

# Mark Jacobson

## List of Publications by Year in descending order

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228  
papers

29,134  
citations

6592

79  
h-index

5519

163  
g-index

246  
all docs

246  
docs citations

246  
times ranked

21529  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bounding the role of black carbon in the climate system: A scientific assessment. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 5380-5552.	1.2	4,319
2	Strong radiative heating due to the mixing state of black carbon in atmospheric aerosols. <i>Nature</i> , 2001, 409, 695-697.	13.7	2,205
3	Review of solutions to global warming, air pollution, and energy security. <i>Energy and Environmental Science</i> , 2009, 2, 148-173.	15.6	1,389
4	Providing all global energy with wind, water, and solar power, Part I: Technologies, energy resources, quantities and areas of infrastructure, and materials. <i>Energy Policy</i> , 2011, 39, 1154-1169.	4.2	1,137
5	Cleaning the Air and Improving Health with Hydrogen Fuel-Cell Vehicles. <i>Science</i> , 2005, 308, 1901-1905.	6.0	900
6	100% Clean and Renewable Wind, Water, and Sunlight All-Sector Energy Roadmaps for 139 Countries of the World. <i>Joule</i> , 2017, 1, 108-121.	11.7	732
7	Control of fossil-fuel particulate black carbon and organic matter, possibly the most effective method of slowing global warming. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 16-1.	3.3	619
8	Providing all global energy with wind, water, and solar power, Part II: Reliability, system and transmission costs, and policies. <i>Energy Policy</i> , 2011, 39, 1170-1190.	4.2	614
9	Evaluation of global wind power. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	541
10	A physically-based treatment of elemental carbon optics: Implications for global direct forcing of aerosols. <i>Geophysical Research Letters</i> , 2000, 27, 217-220.	1.5	460
11	Global direct radiative forcing due to multicomponent anthropogenic and natural aerosols. <i>Journal of Geophysical Research</i> , 2001, 106, 1551-1568.	3.3	426
12	How green is blue hydrogen?. <i>Energy Science and Engineering</i> , 2021, 9, 1676-1687.	1.9	357
13	Climate response of fossil fuel and biofuel soot, accounting for soot's feedback to snow and sea ice albedo and emissivity. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	349
14	Low-cost solution to the grid reliability problem with 100% penetration of intermittent wind, water, and solar for all purposes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 15060-15065.	3.3	343
15	Isolating nitrated and aromatic aerosols and nitrated aromatic gases as sources of ultraviolet light absorption. <i>Journal of Geophysical Research</i> , 1999, 104, 3527-3542.	3.3	332
16	100% clean and renewable wind, water, and sunlight (WWS) all-sector energy roadmaps for the 50 United States. <i>Energy and Environmental Science</i> , 2015, 8, 2093-2117.	15.6	330
17	World estimates of PV optimal tilt angles and ratios of sunlight incident upon tilted and tracked PV panels relative to horizontal panels. <i>Solar Energy</i> , 2018, 169, 55-66.	2.9	310
18	Development and application of a new air pollution modeling system—II. Aerosol module structure and design. <i>Atmospheric Environment</i> , 1997, 31, 131-144.	1.9	289

