Michael D Moran

List of Publications by Year
in descending order

33 papers	1,331 citations	361413 20 h-index	395702 33 g-index
47 all docs	47 docs citations	47 times ranked	1932 citing authors

#	Article	IF	Citations
1	A global catalogue of large SO₂ sources and emissions derived from the Ozone Monitoring Instrument. Atmospheric Chemistry and Physics, 2016, 16, 11497-11519.	4.9	200
2	Cloud processing of gases and aerosols in a regional air quality model (AURAMS). Atmospheric Research, 2006, 82, 248-275.	4.1	124
3	Evaluation of the meteorological forcing used for the Air Quality Model Evaluation International Initiative (AQMEII) air quality simulations. Atmospheric Environment, 2012, 53, 15-37.	4.1	111
4	Differences between measured and reported volatile organic compound emissions from oil sands facilities in Alberta, Canada. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3756-E3765.	7.1	75
5	The FireWork air quality forecast system with near-real-time biomass burning emissions: Recent developments and evaluation of performance for the 2015 North American wildfire season. Journal of the Air and Waste Management Association, 2016, 66, 819-841.	1.9	65
6	Estimates of exceedances of critical loads for acidifying deposition in Alberta and Saskatchewan. Atmospheric Chemistry and Physics, 2018, 18, 9897-9927.	4.9	62
7	Review and uncertainty assessment of size-resolved scavenging coefficient formulations for below-cloud snow scavenging of atmospheric aerosols. Atmospheric Chemistry and Physics, 2013, 13, 10005-10025.	4.9	58
8	Development of a new semi-empirical parameterization for below-cloud scavenging of size-resolved aerosol particles by both rain and snow. Geoscientific Model Development, 2014, 7, 799-819.	3.6	53
9	Eight-Year Estimates of Methane Emissions from Oil and Gas Operations in Western Canada Are Nearly Twice Those Reported in Inventories. Environmental Science & Technology, 2020, 54, 14899-14909.	10.0	52
10	Evaluating the capability of regional-scale air quality models to capture the vertical distribution of pollutants. Geoscientific Model Development, 2013, 6, 791-818.	3.6	49
11	Ammonia measurements from space with the Cross-track Infrared Sounder: characteristics and applications. Atmospheric Chemistry and Physics, 2020, 20, 2277-2302.	4.9	47
12	Emissions preparation and analysis for multiscale air quality modeling over the Athabasca Oil Sands Region of Alberta, Canada. Atmospheric Chemistry and Physics, 2018, 18, 10459-10481.	4.9	40
13	Multi-Year (2013â€“2016) PM2.5 Wildfire Pollution Exposure over North America as Determined from Operational Air Quality Forecasts. Atmosphere, 2017, 8, 179.	2.3	39
14	PAH concentrations simulated with the AURAMS-PAH chemical transport model over Canada and the USA. Atmospheric Chemistry and Physics, 2014, 14, 4065-4077.	4.9	33
15	Blending forest fire smoke forecasts with observed data can improve their utility for public health applications. Atmospheric Environment, 2016, 145, 308-317.	4.1	33
16	A chemical transport model study of plume-rise and particle size distribution for the Athabasca oil sands. Atmospheric Chemistry and Physics, 2018, 18, 8667-8688.	4.9	33
17	The FireWork v2.0 air quality forecast system with biomass burning emissions from the Canadian Forest Fire Emissions Prediction System v2.03. Geoscientific Model Development, 2019, 12, 3283-3310.	3.6	32
18	Improvements to Wintertime Particulate-Matter Forecasting With GEM-MACH15. NATO Science for Peace and Security Series C: Environmental Security, 2011, , 591-597.	0.2	29

#	Article	IF	Citations
19	Impact of chemical lateral boundary conditions in a regional air quality forecast model on surface ozone predictions during stratospheric intrusions. Atmospheric Environment, 2018, 174, 148-170.	4.1	25
20	Methane emissions in the United States, Canada, and Mexico: evaluation of national methane emission inventories and 2010â€“2017 sectoral trends by inverse analysis of in situ (GLOBALVIEWplus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Atmospheric Chemistry and Physics, 2022, 22, 395-418.	4.9	25
21	Chemical Analysis of Surface-Level Ozone Exceedances during the 2015 Pan American Games. Atmosphere, 2020, 11, 572.	2.3	18
22	Isolating the impact of COVID-19 lockdown measures on urban air quality in Canada. Air Quality, Atmosphere and Health, 2021, 14, 1549-1570.	3.3	17
23	Turbulent transport, emissions and the role of compensating errors in chemical transport models. Geoscientific Model Development, 2014, 7, 1001-1024.	3.6	16
24	High-resolution quantification of atmospheric CO₂ mixing ratios in the Greater Toronto Area, Canada. Atmospheric Chemistry and Physics, 2018, 18, 3387-3401.	4.9	12
25	Impact of Urbanization on the Predictions of Urban Meteorology and Air Pollutants over Four Major North American Cities. Atmosphere, 2020, 11, 969.	2.3	12
26	Modeling atmospheric ammonia and ammonium using a stochastic Lagrangian air quality model (STILT-Chem v0.7). Geoscientific Model Development, 2013, 6, 327-344.	3.6	11
27	A gridded inventory of Canadaâ€™s anthropogenic methane emissions. Environmental Research Letters, 2022, 17, 014007.	5.2	11
28	An evaluation of the efficacy of very high resolution air-quality modelling over the Athabasca oil sands region, Alberta, Canada. Atmospheric Chemistry and Physics, 2019, 19, 4393-4417.	4.9	9
29	An evaluation of ambient ammonia concentrations over southern Ontario simulated with different dry deposition schemes within STILT-Chem v0.8. Geoscientific Model Development, 2014, 7, 1037-1050.	3.6	8
30	Top-Down Determination of Black Carbon Emissions from Oil Sand Facilities in Alberta, Canada Using Aircraft Measurements. Environmental Science & Technology, 2020, 54, 412-418.	10.0	7
31	Development of aerosol optical properties for improving the MESSy photolysis module in the GEM-MACH v2.4 air quality model and application for calculating photolysis rates in a biomass burning plume. Geoscientific Model Development, 2022, 15, 219-249.	3.6	5
32	Expansion of a size disaggregation profile library for particulate matter emissions processing from three generic profiles to 36 source-type-specific profiles. Journal of the Air and Waste Management Association, 2020, 70, 1067-1100.	1.9	3
33	Towards understanding the variability in source contribution of CO2 using high-resolution simulations of atmospheric Î´13CO2 signatures in the Greater Toronto Area, Canada. Atmospheric Environment, 2019, 214, 116877.	4.1	2