George A Pouliot

List of Publications by Year
in descending order

65 papers	5,472 citations	101543 36 h-index	118850 62 g-index
83 all docs	83 docs citations	83 times ranked	5074 citing authors

#	Article	IF	Citations
1	HTAP_v2.2: a mosaic of regional and global emission grid maps for 2008 and 2010 to study hemispheric transport of air pollution. Atmospheric Chemistry and Physics, 2015, 15, 11411-11432.	4.9	647
2	Model Representation of Secondary Organic Aerosol in CMAQv4.7. Environmental Science & Technology, 2010, 44, 8553-8560.	10.0	364
3	To What Extent Can Biogenic SOA be Controlled?. Environmental Science & Technology, 2010, 44, 3376-3380.	10.0	254
4	Emissions Inventory of PM_{2.5} Trace Elements across the United States. Environmental Science & Technology, 2009, 43, 5790-5796.	10.0	237
5	Unspeciated organic emissions from combustion sources and their influence on the secondary organic aerosol budget in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10473-10478.	7.1	196
6	WRF-CMAQ two-way coupled system with aerosol feedback: software development and preliminary results. Geoscientific Model Development, 2012, 5, 299-312.	3.6	193
7	Description and evaluation of the Community Multiscale Air Quality (CMAQ) modeling system version 5.1. Geoscientific Model Development, 2017, 10, 1703-1732.	3.6	187
8	The health impacts and economic value of wildland fire episodes in the U.S.: 2008â€“2012. Science of the Total Environment, 2018, 610-611, 802-809.	8.0	184
9	Evaluation of dust and trace metal estimates from the Community Multiscale Air Quality (CMAQ) model version 5.0. Geoscientific Model Development, 2013, 6, 883-899.	3.6	182
10	Observations and modeling of air quality trends over 1990â€“2010 across the Northern Hemisphere: China, the United States and Europe. Atmospheric Chemistry and Physics, 2015, 15, 2723-2747.	4.9	178
11	Evaluation of operational on-line-coupled regional air quality models over Europe and North America in the context of AQMEII phase 2. Part I: Ozone. Atmospheric Environment, 2015, 115, 404-420.	4.1	168
12	Comparing emission inventories and model-ready emission datasets between Europe and North America for the AQMEII project. Atmospheric Environment, 2012, 53, 4-14.	4.1	156
13	Historical gaseous and primary aerosol emissions in the United States from 1990 to 2010. Atmospheric Chemistry and Physics, 2013, 13, 7531-7549.	4.9	148
14	Linking the Eta Model with the Community Multiscale Air Quality (CMAQ) Modeling System to Build a National Air Quality Forecasting System. Weather and Forecasting, 2005, 20, 367-384.	1.4	143
15	The development and uses of EPAâ€™s SPECIATE database. Atmospheric Pollution Research, 2010, 1, 196-206.	3.8	136
16	Evaluation of operational online-coupled regional air quality models over Europe and North America in the context of AQMEII phase 2. Part II: Particulate matter. Atmospheric Environment, 2015, 115, 421-441.	4.1	133
17	Community Vulnerability to Health Impacts of Wildland Fire Smoke Exposure. Environmental Science & Technology, 2017, 51, 6674-6682.	10.0	126
18	Regional sources of atmospheric formaldehyde and acetaldehyde, and implications for atmospheric modeling. Atmospheric Environment, 2012, 47, 477-490.	4.1	114

