# Randall V Martin

## List of Publications by Citations

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ext. citations

avg, IF

L-index

#	Paper	IF	Citations
355	A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. <i>Lancet, The</i> , <b>2012</b> , 380, 2224-60	40	7625
354	Estimates and 25-year trends of the global burden of disease attributable to ambient air pollution: an analysis of data from the Global Burden of Diseases Study 2015. <i>Lancet, The</i> , <b>2017</b> , 389, 1907-1918	40	2658
353	Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. <i>Lancet, The</i> , <b>2016</b> , 388, 1659-1724	40	2431
352	Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 188 countries, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. <i>Lancet, The</i> , <b>2015</b> , 386, 2287-323	40	1776
351	Global estimates of ambient fine particulate matter concentrations from satellite-based aerosol optical depth: development and application. <i>Environmental Health Perspectives</i> , <b>2010</b> , 118, 847-55	8.4	1174
350	Tropospheric Aerosol Optical Thickness from the GOCART Model and Comparisons with Satellite and Sun Photometer Measurements. <i>Journals of the Atmospheric Sciences</i> , <b>2002</b> , 59, 461-483	2.1	1004
349	Global estimates of mortality associated with long-term exposure to outdoor fine particulate matter. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 959	2- <del>95</del> 97	810
348	Ambient Air Pollution Exposure Estimation for the Global Burden of Disease 2013. <i>Environmental Science &amp; Environmental Scienc</i>	10.3	682
347	Global Estimates of Fine Particulate Matter using a Combined Geophysical-Statistical Method with Information from Satellites, Models, and Monitors. <i>Environmental Science &amp; Environmental Science &amp; E</i>	10.3	627
346	Use of satellite observations for long-term exposure assessment of global concentrations of fine particulate matter. <i>Environmental Health Perspectives</i> , <b>2015</b> , 123, 135-43	8.4	569
345	Interannual and seasonal variability of biomass burning emissions constrained by satellite observations. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108, ACH 1-1		534
344	Exposure assessment for estimation of the global burden of disease attributable to outdoor air pollution. <i>Environmental Science &amp; Environmental Scien</i>	10.3	503
343	Transboundary health impacts of transported global air pollution and international trade. <i>Nature</i> , <b>2017</b> , 543, 705-709	50.4	501
342	Sources of carbonaceous aerosols over the United States and implications for natural visibility. Journal of Geophysical Research, <b>2003</b> , 108,		411
341	Living near major roads and the incidence of dementia, Parkinson's disease, and multiple sclerosis: a population-based cohort study. <i>Lancet, The</i> , <b>2017</b> , 389, 718-726	40	401
340	Risk of nonaccidental and cardiovascular mortality in relation to long-term exposure to low concentrations of fine particulate matter: a Canadian national-level cohort study. <i>Environmental Health Perspectives</i> , <b>2012</b> , 120, 708-14	8.4	396
339	Global and regional decreases in tropospheric oxidants from photochemical effects of aerosols. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108, n/a-n/a		390

338	Global inventory of nitrogen oxide emissions constrained by space-based observations of NO2 columns. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		374	
337	Global partitioning of NOx sources using satellite observations: relative roles of fossil fuel combustion, biomass burning and soil emissions. <i>Faraday Discussions</i> , <b>2005</b> , 130, 407-23; discussion 491-517, 519-24	3.6	337	
336	Satellite remote sensing of surface air quality. Atmospheric Environment, 2008, 42, 7823-7843	5.3	328	
335	Estimating ground-level PM2.5 using aerosol optical depth determined from satellite remote sensing. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		326	
334	Ambient PM2.5, Opand NOExposures and Associations with Mortality over 16 Years of Follow-Up in the Canadian Census Health and Environment Cohort (CanCHEC). <i>Environmental Health Perspectives</i> , <b>2015</b> , 123, 1180-6	8.4	303	
333	Measuring the health-related Sustainable Development Goals in 188 countries: a baseline analysis from the Global Burden of Disease Study 2015. <i>Lancet, The</i> , <b>2016</b> , 388, 1813-1850	40	302	
332	Mapping isoprene emissions over North America using formaldehyde column observations from space. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		295	
331	An improved retrieval of tropospheric nitrogen dioxide from GOME. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACH 9-1		293	
330	Emissions estimation from satellite retrievals: A review of current capability. <i>Atmospheric Environment</i> , <b>2013</b> , 77, 1011-1042	5.3	270	
329	Air mass factor formulation for spectroscopic measurements from satellites: Application to formaldehyde retrievals from the Global Ozone Monitoring Experiment. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 14539-14550		269	
328	Steps towards a mechanistic model of global soil nitric oxide emissions: implementation and space based-constraints. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 7779-7795	6.8	236	
327	Ground-level nitrogen dioxide concentrations inferred from the satellite-borne Ozone Monitoring Instrument. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		233	
326	"What We Breathe Impacts Our Health: Improving Understanding of the Link between Air Pollution and Health". <i>Environmental Science &amp; Environmental Sci</i>	10.3	229	
325	Analysis of aircraft and satellite measurements from the Intercontinental Chemical Transport Experiment (INTEX-B) to quantify long-range transport of East Asian sulfur to Canada. <i>Atmospheric Chemistry and Physics</i> , <b>2008</b> , 8, 2999-3014	6.8	229	
324	Spatial analysis of air pollution and mortality in California. <i>American Journal of Respiratory and Critical Care Medicine</i> , <b>2013</b> , 188, 593-9	10.2	227	
323	Regional Estimates of Chemical Composition of Fine Particulate Matter Using a Combined Geoscience-Statistical Method with Information from Satellites, Models, and Monitors. <i>Environmental Science &amp; Description of Statistical Method with Information From Satellites, Models, and Monitors.</i>	10.3	224	
322	Measuring progress and projecting attainment on the basis of past trends of the health-related Sustainable Development Goals in 188 countries: an analysis from the Global Burden of Disease Study 2016. <i>Lancet, The</i> , <b>2017</b> , 390, 1423-1459	40	224	
321	Transatlantic transport of pollution and its effects on surface ozone in Europe and North America.  Journal of Geophysical Research, 2002, 107, ACH 4-1		220	

