

# Tanya Spero

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

2,877  
citations

186209

28  
h-index

197736

49  
g-index

65  
all docs

65  
docs citations

65  
times ranked

3009  
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving Surface PM <sub>2.5</sub> Forecasts in the United States Using an Ensemble of Chemical Transport Model Outputs: 2. Bias Correction With Satellite Data for Rural Areas. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	3
2	Development and evaluation of an advanced National Air Quality Forecasting Capability using the NOAA Global Forecast System version 16. <i>Geoscientific Model Development</i> , 2022, 15, 3281-3313.	1.3	8
3	High-resolution dynamically downscaled rainfall and temperature projections for ecological life zones within Puerto Rico and for the U.S. Virgin Islands. <i>International Journal of Climatology</i> , 2021, 41, 1305-1327.	1.5	8
4	Projecting changes in extreme rainfall from three tropical cyclones using the design-rainfall approach. <i>Npj Climate and Atmospheric Science</i> , 2021, 4, .	2.6	2
5	The Community Multiscale Air Quality (CMAQ) model versions 5.3 and 5.3.1: system updates and evaluation. <i>Geoscientific Model Development</i> , 2021, 14, 2867-2897.	1.3	114
6	Regional temperature-ozone relationships across the U.S. under multiple climate and emissions scenarios. <i>Journal of the Air and Waste Management Association</i> , 2021, 71, 1251-1264.	0.9	19
7	Projecting changes in extreme rainfall from three tropical cyclones using the design-rainfall approach. <i>Nature Climate Change</i> , 2021, 4, 1-8.	8.1	0
8	Improving Surface PM <sub>2.5</sub> Forecasts in the United States Using an Ensemble of Chemical Transport Model Outputs: 1. Bias Correction With Surface Observations in Nonrural Areas. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD032293.	1.2	16
9	Ozone-related asthma emergency department visits in the US in a warming climate. <i>Environmental Research</i> , 2020, 183, 109206.	3.7	12
10	Data Availability Principles and Practice. <i>Weather, Climate, and Society</i> , 2020, 12, 647-649.	0.5	5
11	Effects of Mosaic Land Use on Dynamically Downscaled WRF Simulations of the Contiguous United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 9117-9140.	1.2	10
12	Influence of bromine and iodine chemistry on annual, seasonal, diurnal, and background ozone: CMAQ simulations over the Northern Hemisphere. <i>Atmospheric Environment</i> , 2019, 213, 395-404.	1.9	29
13	Projections of Atmospheric Nitrogen Deposition to the Chesapeake Bay Watershed. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 3307-3326.	1.3	7
14	Projected Changes in Maternal Heat Exposure During Early Pregnancy and the Associated Congenital Heart Defect Burden in the United States. <i>Journal of the American Heart Association</i> , 2019, 8, e010995.	1.6	41
15	Updates to the Noah Land Surface Model in WRF-CMAQ to Improve Simulated Meteorology, Air Quality, and Deposition. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 231-256.	1.3	39
16	Developing PDF Curves From Dynamically Downscaled WRF Model Fields to Examine Extreme Precipitation Events in Three Eastern U.S. Metropolitan Areas. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 13895-13913.	1.2	6
17	Attributing differences in the fate of lateral boundary ozone in AQMEII3 models to physical process representations. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 17157-17175.	1.9	5
18	The potential effects of climate change on air quality across the conterminous US at 2030 under three Representative Concentration Pathways. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 15471-15489.	1.9	33