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19	The Community Multiscale Air Quality (CMAQ) model versions 5.3 and 5.3.1: system updates and evaluation. Geoscientific Model Development, 2021, 14, 2867-2897.	3.6	114
20	Analysis of the emission inventories and model-ready emission datasets of Europe and North America for phase 2 of the AQMEII project. Atmospheric Environment, 2015, 115, 345-360.	4.1	100
21	Contribution of regional-scale fire events to ozone and PM2.5 air quality estimated by photochemical modeling approaches. Atmospheric Environment, 2016, 140, 539-554.	4.1	95
22	Modeling the Role of Alkanes, Polycyclic Aromatic Hydrocarbons, and Their Oligomers in Secondary Organic Aerosol Formation. Environmental Science & Technology, 2012, 46, 6041-6047.	10.0	89
23	Extending the Community Multiscale Air Quality (CMAQ) modeling system to hemispheric scales: overview of process considerations and initial applications. Atmospheric Chemistry and Physics, 2017, 17, 12449-12474.	4.9	83
24	Evaluation of realâ€‰time PM_{2.5} forecasts and process analysis for PM_{2.5} formation over the eastern United States using the Etaâ€CMAQ forecast model during the 2004 ICARTT study. Journal of Geophysical Research, 2008, 113, .	3.3	75
25	The impact of chemical lateral boundary conditions on CMAQ predictions of tropospheric ozone over the continental United States. Environmental Fluid Mechanics, 2009, 9, 43-58.	1.6	72
26	A performance evaluation of the National Air Quality Forecast Capability for the summer of 2007â˜†. Atmospheric Environment, 2009, 43, 2312-2320.	4.1	69
27	Annual application and evaluation of the online coupled WRFâ€“CMAQ system over North America under AQMEII phase 2. Atmospheric Environment, 2015, 115, 683-694.	4.1	61
28	Assessment of the MACC reanalysis and its influence as chemical boundary conditions for regional air quality modeling in AQMEII-2. Atmospheric Environment, 2015, 115, 371-388.	4.1	59
29	Eta-CMAQ air quality forecasts for O₃ and related species using three different photochemical mechanisms (CB4, CB05, SAPRC-99): comparisons with measurements during the 2004 ICARTT study. Atmospheric Chemistry and Physics, 2010, 10, 3001-3025.	4.9	55
30	Diagnostic Model Evaluation for Carbonaceous PM2.5Using Organic Markers Measured in the Southeastern U.S.. Environmental Science & Technology, 2007, 41, 1577-1583.	10.0	53
31	Modeling emissions for three-dimensional atmospheric chemistry transport models. Journal of the Air and Waste Management Association, 2018, 68, 763-800.	1.9	51
32	Impacts of different characterizations of large-scale background on simulated regional-scale ozone over the continental United States. Atmospheric Chemistry and Physics, 2018, 18, 3839-3864.	4.9	45
33	Assessing multi-year changes in modeled and observed urban NOX concentrations from a dynamic model evaluation perspective. Atmospheric Environment, 2010, 44, 2894-2901.	4.1	44
34	A comparison of atmospheric composition using the Carbon Bond and Regional Atmospheric Chemistry Mechanisms. Atmospheric Chemistry and Physics, 2013, 13, 9695-9712.	4.9	44
35	Dynamic evaluation of CMAQ part I: Separating the effects of changing emissions and changing meteorology on ozone levels between 2002 and 2005 in the eastern US. Atmospheric Environment, 2015, 103, 247-255.	4.1	42
36	Development of the crop residue and rangeland burning in the 2014 National Emissions Inventory using information from multiple sources. Journal of the Air and Waste Management Association, 2017, 67, 613-622.	1.9	37

