

Ariel F Stein

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6970121/publications.pdf>

Version: 2024-02-01

73
papers

7,587
citations

159358

30
h-index

82410

72
g-index

78
all docs

78
docs citations

78
times ranked

9085
citing authors

#	ARTICLE	IF	CITATIONS
1	NOAA's HYSPLIT Atmospheric Transport and Dispersion Modeling System. Bulletin of the American Meteorological Society, 2015, 96, 2059-2077.	1.7	3,982
2	Real-time Environmental Applications and Display sYstem: READY. Environmental Modelling and Software, 2017, 95, 210-228.	1.9	1,097
3	Global and regional trends of atmospheric sulfur. Scientific Reports, 2019, 9, 953.	1.6	166
4	Description and Verification of the NOAA Smoke Forecasting System: The 2007 Fire Season. Weather and Forecasting, 2009, 24, 361-378.	0.5	123
5	Microplastics and nanoplastics in the marine-atmosphere environment. Nature Reviews Earth & Environment, 2022, 3, 393-405.	12.2	121
6	Does dust from Patagonia reach the sub-Antarctic Atlantic Ocean?. Geophysical Research Letters, 2007, 34, .	1.5	116
7	Recent increase of surface particulate matter concentrations in the Seoul Metropolitan Area, Korea. Scientific Reports, 2017, 7, 4710.	1.6	111
8	Determination of the contribution of northern Africa dust source areas to PM10 concentrations over the central Iberian Peninsula using the Hybrid Single-Particle Lagrangian Integrated Trajectory model (HYSPLIT) model. Journal of Geophysical Research, 2006, 111, .	3.3	107
9	A hybrid modeling approach to resolve pollutant concentrations in an urban area. Atmospheric Environment, 2007, 41, 9410-9426.	1.9	85
10	Ground/satellite observations and atmospheric modeling of dust storms originating in the high Puna Altiplano deserts (South America): Implications for the interpretation of paleoclimatic archives. Journal of Geophysical Research D: Atmospheres, 2013, 118, 3817-3831.	1.2	81
11	Evaluation of Lagrangian Particle Dispersion Models with Measurements from Controlled Tracer Releases. Journal of Applied Meteorology and Climatology, 2013, 52, 2623-2637.	0.6	70
12	A combined observational and modeling approach to study modern dust transport from the Patagonia desert to East Antarctica. Atmospheric Chemistry and Physics, 2010, 10, 8287-8303.	1.9	67
13	Global sand and dust storms in 2008: Observation and HYSPLIT model verification. Atmospheric Environment, 2011, 45, 6368-6381.	1.9	67
14	Size distribution and concentrations of heavy metals in atmospheric aerosols originating from industrial emissions as predicted by the HYSPLIT model. Atmospheric Environment, 2013, 71, 234-244.	1.9	67
15	Modeling and evaluation of urban pollution events of atmospheric heavy metals from a large Cu-smelter. Science of the Total Environment, 2016, 539, 17-25.	3.9	65
16	Source apportionment for African dust outbreaks over the Western Mediterranean using the HYSPLIT model. Atmospheric Research, 2011, 99, 518-527.	1.8	63
17	An empirically derived emission algorithm for wind-blown dust. Journal of Geophysical Research, 2010, 115, .	3.3	55
18	The New England Air Quality Forecasting Pilot Program: Development of an Evaluation Protocol and Performance Benchmark. Journal of the Air and Waste Management Association, 2005, 55, 1782-1796.	0.9	50

