-2615	10.3	94
79	Personal exposures to PM2.5 mass and trace elements in Baltimore, MD, USA. *Atmospheric Environment*, **2001**, 35, 6511-6524	5.3	93
78	The use of Pb, Sr, and Hg isotopes in Great Lakes precipitation as a tool for pollution source attribution. *Science of the Total Environment*, **2015**, 502, 362-74	10.2	91
77	Source apportionment of ambient fine particulate matter in Dearborn, Michigan, using hourly resolved PM chemical composition data. *Science of the Total Environment*, **2013**, 448, 2-13	10.2	77
76	Mutagenicity and Lung Toxicity of Smoldering vs. Flaming Emissions from Various Biomass Fuels: Implications for Health Effects from Wildland Fires. *Environmental Health Perspectives*, **2018**, 126, 017011	8.4	76
75	Divalent inorganic reactive gaseous mercury emissions from a mercury cell chlor-alkali plant and its impact on near-field atmospheric dry deposition. *Atmospheric Environment*, **2004**, 38, 613-622	5.3	74
74	Receptor modeling of ambient and personal exposure samples: 1998 Baltimore Particulate Matter Epidemiology-Exposure Study. *Atmospheric Environment*, **2003**, 37, 3289-3302	5.3	74
73	Individual particle analysis of indoor, outdoor, and community samples from the 1998 Baltimore particulate matter study. *Atmospheric Environment*, **2001**, 35, 3935-3946	5.3	73
72	Intensive atmospheric mercury measurements at Terra Nova Bay in Antarctica during November and December 2000. *Journal of Geophysical Research*, **2002**, 107, ACH 20-1-ACH 20-8		73

71	Reactive mercury in the troposphere: Model formation and results for Florida, the northeastern United States, and the Atlantic Ocean. *Journal of Geophysical Research*, **2007**, 112,		72
70	Fluxes of reactive gaseous mercury measured with a newly developed method using relaxed eddy accumulation. *Atmospheric Environment*, **2006**, 40, 5452-5463	5.3	69
69	Source apportionment of ambient fine and coarse particulate matter at the Fort McKay community site, in the Athabasca Oil Sands Region, Alberta, Canada. *Science of the Total Environment*, **2017**, 584-585, 105-117	10.2	67
68	Ft. McHenry tunnel study: Source profiles and mercury emissions from diesel and gasoline powered vehicles. *Atmospheric Environment*, **2007**, 41, 8711-8724	5.3	65
67	The Near-Road Exposures and Effects of Urban Air Pollutants Study (NEXUS): study design and methods. *Science of the Total Environment*, **2013**, 448, 38-47	10.2	64
66	The impact of the 2016 Fort McMurray Horse River Wildfire on ambient air pollution levels in the Athabasca Oil Sands Region, Alberta, Canada. *Science of the Total Environment*, **2018**, 618, 1665-1676	10.2	61
65	The dry-deposition of speciated mercury to the Florida Everglades: Measurements and modeling. *Atmospheric Environment*, **2007**, 41, 136-149	5.3	55
64	Concentrations and solubility of metals from indoor and personal exposure PM2.5 samples. *Atmospheric Environment*, **2004**, 38, 237-247	5.3	51
63	The effects of the coastal environment on the atmospheric mercury cycle. *Journal of Geophysical Research*, **2003**, 108,		50
62	Impacts of a large boreal wildfire on ground level atmospheric concentrations of PAHs, VOCs and ozone. *Atmospheric Environment*, **2018**, 178, 19-30	5.3	43
61	Identification of sources and estimation of emission profiles from highly time-resolved pollutant measurements in Tampa, FL. *Atmospheric Environment*, **2006**, 40, 467-481	5.3	41
60	Atmospheric mercury species measured in Guiyang, Guizhou province, southwest China. *Atmospheric Research*, **2011**, 100, 93-102	5.4	39
59	Air synthesis review: polycyclic aromatic compounds in the oil sands region. *Environmental Reviews*, **2018**, 26, 430-468	4.5	39
58	Oxidation of gaseous elemental mercury to gaseous divalent mercury during 2003 polar sunrise at Ny-Alesund. *Environmental Science & Technology*, **2005**, 39, 9156-65	10.3	35
57	Source apportionment of an epiphytic lichen biomonitor to elucidate the sources and spatial distribution of polycyclic aromatic hydrocarbons in the Athabasca Oil Sands Region, Alberta, Canada. *Science of the Total Environment*, **2019**, 654, 1241-1257	10.2	34
56	Differential accumulation of PAHs, elements, and Pb isotopes by five lichen species from the Athabasca Oil Sands Region in Alberta, Canada. *Chemosphere*, **2017**, 184, 700-710	8.4	34
55	An application of passive samplers to understand atmospheric mercury concentration and dry deposition spatial distributions. *Journal of Environmental Monitoring*, **2012**, 14, 2976-82		34
54	Deposition and emission of gaseous mercury to and from Lake Michigan during the Lake Michigan Mass Balance Study (July, 1994-October, 1995). *Environmental Science & Technology*, **2002**, 36, 4525-32	10.3	34

53	Spatial variability of mercury wet deposition in eastern Ohio: summertime meteorological case study analysis of local source influences. *Environmental Science & Technology*, **2009**, 43, 4946-53	10.3	33