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19	Examining WRF's Sensitivity to Contemporary Land-Use Datasets across the Contiguous United States Using Dynamical Downscaling. <i>Journal of Applied Meteorology and Climatology</i> , 2018, 57, 2561-2583.	0.6	12
20	A Maieutic Exploration of Nudging Strategies for Regional Climate Applications Using the WRF Model. <i>Journal of Applied Meteorology and Climatology</i> , 2018, 57, 1883-1906.	0.6	17
21	Characterizing the impact of projected changes in climate and air quality on human exposures to ozone. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2017, 27, 260-270.	1.8	15
22	Extending the Community Multiscale Air Quality (CMAQ) modeling system to hemispheric scales: overview of process considerations and initial applications. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 12449-12474.	1.9	83
23	Description and evaluation of the Community Multiscale Air Quality (CMAQ) modeling system version 5.1. <i>Geoscientific Model Development</i> , 2017, 10, 1703-1732.	1.3	187
24	Assessing the Added Value of Dynamical Downscaling Using the Standardized Precipitation Index. <i>Advances in Meteorology</i> , 2016, 2016, 1-14.	0.6	13
25	Evaluation of near surface ozone and particulate matter in air quality simulations driven by dynamically downscaled historical meteorological fields. <i>Atmospheric Environment</i> , 2016, 138, 42-54.	1.9	6
26	The Impact of Incongruous Lake Temperatures on Regional Climate Extremes Downscaled from the CMIP5 Archive Using the WRF Model. <i>Journal of Climate</i> , 2016, 29, 839-853.	1.2	24
27	The geographic distribution and economic value of climate change-related ozone health impacts in the United States in 2030. <i>Journal of the Air and Waste Management Association</i> , 2015, 65, 570-580.	0.9	85
28	Technical challenges and solutions in representing lakes when using WRF in downscaling applications. <i>Geoscientific Model Development</i> , 2015, 8, 1085-1096.	1.3	39
29	Increasing the credibility of regional climate simulations by introducing subgrid-scale cloud-radiation interactions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 5317-5330.	1.2	50
30	An Observation-Based Investigation of Nudging in WRF for Downscaling Surface Climate Information to 12-km Grid Spacing. <i>Journal of Applied Meteorology and Climatology</i> , 2014, 53, 20-33.	0.6	47
31	Improving the representation of clouds, radiation, and precipitation using spectral nudging in the Weather Research and Forecasting model. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 11,682-11,694.	1.2	36
32	Using a coupled lake model with WRF for dynamical downscaling. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 7193-7208.	1.2	58
33	Simulating the impact of the large-scale circulation on the 2-m temperature and precipitation climatology. <i>Climate Dynamics</i> , 2013, 40, 1903-1920.	1.7	56
34	Does Nudging Squelch the Extremes in Regional Climate Modeling?. <i>Journal of Climate</i> , 2012, 25, 7046-7066.	1.2	111
35	WRF-CMAQ two-way coupled system with aerosol feedback: software development and preliminary results. <i>Geoscientific Model Development</i> , 2012, 5, 299-312.	1.3	193
36	Introducing subgrid-scale cloud feedbacks to radiation for regional meteorological and climate modeling. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	86

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37	Examining Interior Grid Nudging Techniques Using Two-Way Nesting in the WRF Model for Regional Climate Modeling. <i>Journal of Climate</i> , 2012, 25, 2805-2823.	1.2	116
38	Diagnostic analysis of ozone concentrations simulated by two regional-scale air quality models. <i>Atmospheric Environment</i> , 2011, 45, 5957-5969.	1.9	23
39	Incremental testing of the Community Multiscale Air Quality (CMAQ) modeling system version 4.7. <i>Geoscientific Model Development</i> , 2010, 3, 205-226.	1.3	404
40	Using National Air Quality Forecast Guidance to Develop Local Air Quality Index Forecasts. <i>Bulletin of the American Meteorological Society</i> , 2010, 91, 313-326.	1.7	31
41	The impact of chemical lateral boundary conditions on CMAQ predictions of tropospheric ozone over the continental United States. <i>Environmental Fluid Mechanics</i> , 2009, 9, 43-58.	0.7	72
42	The Impact of Nudging in the Meteorological Model for Retrospective Air Quality Simulations. Part II: Evaluating Collocated Meteorological and Air Quality Observations. <i>Journal of Applied Meteorology and Climatology</i> , 2008, 47, 1868-1887.	0.6	35
43	The Impact of Nudging in the Meteorological Model for Retrospective Air Quality Simulations. Part I: Evaluation against National Observation Networks. <i>Journal of Applied Meteorology and Climatology</i> , 2008, 47, 1853-1867.	0.6	103
44	A detailed evaluation of the Eta-CMAQ forecast model performance for O <sub>3</sub> , its related precursors, and meteorological parameters during the 2004 ICARTT study. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	95
45	Evaluating the use of outputs from comprehensive meteorological models in air quality modeling applications. <i>Atmospheric Environment</i> , 2007, 41, 1689-1705.	1.9	18
46	Linking the Eta Model with the Community Multiscale Air Quality (CMAQ) Modeling System to Build a National Air Quality Forecasting System. <i>Weather and Forecasting</i> , 2005, 20, 367-384.	0.5	143
47	Simulation of Meteorological Fields Within and Above Urban and Rural Canopies with a Mesoscale Model. <i>Boundary-Layer Meteorology</i> , 2004, 113, 111-158.	1.2	155
48	Implementation of an Urban Canopy Parameterization in a Mesoscale Meteorological Model. <i>Journal of Applied Meteorology and Climatology</i> , 2004, 43, 1648-1665.	1.7	79
49	Simulation at Neighborhood Scale with Cmaq. , 2004, , 441-449.		0
50	A Heuristic Study on the Importance of Anisotropic Error Distributions in Data Assimilation. <i>Monthly Weather Review</i> , 2001, 129, 766-783.	0.5	9
51	Title is missing!. <i>Water, Air and Soil Pollution</i> , 2001, 1, 243-252.	0.8	86