320	Measuring progress from 1990 to 2017 and projecting attainment to 2030 of the health-related Sustainable Development Goals for 195 countries and territories: a systematic analysis for the Global Burden of Disease Study 2017. <i>Lancet, The,</i> <b>2018</b> , 392, 2091-2138	40	210
319	Outdoor air pollution, preterm birth, and low birth weight: analysis of the world health organization global survey on maternal and perinatal health. <i>Environmental Health Perspectives</i> , <b>2014</b> , 122, 425-30	8.4	199
318	Atmospheric ammonia and particulate inorganic nitrogen over the United States. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 10295-10312	6.8	194
317	Fifteen-year global time series of satellite-derived fine particulate matter. <i>Environmental Science &amp; Environmental &amp;</i>	10.3	193
316	Application of satellite observations for timely updates to global anthropogenic NOx emission inventories. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	193
315	Estimates of global mortality attributable to particulate air pollution using satellite imagery. <i>Environmental Research</i> , <b>2013</b> , 120, 33-42	7.9	192
314	Exposure to ambient air pollution and the incidence of dementia: A population-based cohort study. <i>Environment International</i> , <b>2017</b> , 108, 271-277	12.9	185
313	Satellite observations of formaldehyde over North America from GOME. <i>Geophysical Research Letters</i> , <b>2000</b> , 27, 3461-3464	4.9	185
312	SO2 emissions and lifetimes: Estimates from inverse modeling using in situ and global, space-based (SCIAMACHY and OMI) observations. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		182
311	Risk of incident diabetes in relation to long-term exposure to fine particulate matter in Ontario, Canada. <i>Environmental Health Perspectives</i> , <b>2013</b> , 121, 804-10	8.4	181
310	Indirect validation of tropospheric nitrogen dioxide retrieved from the OMI satellite instrument: Insight into the seasonal variation of nitrogen oxides at northern midlatitudes. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		181
309	Application of OMI observations to a space-based indicator of NOx and VOC controls on surface ozone formation. <i>Atmospheric Environment</i> , <b>2010</b> , 44, 2213-2223	5.3	179
308	High-Resolution Satellite-Derived PM2.5 from Optimal Estimation and Geographically Weighted Regression over North America. <i>Environmental Science &amp; Environmental Science &amp; En</i>	10.3	169
307	Creating national air pollution models for population exposure assessment in Canada. <i>Environmental Health Perspectives</i> , <b>2011</b> , 119, 1123-9	8.4	167
306	Tropospheric Emissions: Monitoring of Pollution (TEMPO). <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2017</b> , 186, 17-39	2.1	163
305	Estimating long-term PM2.5 concentrations in China using satellite-based aerosol optical depth and a chemical transport model. <i>Remote Sensing of Environment</i> , <b>2015</b> , 166, 262-270	13.2	162
304	A hybrid approach to estimating national scale spatiotemporal variability of PM2.5 in the contiguous United States. <i>Environmental Science &amp; Environmental Science &amp; Environme</i>	10.3	160
303	Evaluation of space-based constraints on global nitrogen oxide emissions with regional aircraft measurements over and downwind of eastern North America. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		159