#	ARTICLE	IF	CITATIONS
19	Verification of the NOAA Smoke Forecasting System: Model Sensitivity to the Injection Height. <i>Weather and Forecasting</i> , 2009, 24, 379-394.	0.5	50
20	Improving volcanic ash predictions with the HYSPLIT dispersion model by assimilating MODIS satellite retrievals. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 2865-2879.	1.9	43
21	Using PM10 geochemical maps for defining the origin of atmospheric pollution in Andalusia (Southern) Tj ETQq1 1 0,784314 rgBT /O	1.9	40
22	Street level air pollution in Córdoba City, Argentina. <i>Atmospheric Environment</i> , 1996, 30, 3491-3495.	1.9	38
23	Source term estimation using air concentration measurements and a Lagrangian dispersion model "Experiments with pseudo and real cesium-137 observations from the Fukushima nuclear accident. <i>Atmospheric Environment</i> , 2015, 106, 241-251.	1.9	38
24	Levels and chemical composition of PM in a city near a large Cu-smelter in Spain. <i>Journal of Environmental Monitoring</i> , 2011, 13, 1276.	2.1	37
25	Potential Use of Transport and Dispersion Model Ensembles for Forecasting Applications. <i>Weather and Forecasting</i> , 2015, 30, 639-655.	0.5	37
26	Emissions from Pre-Hispanic Metallurgy in the South American Atmosphere. <i>PLoS ONE</i> , 2014, 9, e111315.	1.1	37
27	International challenge to predict the impact of radionuclide releases from medical isotope production on a comprehensive nuclear test ban treaty sampling station. <i>Journal of Environmental Radioactivity</i> , 2016, 157, 41-51.	0.9	35
28	Modeling and surface observations of arsenic dispersion from a large Cu-smelter in southwestern Europe. <i>Atmospheric Environment</i> , 2012, 49, 114-122.	1.9	34
29	Incorporation of detailed chemistry into a three-dimensional Lagrangian-Eulerian hybrid model: application to regional tropospheric ozone. <i>Atmospheric Environment</i> , 2000, 34, 4361-4372.	1.9	33
30	Large Salt Dust Storms Follow a 30-Year Rainfall Cycle in the Mar Chiquita Lake (Córdoba, Argentina). <i>PLoS ONE</i> , 2016, 11, e0156672.	1.1	33
31	U.S. emissions of HFC-134a derived for 2008-2012 from an extensive flask-air sampling network. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 801-825.	1.2	30
32	Inline Coupling of WRF-HYSPLIT: Model Development and Evaluation Using Tracer Experiments. <i>Journal of Applied Meteorology and Climatology</i> , 2015, 54, 1162-1176.	0.6	28
33	International challenge to model the long-range transport of radionuclide released from medical isotope production to six Comprehensive Nuclear-Test-Ban Treaty monitoring stations. <i>Journal of Environmental Radioactivity</i> , 2018, 192, 667-686.	0.9	27
34	A backward-time stochastic Lagrangian air quality model. <i>Atmospheric Environment</i> , 2012, 54, 373-386.	1.9	26
35	Wintertime CO ₂ , CH ₄ , and CO Emissions Estimation for the Washington, DC-Baltimore Metropolitan Area Using an Inverse Modeling Technique. <i>Environmental Science & Technology</i> , 2020, 54, 2606-2614.	4.6	25
36	Intercomparison of atmospheric trace gas dispersion models: Barnett Shale case study. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 2561-2576.	1.9	24

#	ARTICLE	IF	CITATIONS
37	Modeling PM10 Originating from Dust Intrusions in the Southern Iberian Peninsula Using HYSPLIT. <i>Weather and Forecasting</i> , 2011, 26, 236-242.	0.5	23
38	Sensitivities of sulfate aerosol formation and oxidation pathways on the chemical mechanism employed in simulations. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 8567-8574.	1.9	22
39	The sensitivity of sulfur wet deposition to atmospheric oxidants. <i>Atmospheric Environment</i> , 2000, 34, 1681-1690.	1.9	21
40	Using measured and modeled indicators to assess ozone-NO _x -VOC sensitivity in a western Mediterranean coastal environment. <i>Atmospheric Environment</i> , 2005, 39, 7167-7180.	1.9	21
41	Evaluation of the use of photochemical indicators to assess ozone-NO _x -VOC sensitivity in the Southwestern Iberian Peninsula. <i>Journal of Atmospheric Chemistry</i> , 2009, 63, 73-91.	1.4	21
42	Ensemble PM _{2.5} Forecasting During the 2018 Camp Fire Event Using the HYSPLIT Transport and Dispersion Model. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD032768.	1.2	21
43	Impacts of the COVID-19 economic slowdown on ozone pollution in the U.S.. <i>Atmospheric Environment</i> , 2021, 264, 118713.	1.9	20
44	Soluble iron inputs to the Southern Ocean through recent andesitic to rhyolitic volcanic ash eruptions from the Patagonian Andes. <i>Global Biogeochemical Cycles</i> , 2015, 29, 1125-1144.	1.9	19
45	Multi year aerosol characterization in the tropical Andes and in adjacent Amazonia using AERONET measurements. <i>Atmospheric Environment</i> , 2017, 166, 412-432.	1.9	19
46	Air quality impacts of the 2018 Mt. Kilauea Volcano eruption in Hawaii: A regional chemical transport model study with satellite-constrained emissions. <i>Atmospheric Environment</i> , 2020, 237, 117648.	1.9	18
47	Empirical evidence for the low- and high-NO _x photochemical regimes of sulfate and nitrate formation. <i>Atmospheric Environment</i> , 2003, 37, 3615-3625.	1.9	17
48	Dispersion simulations using HYSPLIT for the Sagebrush Tracer Experiment. <i>Atmospheric Environment</i> , 2018, 186, 18-31.	1.9	16
49	Chemical indicators of sulfate sensitivity to nitrogen oxides and volatile organic compounds. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 13-1.	3.3	15
50	Photochemical model evaluation of the surface ozone impact of a power plant in a heavily industrialized area of southwestern Spain. <i>Journal of Environmental Management</i> , 2010, 91, 662-676.	3.8	15
51	A Long-Term WRF Meteorological Archive for Dispersion Simulations: Application to Controlled Tracer Experiments. <i>Journal of Applied Meteorology and Climatology</i> , 2017, 56, 2203-2220.	0.6	15
52	Incorporating features from the Stochastic Time-Inverted Lagrangian Transport (STILT) model into the Hybrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT) model: a unified dispersion model for time-forward and time-reversed applications. <i>Journal of Applied Meteorology and Climatology</i> , 2021, . . .	0.6	14
53	Inverse modeling of fire emissions constrained by smoke plume transport using HYSPLIT dispersion model and geostationary satellite observations. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 10259-10277.	1.9	14
54	Identifying the causes of differences in ozone production from the CBO5 and CBMIV chemical mechanisms. <i>Geoscientific Model Development</i> , 2012, 5, 257-268.	1.3	13