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37	A multi-model assessment for the 2006 and 2010 simulations under the Air Quality Model Evaluation International Initiative (AQMEII) phase 2 over North America: Part I. Indicators of the sensitivity of O3 and PM2.5 formation regimes. Atmospheric Environment, 2015, 115, 569-586.	4.1	36
38	Modeling crop residue burning experiments to evaluate smoke emissions and plume transport. Science of the Total Environment, 2018, 627, 523-533.	8.0	36
39	Assessment of the effects of horizontal grid resolution on long-term air quality trends using coupled WRF-CMAQ simulations. Atmospheric Environment, 2016, 132, 207-216.	4.1	35
40	Influence of uncertainties in burned area estimates on modeled wildland fire PM2.5 and ozone pollution in the contiguous U.S.. Atmospheric Environment, 2018, 191, 328-339.	4.1	35
41	The impact of US wildland fires on ozone and particulate matter: a comparison of measurements and CMAQ model predictions from 2008 to 2012. International Journal of Wildland Fire, 2018, 27, 684.	2.4	30
42	Comparative evaluation of the impact of WRF/NMM and WRF/ARW meteorology on CMAQ simulations for PM_{2.5} and its related precursors during the 2006 TexAQS/GoMACCS study. Atmospheric Chemistry and Physics, 2012, 12, 4091-4106.	4.9	27
43	A multi-model assessment for the 2006 and 2010 simulations under the Air Quality Model Evaluation International Initiative (AQMEII) Phase 2 over North America: Part II. Evaluation of column variable predictions using satellite data. Atmospheric Environment, 2015, 115, 587-603.	4.1	25
44	Vegetation exposure to ozone over the continental United States: Assessment of exposure indices by the Eta-CMAQ air quality forecast model. Atmospheric Environment, 2009, 43, 724-733.	4.1	24
45	Predicting the Effects of Nanoscale Cerium Additives in Diesel Fuel on Regional-Scale Air Quality. Environmental Science & Technology, 2014, 48, 12775-12782.	10.0	24
46	Significant ground-level ozone attributed to lightning-induced nitrogen oxides during summertime over the Mountain West States. Npj Climate and Atmospheric Science, 2020, 3, 6.	6.8	22
47	Comparative evaluation of the impact of WRFâ€“NMM and WRFâ€“ARW meteorology on CMAQ simulations for O3 and related species during the 2006 TexAQS/GoMACCS campaign. Atmospheric Pollution Research, 2012, 3, 149-162.	3.8	20
48	The Detailed Emissions Scaling, Isolation, and Diagnostic (DESID) module in the Community Multiscale Air Quality (CMAQ) modeling system version 5.3.2. Geoscientific Model Development, 2021, 14, 3407-3420.	3.6	20
49	Assessing satellite-based fire data for use in the National Emissions Inventory. Journal of Applied Remote Sensing, 2009, 3, 031504.	1.3	19
50	Refining fire emissions for air quality modeling with remotely sensed fire counts: A wildfire case study. Atmospheric Environment, 2007, 41, 655-665.	4.1	17
51	Quantification of emission factor uncertainty. Journal of the Air and Waste Management Association, 2012, 62, 287-298.	1.9	17
52	Impact of wildfire on particulate matter in the southeastern United States in November 2016. Science of the Total Environment, 2020, 724, 138354.	8.0	17
53	Performance Evaluation of the Meteorology and Air Quality Conditions From Multiscale WRFâ€CMAQ Simulations for the Long Island Sound Tropospheric Ozone Study (LISTOS). Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	16
54	Development of a biomass burning emissions inventory by combining satellite and ground-based information. Journal of Applied Remote Sensing, 2008, 2, 021501.	1.3	13

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55	Source-receptor reconciliation of fine-particulate emissions from residential wood combustion in the southeastern United States. Atmospheric Environment, 2014, 98, 454-460.	4.1	12
56	Diagnostic Analysis of the Three-Dimensional Sulfur Distributions over the Eastern United States Using the CMAQ Model and Measurements from the ICARTT Field Experiment. NATO Security Through Science Series C: Environmental Security, 2008, , 496-504.	0.1	9
57	Reflecting on progress since the 2005 NARSTO emissions inventory report. Journal of the Air and Waste Management Association, 2019, 69, 1023-1048.	1.9	8
58	An evaluation of empirical and statistically based smoke plume injection height parametrisations used within air quality models. International Journal of Wildland Fire, 2022, 31, 193-211.	2.4	7
59	Diagnostic Air Quality Model Evaluation of Source-Specific Primary and Secondary Fine Particulate Carbon. Environmental Science & Technology, 2014, 48, 464-473.	10.0	6
60	Assessing the Anthropogenic Fugitive Dust Emission Inventory and Temporal Allocation Using an Updated Speciation of Particulate Matter. NATO Science for Peace and Security Series C: Environmental Security, 2011, , 585-589.	0.2	4
61	Global and Regional Modeling of Long-Range Transport and Intercontinental Source-Receptor Linkages. Springer Proceedings in Complexity, 2016, , 245-250.	0.3	1
62	A Proof-of-Concept for Linking the Global Meteorological Model, MPAS-a with the Air Quality Model, CMAQ. Springer Proceedings in Complexity, 2020, , 35-40.	0.3	1
63	Dynamic Evaluation of the CMAQv5.0 Modeling System: Assessing the Modelâ€™s Ability to Simulate Ozone Changes Due to NOx Emission Reductions. Springer Proceedings in Complexity, 2014, , 433-438.	0.3	0
64	Development of Fire Emissions Inventory Using Satellite Data. NATO Security Through Science Series C: Environmental Security, 2008, , 217-225.	0.1	0
65	The New Generation of Air Quality Modeling Systems. Em: Air and Waste Management Association's Magazine for Environmental Managers, 2018, 1, 1-6.	0.2	0