302	Space-based constraints on the production of nitric oxide by lightning. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		157	
301	Evolution of Asian aerosols during transpacific transport in INTEX-B. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 7257-7287	6.8	155	
300	Interpretation of TOMS observations of tropical tropospheric ozone with a global model and in situ observations. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACH 4-1		154	
299	Ozone profile and tropospheric ozone retrievals from the Global Ozone Monitoring Experiment: Algorithm description and validation. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		153	
298	Global Estimates and Long-Term Trends of Fine Particulate Matter Concentrations (1998-2018). <i>Environmental Science &amp; Environmental Science &amp; Environm</i>	10.3	143	
297	Evaluation of OMI operational standard NO<sub>2</sub> column retrievals using in situ and surface-based NO<sub>2</sub> observations. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 11587-11609	6.8	143	
296	Characterization of a large biogenic secondary organic aerosol event from eastern Canadian forests. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 2825-2845	6.8	141	
295	Remote sensed and in situ constraints on processes affecting tropical tropospheric ozone. <i>Atmospheric Chemistry and Physics</i> , <b>2007</b> , 7, 815-838	6.8	141	
294	Growth in NO<sub>x</sub> emissions from power plants in China: bottom-up estimates and satellite observations. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 4429-4447	6.8	139	
293	North American pollution outflow and the trapping of convectively lifted pollution by upper-level anticyclone. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		139	
292	Spatial association between ambient fine particulate matter and incident hypertension. <i>Circulation</i> , <b>2014</b> , 129, 562-9	16.7	135	
291	Estimates of the Global Burden of Ambient [Formula: see text], Ozone, and [Formula: see text] on Asthma Incidence and Emergency Room Visits. <i>Environmental Health Perspectives</i> , <b>2018</b> , 126, 107004	8.4	132	
290	Retrieving tropospheric nitrogen dioxide from the Ozone Monitoring Instrument: effects of aerosols, surface reflectance anisotropy, and vertical profile of nitrogen dioxide. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 1441-1461	6.8	130	
289	Urban greenness and mortality in Canada's largest cities: a national cohort study. <i>Lancet Planetary Health, The</i> , <b>2017</b> , 1, e289-e297	9.8	129	
288	Scaling relationship for NO2 pollution and urban population size: a satellite perspective. <i>Environmental Science &amp; Environmental Science &amp; Environmen</i>	10.3	129	
287	Satellite-based estimates of ground-level fine particulate matter during extreme events: A case study of the Moscow fires in 2010. <i>Atmospheric Environment</i> , <b>2011</b> , 45, 6225-6232	5.3	129	
286	Western European land use regression incorporating satellite- and ground-based measurements of NO2 and PM10. <i>Environmental Science &amp; Environmental Sc</i>	10.3	127	
285	Indonesian wildfires of 1997: Impact on tropospheric chemistry. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		122	

284	Long-term fine particulate matter exposure and mortality from diabetes in Canada. <i>Diabetes Care</i> , <b>2013</b> , 36, 3313-20	14.6	119
283	Development of West-European PM and NO land use regression models incorporating satellite-derived and chemical transport modelling data. <i>Environmental Research</i> , <b>2016</b> , 151, 1-10	7.9	118
282	Global chemical composition of ambient fine particulate matter for exposure assessment. <i>Environmental Science &amp; Environmental Science &amp; Environmental</i>	10.3	118
281	Multi-model ensemble simulations of tropospheric NO<sub>2</sub> compared with GOME retrievals for the year 2000. <i>Atmospheric Chemistry and Physics</i> , <b>2006</b> , 6, 2943-2979	6.8	118
280	High resolution mapping of nitrogen dioxide with TROPOMI: First results and validation over the Canadian oil sands. <i>Geophysical Research Letters</i> , <b>2019</b> , 46, 1049-1060	4.9	117
279	Satellite mapping of rain-induced nitric oxide emissions from soils. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109, n/a-n/a		116
278	Risk estimates of mortality attributed to low concentrations of ambient fine particulate matter in the Canadian community health survey cohort. <i>Environmental Health</i> , <b>2016</b> , 15, 18	6	114
277	A tropospheric ozone maximum over the Middle East. <i>Geophysical Research Letters</i> , <b>2001</b> , 28, 3235-3238	84.9	113
276	Long-Term Trends Worldwide in Ambient NO2 Concentrations Inferred from Satellite Observations. <i>Environmental Health Perspectives</i> , <b>2016</b> , 124, 281-9	8.4	113
275	Global Land Use Regression Model for Nitrogen Dioxide Air Pollution. <i>Environmental Science &amp; Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 6957-6964	10.3	111
274	Improved satellite retrievals of NO<sub>2</sub> and SO<sub>2</sub> over the Canadian oil sands and comparisons with surface measurements. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 3637-3656	6.8	110
273	Space-based diagnosis of surface ozone sensitivity to anthropogenic emissions. <i>Geophysical Research Letters</i> , <b>2004</b> , 31, n/a-n/a	4.9	110
272	Sources of tropospheric ozone along the Asian Pacific Rim: An analysis of ozonesonde observations. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACH 3-1-ACH 3-19		107
271	Spatial PM, NO, O and BC models for Western Europe - Evaluation of spatiotemporal stability. <i>Environment International</i> , <b>2018</b> , 120, 81-92	12.9	106
270	Space-based detection of missing sulfur dioxide sources of global air pollution. <i>Nature Geoscience</i> , <b>2016</b> , 9, 496-500	18.3	105
269	Worldwide biogenic soil NO<sub>x</sub> emissions inferred from OMI NO<sub>2</sub> observations. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 10363-10381	6.8	105
268	Long-term exposure to fine particulate matter: association with nonaccidental and cardiovascular mortality in the agricultural health study cohort. <i>Environmental Health Perspectives</i> , <b>2014</b> , 122, 609-15	8.4	105
267	Aerosol size-dependent below-cloud scavenging by rain and snow in the ECHAM5-HAM.  Atmospheric Chemistry and Physics, 2009, 9, 4653-4675	6.8	104

