James T Kelly

List of Publications by Year
in descending order

54 papers	3,385 citations	218381 26 h-index	161609 54 g-index
62 all docs	62 docs citations	62 times ranked	3656 citing authors

#	Article	IF	Citations
1	Mimicking atmospheric photochemical modeling with a deep neural network. Atmospheric Research, 2022, 265, 105919.	1.8	8
2	Hydrogen chloride (HCl) at ground sites during CalNex 2010 and insight into its thermodynamic properties. Journal of Geophysical Research D: Atmospheres, 2022, 127, 1-16.	1.2	1
3	Examining PM2.5 concentrations and exposure using multiple models. Environmental Research, 2021, 196, 110432.	3.7	20
4	Furthering a partnership: Air quality modeling and improving public health. Journal of the Air and Waste Management Association, 2021, 71, 682-688.	0.9	1
5	Monthly Patterns of Ammonia Over the Contiguous United States at 2â€km Resolution. Geophysical Research Letters, 2021, 48, e2020GL090579.	1.5	16
6	Coupled Air Quality and Boundary-Layer Meteorology in Western U.S. Basins during Winter: Design and Rationale for a Comprehensive Study. Bulletin of the American Meteorological Society, 2021, 102, E2012-E2033.	1.7	14
7	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.	1.3	20
8	Predicting the Nonlinear Response of PM2.5 and Ozone to Precursor Emission Changes with a Response Surface Model. Atmosphere, 2021, 12, 1044.	1.0	9
9	A comparative study of two-way and offline coupled WRF v3.4 and CMAQ v5.0.2 over the contiguous US: performance evaluation and impacts of chemistryâ€“meteorology feedbacks on air quality. Geoscientific Model Development, 2021, 14, 7189-7221.	1.3	5
10	Assessing NO₂ Concentration and Model Uncertainty with High Spatiotemporal Resolution across the Contiguous United States Using Ensemble Model Averaging. Environmental Science & Technology, 2020, 54, 1372-1384.	4.6	155
11	An Ensemble Learning Approach for Estimating High Spatiotemporal Resolution of Ground-Level Ozone in the Contiguous United States. Environmental Science & Technology, 2020, 54, 11037-11047.	4.6	114
12	Data Assimilation of Ambient Concentrations of Multiple Air Pollutants Using an Emission-Concentration Response Modeling Framework. Atmosphere, 2020, 11, 1289.	1.0	9
13	The acidity of atmospheric particles and clouds. Atmospheric Chemistry and Physics, 2020, 20, 4809-4888.	1.9	327
14	Deep Learning for Prediction of the Air Quality Response to Emission Changes. Environmental Science & Technology, 2020, 54, 8589-8600.	4.6	58
15	Large-scale optimization of multi-pollutant control strategies in the Pearl River Delta region of China using a genetic algorithm in machine learning. Science of the Total Environment, 2020, 722, 137701.	3.9	19
16	An ensemble-based model of PM2.5 concentration across the contiguous United States with high spatiotemporal resolution. Environment International, 2019, 130, 104909.	4.8	370
17	Assessing PM2.5 model performance for the conterminous U.S. with comparison to model performance statistics from 2007-2015. Atmospheric Environment, 2019, 214, 116872.	1.9	30
18	Methods, availability, and applications of PM_{2.5} exposure estimates derived from ground measurements, satellite, and atmospheric models. Journal of the Air and Waste Management Association, 2019, 69, 1391-1414.	0.9	73