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19	Effects of Ethanol (E85) versus Gasoline Vehicles on Cancer and Mortality in the United States. Environmental Science & Technology, 2007, 41, 4150-4157.	4.6	273
20	A Path to Sustainable Energy by 2030. Scientific American, 2009, 301, 58-65.	1.0	269
21	Worldwide health effects of the Fukushima Daiichi nuclear accident. Energy and Environmental Science, 2012, 5, 8743.	15.6	268
22	Short-term effects of controlling fossil fuel soot, biofuel soot and gases, and methane on climate, Arctic ice, and air pollution health. Journal of Geophysical Research, 2010, 115, .	3.3	267
23	Modeling coagulation among particles of different composition and size. Atmospheric Environment, 1994, 28, 1327-1338.	1.9	257
24	Spatial and temporal distributions of U.S. winds and wind power at 80 m derived from measurements. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	250
25	Studying the effects of aerosols on vertical photolysis rate coefficient and temperature profiles over an urban airshed. Journal of Geophysical Research, 1998, 103, 10593-10604.	3.3	244
26	SMVGEAR: A sparse-matrix, vectorized gear code for atmospheric models. Atmospheric Environment, 1994, 28, 273-284.	1.9	227
27	A comparative review of inorganic aerosol thermodynamic equilibrium modules: similarities, differences, and their likely causes. Atmospheric Environment, 2000, 34, 117-137.	1.9	218
28	Supplying Baseload Power and Reducing Transmission Requirements by Interconnecting Wind Farms. Journal of Applied Meteorology and Climatology, 2007, 46, 1701-1717.	0.6	216
29	Matching demand with supply at low cost in 139 countries among 20 world regions with 100% intermittent wind, water, and sunlight (WWS) for all purposes. Renewable Energy, 2018, 123, 236-248.	4.3	216
30	Development and application of a new air pollution modeling system " Part III. Aerosol-phase simulations. Atmospheric Environment, 1997, 31, 587-608.	1.9	210
31	Studying the effects of calcium and magnesium on size-distributed nitrate and ammonium with EQUISOLV II. Atmospheric Environment, 1999, 33, 3635-3649.	1.9	203
32	Analysis of emission data from global commercial aviation: 2004 and 2006. Atmospheric Chemistry and Physics, 2010, 10, 6391-6408.	1.9	203
33	Simulation of Aerosol Dynamics: A Comparative Review of Algorithms Used in Air Quality Models. Aerosol Science and Technology, 1999, 31, 487-514.	1.5	190
34	A Monte Carlo approach to generator portfolio planning and carbon emissions assessments of systems with large penetrations of variable renewables. Renewable Energy, 2011, 36, 2278-2286.	4.3	189
35	Effects of biomass burning on climate, accounting for heat and moisture fluxes, black and brown carbon, and cloud absorption effects. Journal of Geophysical Research D: Atmospheres, 2014, 119, 8980-9002.	1.2	188
36	Development and application of the Model of Aerosol Dynamics, Reaction, Ionization, and Dissolution (MADRID). Journal of Geophysical Research, 2004, 109, .	3.3	184

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37	Switching to a U.S. hydrogen fuel cell vehicle fleet: The resultant change in emissions, energy use, and greenhouse gases. <i>Journal of Power Sources</i> , 2005, 150, 150-181.	4.0	173
38	Analysis of aerosol interactions with numerical techniques for solving coagulation, nucleation, condensation, dissolution, and reversible chemistry among multiple size distributions. <i>Journal of Geophysical Research</i> , 2002, 107, AAC 2-1.	3.3	172
39	California offshore wind energy potential. <i>Renewable Energy</i> , 2010, 35, 1244-1254.	4.3	170
40	Power output variations of co-located offshore wind turbines and wave energy converters in California. <i>Renewable Energy</i> , 2010, 35, 2781-2791.	4.3	170
41	Features of a fully renewable US electricity system: Optimized mixes of wind and solar PV and transmission grid extensions. <i>Energy</i> , 2014, 72, 443-458.	4.5	169
42	Simulating equilibrium within aerosols and nonequilibrium between gases and aerosols. <i>Journal of Geophysical Research</i> , 1996, 101, 9079-9091.	3.3	168
43	GATOR-GCMM: A global- through urban-scale air pollution and weather forecast model: 1. Model design and treatment of subgrid soil, vegetation, roads, rooftops, water, sea ice, and snow. <i>Journal of Geophysical Research</i> , 2001, 106, 5385-5401.	3.3	165
44	CLIMATE CHANGE: Enhanced: Recent Reductions in China's Greenhouse Gas Emissions. <i>Science</i> , 2001, 294, 1835-1837.	6.0	165
45	Examining the feasibility of converting New York State's all-purpose energy infrastructure to one using wind, water, and sunlight. <i>Energy Policy</i> , 2013, 57, 585-601.	4.2	162
46	Flexibility mechanisms and pathways to a highly renewable US electricity future. <i>Energy</i> , 2016, 101, 65-78.	4.5	153
47	Impacts of Green New Deal Energy Plans on Grid Stability, Costs, Jobs, Health, and Climate in 143 Countries. <i>One Earth</i> , 2019, 1, 449-463.	3.6	152
48	Effects of Urban Surfaces and White Roofs on Global and Regional Climate. <i>Journal of Climate</i> , 2012, 25, 1028-1044.	1.2	148
49	Investigating cloud absorption effects: Global absorption properties of black carbon, tar balls, and soil dust in clouds and aerosols. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	148
50	Saturation wind power potential and its implications for wind energy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 15679-15684.	3.3	147
51	Evolution of nanoparticle size and mixing state near the point of emission. <i>Atmospheric Environment</i> , 2004, 38, 1839-1850.	1.9	146
52	A model for studying the composition and chemical effects of stratospheric aerosols. <i>Journal of Geophysical Research</i> , 1994, 99, 12897.	3.3	141
53	On the causal link between carbon dioxide and air pollution mortality. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	140
54	Effects of Externally-Through-Internally-Mixed Soot Inclusions within Clouds and Precipitation on Global Climate. <i>Journal of Physical Chemistry A</i> , 2006, 110, 6860-6873.	1.1	135