## (2016-2009)

266	Size-resolved aerosol chemistry on Whistler Mountain, Canada with a high-resolution aerosol mass spectrometer during INTEX-B. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 3095-3111	6.8	104	
265	Data Integration for the Assessment of Population Exposure to Ambient Air Pollution for Global Burden of Disease Assessment. <i>Environmental Science &amp; Disease Assessment. Environmental Science &amp; Disease Assessment Disease Assessment Disease Assessment Disease Assessment Disease Assessment Disease Assessment Disease Di</i>	10.3	102	
264	Impacts of coal burning on ambient PM<sub>2.5</sub> pollution in China. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 4477-4491	6.8	102	
263	Seasonal and interannual variability of North American isoprene emissions as determined by formaldehyde column measurements from space. <i>Geophysical Research Letters</i> , <b>2003</b> , 30, n/a-n/a	4.9	100	
262	Simulation of nitrate, sulfate, and ammonium aerosols over the United States. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 11213-11227	6.8	98	
261	Ambient air pollution and adverse birth outcomes: Differences by maternal comorbidities. <i>Environmental Research</i> , <b>2016</b> , 148, 457-466	7.9	98	
260	Associations between fine particulate matter and mortality in the 2001 Canadian Census Health and Environment Cohort. <i>Environmental Research</i> , <b>2017</b> , 159, 406-415	7.9	97	
259	Optimal estimation for global ground-level fine particulate matter concentrations. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 5621-5636	4.4	97	
258	Quantification of the factors controlling tropical tropospheric ozone and the South Atlantic maximum. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		95	
257	Retrieval of vertical columns of sulfur dioxide from SCIAMACHY and OMI: Air mass factor algorithm development, validation, and error analysis. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		93	
256	The Vertical Structure of Tropical Convection and Its Impact on the Budgets of Water Vapor and Ozone. <i>Journals of the Atmospheric Sciences</i> , <b>2005</b> , 62, 1560-1573	2.1	93	
255	Variation in global chemical composition of PM<sub>2.5</sub>: emerging results from SPARTAN. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 9629-9653	6.8	92	
254	Chemical data assimilation estimates of continental U.S. ozone and nitrogen budgets during the Intercontinental Chemical Transport Experiment North America. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		92	
253	Application of OMI, SCIAMACHY, and GOME-2 satellite SO2 retrievals for detection of large emission sources. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 11,399-11,418	4.4	91	
252	Remote Sensing of Tropospheric Pollution from Space. <i>Bulletin of the American Meteorological Society</i> , <b>2008</b> , 89, 805-822	6.1	91	
251	A comparison of linear regression, regularization, and machine learning algorithms to develop Europe-wide spatial models of fine particles and nitrogen dioxide. <i>Environment International</i> , <b>2019</b> , 130, 104934	12.9	90	
250	Evaluation of GOME satellite measurements of tropospheric NO2 and HCHO using regional data from aircraft campaigns in the southeastern United States. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		89	
249	Associations of Pregnancy Outcomes and PM2.5 in a National Canadian Study. <i>Environmental Health Perspectives</i> , <b>2016</b> , 124, 243-9	8.4	89	

248	Response of global particulate-matter-related mortality to changes in local precursor emissions. <i>Environmental Science &amp; Environmental Science &amp; Envi</i>	10.3	88
247	Comparing the Health Effects of Ambient Particulate Matter Estimated Using Ground-Based versus Remote Sensing Exposure Estimates. <i>Environmental Health Perspectives</i> , <b>2017</b> , 125, 552-559	8.4	87
246	Data integration model for air quality: a hierarchical approach to the global estimation of exposures to ambient air pollution. <i>Journal of the Royal Statistical Society Series C: Applied Statistics</i> , <b>2018</b> , 67, 231-253	1.5	87
245	Source influence on emission pathways and ambient PM pollution over India (2015-2050). <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 8017-8039	6.8	86
244	A national study of the association between traffic-related air pollution and adverse pregnancy outcomes in Canada, 1999-2008. <i>Environmental Research</i> , <b>2016</b> , 148, 513-526	7.9	86
243	Overview paper: New insights into aerosol and climate in the Arctic. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 2527-2560	6.8	85
242	Processes controlling the annual cycle of Arctic aerosol number and size distributions. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 3665-3682	6.8	84
241	Net ecosystem fluxes of isoprene over tropical South America inferred from Global Ozone Monitoring Experiment (GOME) observations of HCHO columns. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		84
240	Evidence of lightning NOx and convective transport of pollutants in satellite observations over North America. <i>Geophysical Research Letters</i> , <b>2005</b> , 32,	4.9	84
239	Nested-grid simulation of mercury over North America. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 6095-6111	6.8	83
238	Heterogeneous sulfate aerosol formation mechanisms during wintertime Chinese haze events: air quality model assessment using observations of sulfate oxygen isotopes in Beijing. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 6107-6123	6.8	82
237	Influences of in-cloud aerosol scavenging parameterizations on aerosol concentrations and wet deposition in ECHAM5-HAM. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 1511-1543	6.8	82
236	Seasonal variability of NOx emissions over east China constrained by satellite observations: Implications for combustion and microbial sources. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		77
235	Transient climate and ambient health impacts due to national solid fuel cookstove emissions.  Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1269-1274	11.5	74
234	A method for evaluating spatially-resolved NO<sub>x</sub> emissions using Kalman filter inversion, direct sensitivities, and space-based NO<sub>2</sub> observations. <i>Atmospheric Chemistry and Physics</i> , <b>2008</b> , 8, 5603-5614	6.8	71
233	Application of empirical orthogonal functions to evaluate ozone simulations with regional and global models. <i>Journal of Geophysical Research</i> , <b>2003</b> , 108,		70
232	Satellite measurements oversee China sulfur dioxide emission reductions from coal-fired power plants. <i>Environmental Research Letters</i> , <b>2015</b> , 10, 114015	6.2	69
231	Revealing the hidden health costs embodied in Chinese exports. <i>Environmental Science &amp; Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 4381-8	10.3	68