#	Article	IF	Citations
19	A system for developing and projecting PM2.5 spatial fields to correspond to just meeting national ambient air quality standards. Atmospheric Environment: X, 2019, 2, 100019.	0.8	15
20	Development and application of observable response indicators for design of an effective ozone and fine-particle pollution control strategy in China. Atmospheric Chemistry and Physics, 2019, 19, 13627-13646.	1.9	33
21	Health benefit assessment of PM2.5 reduction in Pearl River Delta region of China using a model-monitor data fusion approach. Journal of Environmental Management, 2019, 233, 489-498.	3.8	44
22	Characterizing CO and NO_y Sources and Relative Ambient Ratios in the Baltimore Area Using Ambient Measurements and Source Attribution Modeling. Journal of Geophysical Research D: Atmospheres, 2018, 123, 3304-3320.	1.2	14
23	The estimated change in the level and distribution of PM2.5-attributable health impacts in the United States: 2005â€“2014. Environmental Research, 2018, 167, 506-514.	3.7	53
24	Modeling NH 4 NO 3 Over the San Joaquin Valley During the 2013 DISCOVERâ€AQ Campaign. Journal of Geophysical Research D: Atmospheres, 2018, 123, 4727-4745.	1.2	18
25	A method to predict PM 2.5 resulting from compliance with national ambient air quality standards. Atmospheric Environment, 2017, 162, 1-10.	1.9	19
26	Simulating the phase partitioning of NH3, HNO3, and HCl with size-resolved particles over northern Colorado in winter. Atmospheric Environment, 2016, 131, 67-77.	1.9	15
27	Evaluation of the Community Multiscale Air Quality (CMAQ) model v5.0 against size-resolved measurements of inorganic particle composition across sites in North America. Geoscientific Model Development, 2015, 8, 2877-2892.	1.3	60
28	Gas and aerosol carbon in California: comparison of measurements and model predictions in Pasadena and Bakersfield. Atmospheric Chemistry and Physics, 2015, 15, 5243-5258.	1.9	48
29	Examining single-source secondary impacts estimated from brute-force, decoupled direct method, and advanced plume treatment approaches. Atmospheric Environment, 2015, 111, 10-19.	1.9	18
30	Updating sea spray aerosol emissions in the Community Multiscale Air Quality (CMAQ) model version 5.0.2. Geoscientific Model Development, 2015, 8, 3733-3746.	1.3	47
31	The Aquatic Acidification Index: A New Regulatory Metric Linking Atmospheric and Biogeochemical Models to Assess Potential Aquatic Ecosystem Recovery. Water, Air, and Soil Pollution, 2014, 225, 1.	1.1	10
32	Single source impacts estimated with photochemical model source sensitivity and apportionment approaches. Atmospheric Environment, 2014, 96, 266-274.	1.9	26
33	Photochemical grid model performance with varying horizontal grid resolution and sub-grid plume treatment for the Martins Creek near-field SO2 study. Atmospheric Environment, 2014, 99, 148-158.	1.9	9
34	Measurements and modeling of the inorganic chemical composition of fine particulate matter and associated precursor gases in California's San Joaquin Valley during CalNex 2010. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6853-6866.	1.2	18
35	Fine-scale simulation of ammonium and nitrate over the South Coast Air Basin and San Joaquin Valley of California during CalNex-2010. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3600-3614.	1.2	51
36	Evaluation of surface and upper air fine scale WRF meteorological modeling of the May and June 2010 CalNex period in California. Atmospheric Environment, 2013, 80, 299-309.	1.9	41

#	Article	IF	Citations
37	Sensitivity of aerosol indirect effects to cloud nucleation and autoconversion parameterizations in shortâ€range weather forecasts during the May 2003 aerosol IOP. Journal of Advances in Modeling Earth Systems, 2012, 4, .	1.3	11
38	Challenges to Modeling â€œCold Poolâ€•Meteorology Associated with High Pollution Episodes. Environmental Science & Technology, 2011, 45, 7118-7119.	4.6	33
39	Simulating Particle Size Distributions over California and Impact on Lung Deposition Fraction. Aerosol Science and Technology, 2011, 45, 148-162.	1.5	21
40	Photochemical Modeling in California with Two Chemical Mechanisms: Model Intercomparison and Response to Emission Reductions. Journal of the Air and Waste Management Association, 2011, 61, 559-572.	0.9	27
41	Simulating emission and chemical evolution of coarse sea-salt particles in the Community Multiscale Air Quality (CMAQ) model. Geoscientific Model Development, 2010, 3, 257-273.	1.3	113
42	Incremental testing of the Community Multiscale Air Quality (CMAQ) modeling system version 4.7. Geoscientific Model Development, 2010, 3, 205-226.	1.3	404
43	Aerosol thermodynamics of potassium salts, double salts, and water content near the eutectic. Atmospheric Environment, 2008, 42, 3717-3728.	1.9	17
44	Influence of dust composition on cloud droplet formation. Atmospheric Environment, 2007, 41, 2904-2916.	1.9	124
45	Water uptake by aerosol: Water activity in supersaturated potassium solutions and deliquescence as a function of temperature. Atmospheric Environment, 2006, 40, 4450-4468.	1.9	24
46	Thermodynamics of carbonates and hydrates related to heterogeneous reactions involving mineral aerosol. Journal of Geophysical Research, 2005, 110, .	3.3	44
47	Inertial Particle Deposition in a Monkey Nasal Mold Compared with that in Human Nasal Replicas. Inhalation Toxicology, 2005, 17, 823-830.	0.8	28
48	Particle Deposition in Human Nasal Airway Replicas Manufactured by Different Methods. Part I: Inertial Regime Particles. Aerosol Science and Technology, 2004, 38, 1063-1071.	1.5	213
49	Particle Deposition in Human Nasal Airway Replicas Manufactured by Different Methods. Part II: Ultrafine Particles. Aerosol Science and Technology, 2004, 38, 1072-1079.	1.5	109
50	Nasal Molds as Predictors of Fine and Coarse Particle Deposition in Rat Nasal Airways. Inhalation Toxicology, 2003, 15, 859-875.	0.8	9
51	Respiratory Deposition and Inhalability of Monodisperse Aerosols in Long-Evans Rats. Toxicological Sciences, 2003, 71, 104-111.	1.4	45
52	DEPOSITION OF FINE AND COARSE AEROSOLS IN A RAT NASAL MOLD. Inhalation Toxicology, 2001, 13, 577-588.	0.8	22
53	Particle image velocimetry measurements in complex geometries. Experiments in Fluids, 2000, 29, 91-95.	1.1	130
54	Detailed flow patterns in the nasal cavity. Journal of Applied Physiology, 2000, 89, 323-337.	1.2	210