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55	A study of gas-aerosol equilibrium and aerosol pH in the remote marine boundary layer during the First Aerosol Characterization Experiment (ACE 1). <i>Journal of Geophysical Research</i> , 2000, 105, 17325-17340.	3.3	126
56	Modification of aerosol mass and size distribution due to aqueous-phase SO <sub>2</sub> oxidation in clouds: Comparisons of several models. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	120
57	Wind reduction by aerosol particles. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	120
58	Optimizing investments in coupled offshore wind -electrolytic hydrogen storage systems in Denmark. <i>Journal of Power Sources</i> , 2017, 359, 186-197.	4.0	120
59	Simulating Condensational Growth, Evaporation, and Coagulation of Aerosols Using a Combined Moving and Stationary Size Grid. <i>Aerosol Science and Technology</i> , 1995, 22, 73-92.	1.5	117
60	Estimates of atmospheric dry deposition and associated input of nutrients to Gulf of Aqaba seawater. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	111
61	The Potential of Intermittent Renewables to Meet Electric Power Demand: Current Methods and Emerging Analytical Techniques. <i>Proceedings of the IEEE</i> , 2012, 100, 322-334.	16.4	110
62	Studying ocean acidification with conservative, stable numerical schemes for nonequilibrium air-ocean exchange and ocean equilibrium chemistry. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	109
63	Development and application of a new air pollution modeling system-part I: Gas-phase simulations. <i>Atmospheric Environment</i> , 1996, 30, 1939-1963.	1.9	106
64	ENERGY: Exploiting Wind Versus Coal. <i>Science</i> , 2001, 293, 1438-1438.	6.0	106
65	Changing Trends in Sulfur Emissions in Asia: Implications for Acid Deposition, Air Pollution, and Climate. <i>Environmental Science &amp; Technology</i> , 2002, 36, 4707-4713.	4.6	103
66	Influence of future anthropogenic emissions on climate, natural emissions, and air quality. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	102
67	Enhancement of Local Air Pollution by Urban CO <sub>2</sub> Domes. <i>Environmental Science &amp; Technology</i> , 2010, 44, 2497-2502.	4.6	102
68	100% clean and renewable Wind, Water, and Sunlight (WWS) all-sector energy roadmaps for 53 towns and cities in North America. <i>Sustainable Cities and Society</i> , 2018, 42, 22-37.	5.1	100
69	Numerical Techniques to Solve Condensational and Dissolutional Growth Equations When Growth is Coupled to Reversible Reactions. <i>Aerosol Science and Technology</i> , 1997, 27, 491-498.	1.5	97
70	Nitric acid scavenging by mineral and biomass burning aerosols. <i>Geophysical Research Letters</i> , 1998, 25, 4185-4188.	1.5	97
71	Computation of global photochemistry with SMVGEAR II. <i>Atmospheric Environment</i> , 1995, 29, 2541-2546.	1.9	94
72	Development of mixed-phase clouds from multiple aerosol size distributions and the effect of the clouds on aerosol removal. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	93