230	Toward the next generation of air quality monitoring: Particulate Matter. <i>Atmospheric Environment</i> , <b>2013</b> , 80, 584-590	5.3	68	
229	Tropical tropospheric ozone: Implications for dynamics and biomass burning. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACH 3-1		67	
228	Long-term exposure to ambient ultrafine particles and respiratory disease incidence in in Toronto, Canada: a cohort study. <i>Environmental Health</i> , <b>2017</b> , 16, 64	6	66	
227	Retrievals of sulfur dioxide from the Global Ozone Monitoring Experiment 2 (GOME-2) using an optimal estimation approach: Algorithm and initial validation. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		66	
226	Comparison of geostatistical interpolation and remote sensing techniques for estimating long-term exposure to ambient PM2.5 concentrations across the continental United States. <i>Environmental Health Perspectives</i> , <b>2012</b> , 120, 1727-32	8.4	65	
225	Oxidative burden of fine particulate air pollution and risk of cause-specific mortality in the Canadian Census Health and Environment Cohort (CanCHEC). <i>Environmental Research</i> , <b>2016</b> , 146, 92-9	7.9	64	
224	Synoptic meteorological modes of variability for fine particulate matter (PM<sub>2.5</sub>) air quality in major metropolitan regions of China. <i>Atmospheric Chemistry and Physics</i> , <b>2018</b> , 18, 6733-6748	6.8	64	
223	Fine particulate air pollution and systemic autoimmune rheumatic disease in two Canadian provinces. <i>Environmental Research</i> , <b>2016</b> , 146, 85-91	7.9	63	
222	Interpreting the ultraviolet aerosol index observed with the OMI satellite instrument to understand absorption by organic aerosols: implications for atmospheric oxidation and direct radiative effects. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 2507-2523	6.8	62	•
221	Influence of aerosols and surface reflectance on satellite NO<sub>2</sub> retrieval: seasonal and spatial characteristics and implications for NO<sub><i>x</i></sub> emission constraints. <i>Atmospheric Chemistry and</i>	6.8	61	
220	Long-term Exposure to Fine Particulate Matter Air Pollution and Mortality Among Canadian Women. <i>Epidemiology</i> , <b>2015</b> , 26, 536-45	3.1	61	
219	Maternal exposure to ambient air pollution and risk of early childhood cancers: A population-based study in Ontario, Canada. <i>Environment International</i> , <b>2017</b> , 100, 139-147	12.9	60	
218	Trans-Pacific dust events observed at Whistler, British Columbia during INTEX-B. <i>Atmospheric Chemistry and Physics</i> , <b>2008</b> , 8, 6297-6307	6.8	60	
217	Exposure to Ambient Ultrafine Particles and Nitrogen Dioxide and Incident Hypertension and Diabetes. <i>Epidemiology</i> , <b>2018</b> , 29, 323-332	3.1	59	
216	Evaluation of observed and modelled aerosol lifetimes using radioactive tracers of opportunity and an ensemble of 19 global models. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 3525-3561	6.8	58	
215	Global dry deposition of nitrogen dioxide and sulfur dioxide inferred from space-based measurements. <i>Global Biogeochemical Cycles</i> , <b>2014</b> , 28, 1025-1043	5.9	58	
214	Satellite-based estimates of decline and rebound in China's CO emissions during COVID-19 pandemic. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	58	
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212	Dimethyl sulfide in the summertime Arctic atmosphere: measurements and source sensitivity simulations. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 6665-6680	6.8	55
211	Exposure to ambient air pollution and the incidence of congestive heart failure and acute myocardial infarction: A population-based study of 5.1 million Canadian adults living in Ontario. <i>Environment International</i> , <b>2019</b> , 132, 105004	12.9	55
<b>21</b> 0	Anthropogenic fugitive, combustion and industrial dust is a significant, underrepresented fine particulate matter source in global atmospheric models. <i>Environmental Research Letters</i> , <b>2017</b> , 12, 0440	18 <sup>2</sup>	54
209	Improving the accuracy of daily satellite-derived ground-level fine aerosol concentration estimates for North America. <i>Environmental Science &amp; Environmental </i>	10.3	54
208	Evidence for Asian dust effects from aerosol plume measurements during INTEX-B 2006 near Whistler, BC. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 3523-3546	6.8	54
207	Testing convective parameterizations with tropical measurements of HNO3, CO, H2O, and O3: Implications for the water vapor budget. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,		54
206	Relationships between Changes in Urban Characteristics and Air Quality in East Asia from 2000 to 2010. <i>Environmental Science &amp; Environmental Science </i>	10.3	53
205	Long-term exposure to fine particulate matter air pollution and the risk of lung cancer among participants of the Canadian National Breast Screening Study. <i>International Journal of Cancer</i> , <b>2016</b> , 139, 1958-66	7.5	53
204	Spatially and seasonally resolved estimate of the ratio of organic mass to organic carbon. <i>Atmospheric Environment</i> , <b>2014</b> , 87, 34-40	5.3	53
203	Trends in Chemical Composition of Global and Regional Population-Weighted Fine Particulate Matter Estimated for 25 Years. <i>Environmental Science &amp; Environmental Science &amp; Env</i>	10.3	53
202	Ambient Fine Particulate Matter and Mortality among Survivors of Myocardial Infarction: Population-Based Cohort Study. <i>Environmental Health Perspectives</i> , <b>2016</b> , 124, 1421-8	8.4	53
201	Estimating ground-level PM<sub>2.5</sub> in eastern China using aerosol optical depth determined from the GOCI satellite instrument. <i>Atmospheric Chemistry and Physics</i> , <b>2015</b> , 15, 13133-131	1448	51
200	Springtime transitions of NO2, CO, and O3 over North America: Model evaluation and analysis. Journal of Geophysical Research, <b>2008</b> , 113,		50
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198	A global anthropogenic emission inventory of atmospheric pollutants from sector- and fuel-specific sources (1970\( \text{Q} 017 \)): an application of the Community Emissions Data System (CEDS). <i>Earth System Science Data</i> , <b>2020</b> , 12, 3413-3442	10.5	50
197	Impact of air pollution control policies on future PM concentrations and their source contributions in China. <i>Journal of Environmental Management</i> , <b>2018</b> , 227, 124-133	7.9	50
196	Satellite-based estimates of ambient air pollution and global variations in childhood asthma prevalence. <i>Environmental Health Perspectives</i> , <b>2012</b> , 120, 1333-9	8.4	49
195	Model evidence for a significant source of secondary organic aerosol from isoprene. <i>Atmospheric Environment</i> , <b>2007</b> , 41, 1267-1274	5.3	49