#	ARTICLE	IF	CITATIONS
55	The impact of biogenic VOC emissions on photochemical ozone formation during a high ozone pollution episode in the Iberian Peninsula in the 2003 summer season. <i>Advances in Science and Research</i> , 2008, 2, 9-15.	1.0	13
56	SO ₂ effect on secondary organic aerosol from a mixture of anthropogenic VOCs: experimental and modelled results. <i>International Journal of Environment and Pollution</i> , 2012, 50, 224.	0.2	12
57	Space-Borne Monitoring of NO _x Emissions from Cement Kilns in South Korea. <i>Atmosphere</i> , 2020, 11, 881.	1.0	12
58	Quantitative assessment of changes in surface particulate matter concentrations and precursor emissions over China during the COVID-19 pandemic and their implications for Chinese economic activity. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 10065-10080.	1.9	12
59	Measurements and simulation of speciated PM _{2.5} in south-west Europe. <i>Atmospheric Environment</i> , 2013, 77, 36-50.	1.9	11
60	Evaluation of CMAQ parameterizations for SOA formation from the photooxidation of α -pinene and limonene against smog chamber data. <i>Atmospheric Environment</i> , 2012, 56, 236-245.	1.9	10
61	Black Carbon aerosol measurements and simulation in two cities in south-west Spain. <i>Atmospheric Environment</i> , 2016, 126, 55-65.	1.9	10
62	The evaluation of mixing methods in HYSPLIT using measurements from controlled tracer experiments. <i>Atmospheric Environment</i> , 2019, 219, 117043.	1.9	10
63	Fluid Modeling and the Evaluation of Inherent Uncertainty. <i>Journal of Applied Meteorology and Climatology</i> , 2001, 40, 1769-1774.	1.7	8
64	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
65	A Modeling Study of the Impact of a Power Plant on Ground-Level Ozone in Relation to its Location: Southwestern Spain as a Case Study. <i>Water, Air, and Soil Pollution</i> , 2010, 209, 61-79.	1.1	7
66	Weak-constraint inverse modeling using HYSPLIT-4 Lagrangian dispersion model and Cross-Appalachian Tracer Experiment (CAPTEX) observations – effect of including model uncertainties on source term estimation. <i>Geoscientific Model Development</i> , 2018, 11, 5135-5148.	1.3	7
67	Sensitivity analysis of surface ozone to modified initial and boundary conditions in both rural and industrial zones. <i>Advances in Science and Research</i> , 2008, 2, 113-118.	1.0	6
68	Experimental data on SOA formation from mixtures of anthropogenic and biogenic organic compounds. <i>Atmosfera</i> , 2013, 26, 59-73.	0.3	5
69	Simulation and Evaluation of Control Strategies for Ozone Reduction in a Complex Terrain in Southwestern Spain. <i>Environmental Modeling and Assessment</i> , 2011, 16, 565-576.	1.2	4
70	The Association Between the North Atlantic Oscillation and the Interannual Variability of the Tropospheric Transport Pathways in Western Europe. <i>Geophysical Monograph Series</i> , 2013, , 127-142.	0.1	4
71	Incremental Development of Air Quality Forecasting System with Off-Line/On-Line Capability: Coupling CMAQ to NCEP National Mesoscale Model. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , 2011, , 187-192.	0.1	1
72	Evaluation of SOA Formation Using a Box Model Version of CMAQ and Chamber Experimental Data. <i>Lecture Notes in Computer Science</i> , 2011, , 374-386.	1.0	1

#	ARTICLE	IF	CITATIONS
73	Introduction to a Special Issue of <i>JA&WMA</i> on NOAA's 7th International Workshop on Air Quality Forecasting Research (IWAQFR). <i>Journal of the Air and Waste Management Association</i> , 2016, 66, 815-818.	0.9	0