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73	Examining feedbacks of aerosols to urban climate with a model that treats 3D clouds with aerosol inclusions. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	93
74	Impact of Aviation on Climate: FAA's Aviation Climate Change Research Initiative (ACCRI) Phase II. <i>Bulletin of the American Meteorological Society</i> , 2016, 97, 561-583.	1.7	93
75	A study of sulfur dioxide oxidation pathways over a range of liquid water contents, pH values, and temperatures. <i>Journal of Geophysical Research</i> , 1999, 104, 13749-13769.	3.3	90
76	The Short-Term Cooling but Long-Term Global Warming Due to Biomass Burning. <i>Journal of Climate</i> , 2004, 17, 2909-2926.	1.2	89
77	Probing into regional O <sub>3</sub> and particulate matter pollution in the United States: 2. An examination of formation mechanisms through a process analysis technique and sensitivity study. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	86
78	Temporal and spatial tradeoffs in power system modeling with assumptions about storage: An application of the POWER model. <i>Energy</i> , 2016, 117, 198-213.	4.5	85
79	Probing into regional ozone and particulate matter pollution in the United States: 1. A 1 year CMAQ simulation and evaluation using surface and satellite data. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	84
80	The health and climate impacts of carbon capture and direct air capture. <i>Energy and Environmental Science</i> , 2019, 12, 3567-3574.	15.6	83
81	Large CO <sub>2</sub> reductions via offshore wind power matched to inherent storage in energy end-uses. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	80
82	How much wind power potential does Europe have? Examining European wind power potential with an enhanced socio-technical atlas. <i>Energy Policy</i> , 2019, 132, 1092-1100.	4.2	80
83	Is the size distribution of urban aerosols determined by thermodynamic equilibrium?. <i>Atmospheric Environment</i> , 2002, 36, 2349-2365.	1.9	79
84	Optimal operational strategy for an offgrid hybrid hydrogen/electricity refueling station powered by solar photovoltaics. <i>Journal of Power Sources</i> , 2020, 451, 227810.	4.0	76
85	Effects of Soil Moisture on Temperatures, Winds, and Pollutant Concentrations in Los Angeles. <i>Journal of Applied Meteorology and Climatology</i> , 1999, 38, 607-616.	1.7	73
86	A Solution to the Problem of Nonequilibrium Acid/Base Gas-Particle Transfer at Long Time Step. <i>Aerosol Science and Technology</i> , 2005, 39, 92-103.	1.5	72
87	Enhanced Coagulation Due to Evaporation and Its Effect on Nanoparticle Evolution. <i>Environmental Science &amp; Technology</i> , 2005, 39, 9486-9492.	4.6	69
88	Data investigation of installed and output power densities of onshore and offshore wind turbines worldwide. <i>Energy for Sustainable Development</i> , 2021, 60, 40-51.	2.0	69
89	A roadmap for repowering California for all purposes with wind, water, and sunlight. <i>Energy</i> , 2014, 73, 875-889.	4.5	65
90	Effects of subgrid segregation on ozone production efficiency in a chemical model. <i>Atmospheric Environment</i> , 2000, 34, 2975-2982.	1.9	64