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189	Source attribution of Arctic black carbon constrained by aircraft and surface measurements. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 11971-11989	6.8	47	
188	Methods, availability, and applications of PM exposure estimates derived from ground measurements, satellite, and atmospheric models. <i>Journal of the Air and Waste Management Association</i> , <b>2019</b> , 69, 1391-1414	2.4	45	
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174	Ambient Air Pollution and the Risk of Atrial Fibrillation and Stroke: A Population-Based Cohort Study. <i>Environmental Health Perspectives</i> , <b>2019</b> , 127, 87009	8.4	37
173	Uncertainty associated with convective wet removal of entrained aerosols in a global climate model. <i>Atmospheric Chemistry and Physics</i> , <b>2012</b> , 12, 10725-10748	6.8	37
172	Trans-Pacific transport of reactive nitrogen and ozone to Canada during spring. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 8353-8372	6.8	37
171	Effects of ambient air pollution on incident Parkinson's disease in Ontario, 2001 to 2013: a population-based cohort study. <i>International Journal of Epidemiology</i> , <b>2018</b> , 47, 2038-2048	7.8	36
170	Persistent sensitivity of Asian aerosol to emissions of nitrogen oxides. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 1021-1026	4.9	36
169	Satellite-Based Land-Use Regression for Continental-Scale Long-Term Ambient PM Exposure Assessment in Australia. <i>Environmental Science &amp; Environmental &amp; Envi</i>	10.3	36
168	Effect modification of perinatal exposure to air pollution and childhood asthma incidence. <i>European Respiratory Journal</i> , <b>2018</b> ,	13.6	35
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163	Global distributions of nitric acid from IASI/MetOP measurements. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 7949-7962	6.8	33
162	Seasonal Forecasting for Climate Hazards: Prospects and Responses. <i>Natural Hazards</i> , <b>2001</b> , 23, 171-19	63	33
161	Atmospheric fine particulate matter and breast cancer mortality: a population-based cohort study. <i>BMJ Open</i> , <b>2016</b> , 6, e012580	3	33
160	Associations of Long-Term Exposure to Ultrafine Particles and Nitrogen Dioxide With Increased Incidence of Congestive Heart Failure and Acute Myocardial Infarction. <i>American Journal of Epidemiology</i> , <b>2019</b> , 188, 151-159	3.8	33
159	Associations between cigarette smoking, obesity, sociodemographic characteristics and remote-sensing-derived estimates of ambient PM2.5: results from a Canadian population-based survey. Occupational and Environmental Medicine. 2011, 68, 920-7	2.1	32