52	Receptor Modeling of Epiphytic Lichens to Elucidate the Sources and Spatial Distribution of Inorganic Air Pollution in the Athabasca Oil Sands Region. *Developments in Environmental Science*, **2012**, 11, 427-467		32
51	Application of EPA unmix and nonparametric wind regression on high time resolution trace elements and speciated mercury in Tampa, Florida aerosol. *Environmental Science & Technology* , **2011**, 45, 3511-8	10.3	30
50	Systemic translocation of (70)zinc: kinetics following intratracheal instillation in rats. *Toxicology and Applied Pharmacology*, **2009**, 234, 25-32	4.6	30
49	Behavior of mercury emissions from a commercial coal-fired power plant: the relationship between stack speciation and near-field plume measurements. *Environmental Science & Technology*, **2014**, 48, 13540-8	10.3	28
48	Atmospheric mercury behavior at different altitudes at Ny Alesund during Spring 2003. *Atmospheric Environment*, **2005**, 39, 7646-7656	5.3	27
47	Performance of a new diffusive sampler for Hg0 determination in the troposphere. *Environmental Chemistry*, **2007**, 4, 75	3.2	26
46	Determination of polycyclic aromatic hydrocarbons, dibenzothiophene, and alkylated homologs in the lichen Hypogymnia physodes by gas chromatography using single quadrupole mass spectrometry and time-of-flight mass spectrometry. *Journal of Chromatography A*, **2017**, 1492, 106-116	4.5	25
45	Particulate-phase mercury emissions from biomass burning and impact on resulting deposition: a modelling assessment. *Atmospheric Chemistry and Physics*, **2017**, 17, 1881-1899	6.8	25
44	The role of fuel type and combustion phase on the toxicity of biomass smoke following inhalation exposure in mice. *Archives of Toxicology*, **2019**, 93, 1501-1513	5.8	22
43	Source Analysis of Pollutant Elements in Winter Air Deposition in the Athabasca Oil Sands Region: A Temporal and Spatial Study. *ACS Earth and Space Chemistry*, **2019**, 3, 1656-1668	3.2	22
42	Near-road enhancement and solubility of fine and coarse particulate matter trace elements near a major interstate in Detroit, Michigan. *Atmospheric Environment*, **2016**, 145, 213-224	5.3	22
41	Chemical characterization of ambient particulate matter near the World Trade Center: elemental carbon, organic carbon, and mass reconstruction. *Environmental Science & Technology*, **2004**, 38, 4465-73	10.3	21
40	The impact of commercially treated oil and gas produced water discharges on bromide concentrations and modeled brominated trihalomethane disinfection byproducts at two downstream municipal drinking water plants in the upper Allegheny River, Pennsylvania, USA. *Science of the Total Environment*, **2018**, 542, 505-20	10.2	20
39	Chemical characterization of volatile organic compounds near the World Trade Center: Ambient concentrations and source apportionment. *Atmospheric Environment*, **2007**, 41, 5673-5683	5.3	20
38	Source apportionment of ambient fine and coarse particulate matter polycyclic aromatic hydrocarbons at the Bertha Ganter-Fort McKay community site in the Oil Sands Region of Alberta, Canada. *Science of the Total Environment*, **2019**, 666, 540-558	10.2	19
37	Differential effects of particulate matter upwind and downwind of an urban freeway in an allergic mouse model. *Environmental Science & Technology*, **2015**, 49, 3930-9	10.3	19
36	Coupling meteorology, metal concentrations, and Pb isotopes for source attribution in archived precipitation samples. *Science of the Total Environment*, **2013**, 448, 141-50	10.2	19

35	Comparing field performances of denuder techniques in the high Arctic. *Atmospheric Environment*, **2007**, 41, 1604-1615	5.3	19
34	Using Pb isotope ratios of particulate matter and epiphytic lichens from the Athabasca Oil Sands Region in Alberta, Canada to quantify local, regional, and global Pb source contributions. *Science of the Total Environment*, **2019**, 654, 1293-1304	10.2	17
33	Sea surface temperature variation linked to elemental mercury concentrations measured on Mauna Loa. *Geophysical Research Letters*, **2016**, 43, 7751-7757	4.9	17
32	Physical and Chemical Characterization of Residual Oil-Fired Power Plant Emissions. *Energy & Fuels*, **2009**, 23, 2544-2551	4.1	17
31	Mercury Concentration and Isotopic Composition of Epiphytic Tree Lichens in the Athabasca Oil Sands Region. *Developments in Environmental Science*, **2012**, 373-390		16
30	Investigation of mercury wet deposition physicochemistry in the Ohio River Valley through automated sequential sampling. *Science of the Total Environment*, **2013**, 448, 107-19	10.2	15
29	The Monitoring and Modelling of Hg Species in Support of Local, Regional and Global Modelling **2005**, 123-151		15