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157	Source sector and fuel contributions to ambient PM and attributable mortality across multiple spatial scales. <i>Nature Communications</i> , <b>2021</b> , 12, 3594	17.4	31	
156	Examination of monitoring approaches for ambient air pollution: A case study for India. <i>Atmospheric Environment</i> , <b>2019</b> , 216, 116940	5.3	29	
155	Urban green space and the risks of dementia and stroke. <i>Environmental Research</i> , <b>2020</b> , 186, 109520	7.9	29	
154	Sensitivity of chemistry-transport model simulations to the duration of chemical and transport operators: a case study with GEOS-Chem 10-01. <i>Geoscientific Model Development</i> , <b>2016</b> , 9, 1683-1695	6.3	28	
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147	Interpreting aerosol lifetimes using the GEOS-Chem model and constraints from radionuclide measurements. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 4313-4325	6.8	25	
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144	The impact of air pollution on the incidence of diabetes and survival among prevalent diabetes cases. <i>Environment International</i> , <b>2020</b> , 134, 105333	12.9	24	
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137	Carbon and health implications of trade restrictions. <i>Nature Communications</i> , <b>2019</b> , 10, 4947	17.4	22
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135	Source Contributions to Ambient Fine Particulate Matter for Canada. <i>Environmental Science &amp; Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 10269-10278	10.3	21
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131	Long-term exposure to air pollution and the incidence of multiple sclerosis: A population-based cohort study. <i>Environmental Research</i> , <b>2018</b> , 166, 437-443	7.9	21
130	Assessing uncertainties of a geophysical approach to estimate surface fine particulate matter distributions from satellite-observed aerosol optical depth. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 295-313	6.8	20
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128	Residential Greenness and Cardiovascular Disease Incidence, Readmission, and Mortality. <i>Environmental Health Perspectives</i> , <b>2020</b> , 128, 87005	8.4	20
127	Evaluation and application of multi-decadal visibility data for trend analysis of atmospheric haze. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 2435-2457	6.8	20
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124	Interpretation of measured aerosol mass scattering efficiency over North America using a chemical transport model. <i>Atmospheric Chemistry and Physics</i> , <b>2019</b> , 19, 2635-2653	6.8	19
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119	Comparison of remote sensing and fixed-site monitoring approaches for examining air pollution and health in a national study population. <i>Atmospheric Environment</i> , <b>2013</b> , 80, 161-171	5.3	17	
118	A satellite-based multi-pollutant index of global air quality. <i>Environmental Science &amp; Environmental </i>	10.3	17	
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115	Effects of COVID-19 lockdowns on fine particulate matter concentrations. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	17	
114	Ambient PM and its chemical constituents on lifetime-ever pneumonia in Chinese children: A multi-center study. <i>Environment International</i> , <b>2021</b> , 146, 106176	12.9	17	
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111	Spatial variations in ambient ultrafine particle concentrations and risk of congenital heart defects. <i>Environment International</i> , <b>2019</b> , 130, 104953	12.9	16	
110	Monthly Global Estimates of Fine Particulate Matter and Their Uncertainty. <i>Environmental Science &amp; Eamp; Technology</i> , <b>2021</b> , 55, 15287-15300	10.3	16	
109	Associations between Living Near Water and Risk of Mortality among Urban Canadians. <i>Environmental Health Perspectives</i> , <b>2018</b> , 126, 077008	8.4	16	
108	Prenatal Exposure to Specific PM Chemical Constituents and Preterm Birth in China: A Nationwide Cohort Study. <i>Environmental Science &amp; Environmental S</i>	10.3	15	
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101	Fine particulate matter concentration and composition and the incidence of childhood asthma. <i>Environment International</i> , <b>2021</b> , 152, 106486	12.9	14
100	Global high-resolution emissions of soil NO, sea salt aerosols, and biogenic volatile organic compounds. <i>Scientific Data</i> , <b>2020</b> , 7, 148	8.2	13
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98	Improving present day and future estimates of anthropogenic sectoral emissions and the resulting air quality impacts in Africa. <i>Faraday Discussions</i> , <b>2017</b> , 200, 397-412	3.6	11
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95	Simulation of airborne trace metals in fine particulate matter over North America. <i>Atmospheric Environment</i> , <b>2019</b> , 214,	5.3	10
94	Estimated public health impacts of changes in concentrations of fine particle air pollution in Canada, 2000 to 2011. <i>Canadian Journal of Public Health</i> , <b>2015</b> , 106, e362-8	3.2	10
93	Mapping tropospheric ozone profiles from an airborne ultraviolet-visible spectrometer. <i>Applied Optics</i> , <b>2005</b> , 44, 3312-9	1.7	10
92	Global urban temporal trends in fine particulate matter (PM) and attributable health burdens: estimates from global datasets <i>Lancet Planetary Health, The</i> , <b>2022</b> ,	9.8	10
91	The Atmospheric Imaging Mission for Northern Regions: AIM-North. <i>Canadian Journal of Remote Sensing</i> , <b>2019</b> , 45, 423-442	1.8	10
90	Assessing snow extent data sets over North America to inform and improve trace gas retrievals from solar backscatter. <i>Atmospheric Measurement Techniques</i> , <b>2018</b> , 11, 2983-2994	4	10
89	Temporal and spectral cloud screening of polar winter aerosol optical depth (AOD): impact of homogeneous and inhomogeneous clouds and crystal layers on climatological-scale AODs. <i>Atmospheric Chemistry and Physics</i> , <b>2016</b> , 16, 12753-12765	6.8	9
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82	Global fine-scale changes in ambient NO during COVID-19 lockdowns <i>Nature</i> , <b>2022</b> , 601, 380-387	50.4	8
81	Boundary layer and free-tropospheric dimethyl sulfide in the Arctic spring and summer. <i>Atmospheric Chemistry and Physics</i> , <b>2017</b> , 17, 8757-8770	6.8	7
80	Testing convective transport on short time scales: Comparisons with mass divergence and ozone anomaly patterns about high rain events. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		7
79	Examining PM concentrations and exposure using multiple models. <i>Environmental Research</i> , <b>2021</b> , 196, 110432	7.9	7
78	Comparisons of a Chemical Transport Model with a Four-Year (April to September) Analysis of Fine- and Coarse-Mode Aerosol Optical Depth Retrievals Over the Canadian Arctic. <i>Atmosphere - Ocean</i> , <b>2017</b> , 55, 213-229	1.5	6
77	Evaluation of OMI operational standard NO <sub>2</sub> column retrievals using in situ and surface-based NO <sub>2</sub> observations		6
76	Parkinson's disease aggravation in association with fine particle components in New York State. <i>Environmental Research</i> , <b>2021</b> , 201, 111554	7.9	6
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40 39 38 37	Grid-independent high-resolution dust emissions (v1.0) for chemical transport models: application to GEOS-Chem (12.5.0). <i>Geoscientific Model Development</i> , <b>2021</b> , 14, 4249-4260  Fine particulate matter constituents and infant mortality in Africa: A multicountry study. <i>Environment International</i> , <b>2021</b> , 156, 106739  Refractory black carbon at the Whistler Peak High Elevation Research Site [Measurements and simulations. <i>Atmospheric Environment</i> , <b>2018</b> , 181, 34-46  SPARTAN: a global network to evaluate and enhance satellite-based estimates of ground-level particulate matter for global health applications <b>2014</b> ,  Canada Wide Land-use Regression Models Created From Fixed Site Monitors and Validated With	12.9 5·3	3 2 2
39 38 37 36	Grid-independent high-resolution dust emissions (v1.0) for chemical transport models: application to GEOS-Chem (12.5.0). Geoscientific Model Development, 2021, 14, 4249-4260  Fine particulate matter constituents and infant mortality in Africa: A multicountry study. Environment International, 2021, 156, 106739  Refractory black carbon at the Whistler Peak High Elevation Research Site IMeasurements and simulations. Atmospheric Environment, 2018, 181, 34-46  SPARTAN: a global network to evaluate and enhance satellite-based estimates of ground-level particulate matter for global health applications 2014,  Canada Wide Land-use Regression Models Created From Fixed Site Monitors and Validated With Independent City-specific Measurements. Epidemiology, 2011, 22, S214-S215  Comparison of Remote Sensing, Land-use Regression, and Fixed-site Monitoring Approaches for Estimating Exposure to Ambient Air Pollution Within a Canadian Population-based Study of	12.9 5·3 3.1	3 3 2 2 2

32	Retrieving tropospheric nitrogen dioxide over China from the Ozone Monitoring Instrument: effects of aerosols, surface reflectance anisotropy and vertical profile of nitrogen dioxide		2
31	Interpreting aerosol lifetimes using the GEOS-Chem model and constraints from radionuclide measure	ments	2
30	Evaluation and application of multi-decadal visibility data for trend analysis of atmospheric haze		2
29	Summertime sources of dimethyl sulfide in the Canadian Arctic Archipelago and Baffin Bay		2
28	Estimating Intra-Urban Inequities in PM-Attributable Health Impacts: A Case Study for Washington, DC. <i>GeoHealth</i> , <b>2021</b> , 5, e2021GH000431	5	2
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17	Global deposition of total reactive nitrogen oxides from 1996 to 2014 constrained with satellite observations of NO<sub>2</sub> columns <b>2017</b> ,		1
16	Absorbing aerosol radiative effects in the limb-scatter viewing geometry. <i>Atmospheric Measurement Techniques</i> , <b>2013</b> , 6, 2761-2776	4	1
15	Inequality in historical transboundary anthropogenic PM2.5 health impacts. <i>Science Bulletin</i> , <b>2021</b> , 67, 437-437	10.6	1

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14	Critical Time Windows for Air Pollution Exposure and Birth Weight in a Multicity Canadian Pregnancy Cohort. <i>Epidemiology</i> , <b>2022</b> , 33, 7-16	3.1	1
13	The importance of interstitial particle scavenging by cloud droplets in shaping the remote aerosol size distribution and global aerosol-climate effects		1
12	Land cover change impacts on atmospheric chemistry: simulating projected large-scale tree mortality in the United States		1
11	Impact of spatial proxies on the representation of bottom-up emission inventories: A satellite-based analysis <b>2016</b> ,		1
10	Arctic marine secondary organic aerosol contributes significantly to summertime particle size distributions in the Canadian Arctic Archipelago <b>2018</b> ,		1
9	Remote Sensing of Tropospheric Trace Gases (NO2 and SO2) from SCIAMACHY <b>2009</b> , 63-72		1
8	PM composition and disease aggravation in amyotrophic lateral sclerosis: An analysis of long-term exposure to components of fine particulate matter in New York State <i>Environmental Epidemiology</i> , <b>2022</b> , 6, e204	0.2	1
7	Long-term effects of PM components on blood pressure and hypertension in Chinese children and adolescents <i>Environment International</i> , <b>2022</b> , 161, 107134	12.9	1
6	Associations of long-term exposure to fine particulate matter and its constituents with cardiovascular mortality: A prospective cohort study in China <i>Environment International</i> , <b>2022</b> , 162, 107	138	1
5	Maternal exposure to fine particulate matter and preterm birth and low birth weight in Africa <i>Environment International</i> , <b>2021</b> , 160, 107053	12.9	О
4	Grid-stretching capability for the GEOS-Chem 13.0.0 atmospheric chemistry model. <i>Geoscientific Model Development</i> , <b>2021</b> , 14, 5977-5997	6.3	0
3	Predicting Spatial Variations in Multiple Measures of Oxidative Burden for Outdoor Fine Particulate Air Pollution across Canada. <i>Environmental Science &amp; Environmental Scienc</i>	10.3	0
2	Air Pollution in American Indian Versus Non-American Indian Communities, 2000-2018 <i>American Journal of Public Health</i> , <b>2022</b> , 112, 615-623	5.1	О
1	Tropospheric formaldehyde measurements from the ESA GOME instrument <b>2001</b> , 4150, 1		