28	Ambient concentrations and total deposition of inorganic sulfur, inorganic nitrogen and base cations in the Athabasca Oil Sands Region. *Science of the Total Environment*, **2020**, 706, 134864	10.2	15
27	Investigating the impact of local urban sources on total atmospheric mercury wet deposition in Cleveland, Ohio, USA. *Atmospheric Environment*, **2016**, 127, 262-271	5.3	14
26	Use of an epiphytic lichen and a novel geostatistical approach to evaluate spatial and temporal changes in atmospheric deposition in the Athabasca Oil Sands Region, Alberta, Canada. *Science of the Total Environment*, **2019**, 692, 1005-1021	10.2	13
25	Source identification of PM2.5 in Steubenville, Ohio using a hybrid method for highly time-resolved data. *Environmental Science & Technology*, **2014**, 48, 1718-26	10.3	13
24	Coupling Lead Isotopes and Element Concentrations in Epiphytic Lichens to Track Sources of Air Emissions in the Athabasca Oil Sands Region. *Developments in Environmental Science*, **2012**, 11, 343-372		11
23	Comments on Atmospheric mercury species in the European Arctic: measurements and modeling by Berg et al. Atmospheric Environment 14 (2001), 2569–2582. *Atmospheric Environment*, **2001**, 35, 5377-5378	5.3	10
22	Chemical composition and source apportionment of size fractionated particulate matter in Cleveland, Ohio, USA. *Environmental Pollution*, **2016**, 218, 1180-1190	9.3	10
21	Characteristics and distributions of atmospheric mercury emitted from anthropogenic sources in Guiyang, southwestern China. *Acta Geochimica*, **2016**, 35, 240-250	2.2	9
20	Environmental Chamber Studies of Mercury Reactions in the Atmosphere **2005**, 193-212		9
19	Wind Tunnel Evaluation of an Aircraft-Borne Sampling System. *Aerosol Science and Technology*, **2004**, 38, 311-321	3.4	8
18	The U.S. EPA wildland fire sensor challenge: Performance and evaluation of solver submitted multi-pollutant sensor systems. *Atmospheric Environment*, **2021**, 247, 118165-118165	5.3	8

17	Performance evaluation of modified Semi-continuous Elements in Aerosol Sampler-III. *Atmospheric Environment*, **2011**, 45, 6751-6759	5.3	7
16	Comment on "Measurements of atmospheric mercury species at a coastal site in the Antarctic and over the South Atlantic Ocean during polar summer". *Environmental Science & Technology*, **2003**, 37, 3239-40; author reply 3241-2	10.3	7
15	Comparison of ozone measurement methods in biomass burning smoke: an evaluation under field and laboratory conditions. *Atmospheric Measurement Techniques*, **2021**, 14, 1783-1800	4	7
14	Application of ICP-OES for evaluating energy extraction and production wastewater discharge impacts on surface waters in Western Pennsylvania. *Science of the Total Environment*, **2015**, 529, 21-9	10.2	6
13	Volatile Organic Compound Emissions from Prescribed Burning in Tallgrass Prairie Ecosystems. *Atmosphere*, **2019**, 10, 1-464	2.7	5
12	An Artificial Turf-Based Surrogate Surface Collector for the Direct Measurement of Atmospheric Mercury Dry Deposition. *International Journal of Environmental Research and Public Health*, **2017**, 14,	4.6	5
11	Method for Extraction and Multielement Analysis of Hypogymnia physodes samples from the Athabasca Oil Sands Region. *Developments in Environmental Science*, **2012**, 11, 315-342		5
10	The superstatistical nature and interoccurrence time of atmospheric mercury concentration fluctuations. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 764-774	4.4	4
9	Chemical characterization and sources of PM at 12-hr resolution in Guiyang, China. *Acta Geochimica*, **2018**, 37, 334-345	2.2	4
8	Atmospheric Mercury Concentrations observed at ground-based monitoring sites globally distributed in the framework of the GMOS network **2016**,		2
7	Combustion-Related Organic Species in Temporally Resolved Urban Airborne Particulate Matter. *Air Quality, Atmosphere and Health*, **2017**, 10, 917-927	5.6	1
6	Temporal determination of heavy metals in PM2.5from Guiyang, Guizhou province, southwestern China. *E3S Web of Conferences*, **2013**, 1, 20008	0.5	1
5	Comment on Mercury concentrations in coastal California precipitation: Evidence of local and trans-Pacific fluxes of mercury to North America by D. J. Steding and A. R. Flegal. *Journal of Geophysical Research*, **2003**, 108,		1
4	Signal Decomposition of Conductivity Sensor Measurements on the Allegheny River, Pennsylvania. *Journal of Environmental Engineering, ASCE*, **2018**, 144,	2	1
3	Associations of Air Pollution and Pediatric Asthma in Cleveland, Ohio. *Scientific World Journal, The*, **2021**, 2021, 8881390	2.2	1
2	Evaluation of small form factor, filter-based PM samplers for temporary non-regulatory monitoring during wildland fire smoke events.. *Atmospheric Environment*, **2021**, 265, 1-8	5.3	1
1	Evaluation of Cairpol and Aeroqual Air Sensors in Biomass Burning Plumes. *Atmosphere*, **2022**, 13, 877	2.7	1