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91	Roadmaps to Transition Countries to 100% Clean, Renewable Energy for All Purposes to Curtail Global Warming, Air Pollution, and Energy Risk. <i>Earth's Future</i> , 2017, 5, 948-952.	2.4	63
92	Improvement of SMVGEAR II on vector and scalar machines through absolute error tolerance control. <i>Atmospheric Environment</i> , 1998, 32, 791-796.	1.9	62
93	US East Coast offshore wind energy resources and their relationship to peak-time electricity demand. <i>Wind Energy</i> , 2013, 16, 977-997.	1.9	62
94	Effects of wind-powered hydrogen fuel cell vehicles on stratospheric ozone and global climate. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	61
95	Examining the temperature dependence of ethanol (E85) versus gasoline emissions on air pollution with a largely-explicit chemical mechanism. <i>Atmospheric Environment</i> , 2010, 44, 1192-1199.	1.9	60
96	Measurements of Aerosol Chemistry during New Particle Formation Events at a Remote Rural Mountain Site. <i>Environmental Science &amp; Technology</i> , 2011, 45, 8208-8216.	4.6	60
97	GATOR-GCMM: 2. A study of daytime and nighttime ozone layers aloft, ozone in national parks, and weather during the SARMAP field campaign. <i>Journal of Geophysical Research</i> , 2001, 106, 5403-5420.	3.3	59
98	Microphysical and radiative effects of aerosols on warm clouds during the Amazon biomass burning season as observed by MODIS: impacts of water vapor and land cover. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 3021-3036.	1.9	57
99	Summary of the cloud chemistry modeling intercomparison: Photochemical box model simulation. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	54
100	The carbon abatement potential of high penetration intermittent renewables. <i>Energy and Environmental Science</i> , 2012, 5, 6592.	15.6	53
101	Taming hurricanes with arrays of offshore wind turbines. <i>Nature Climate Change</i> , 2014, 4, 195-200.	8.1	53
102	The United States can keep the grid stable at low cost with 100% clean, renewable energy in all sectors despite inaccurate claims. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E5021-E5023.	3.3	53
103	Modification Of The Standard $\kappa$ -Equation For The Stable Abl Through Enforced Consistency With Monin-Obukhov Similarity Theory. <i>Boundary-Layer Meteorology</i> , 2003, 106, 383-410.	1.2	52
104	Renewable build-up pathways for the US: Generation costs are not system costs. <i>Energy</i> , 2015, 81, 437-445.	4.5	51
105	The effect on photochemical smog of converting the U.S. fleet of gasoline vehicles to modern diesel vehicles. <i>Geophysical Research Letters</i> , 2004, 31, .	1.5	45
106	A comparative study of nucleation parameterizations: 1. Examination and evaluation of the formulations. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	45
107	Ring of impact from the mega-urbanization of Beijing between 2000 and 2009. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 5740-5756.	1.2	45
108	Coupling and evaluating gas/particle mass transfer treatments for aerosol simulation and forecast. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	44

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109	Comparing results from a physical model with satellite and in situ observations to determine whether biomass burning aerosols over the Amazon brighten or burn off clouds. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	44
110	Low-cost solutions to global warming, air pollution, and energy insecurity for 145 countries. <i>Energy and Environmental Science</i> , 2022, 15, 3343-3359.	15.6	44
111	Comparison of a 4000-reaction chemical mechanism with the carbon bond IV and an adjusted carbon bond IV-EX mechanism using SMVGEAR II. <i>Atmospheric Environment</i> , 2000, 34, 3015-3026.	1.9	43
112	Correction to "Control of fossil-fuel particulate black carbon and organic matter, possibly the most effective method of slowing global warming" <i>Journal of Geophysical Research</i> , 2005, 110, n/a-n/a.	3.3	43
113	Reducing Offshore Transmission Requirements by Combining Offshore Wind and Wave Farms. <i>IEEE Journal of Oceanic Engineering</i> , 2011, 36, 552-561.	2.1	42
114	A Refined Method of Parameterizing Absorption Coefficients among Multiple Gases Simultaneously from Line-by-Line Data. <i>Journals of the Atmospheric Sciences</i> , 2005, 62, 506-517.	0.6	41
115	Where is the ideal location for a US East Coast offshore grid?. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	41
116	Geographical and seasonal variability of the global "practical" wind resources. <i>Applied Geography</i> , 2013, 45, 119-130.	1.7	37
117	A 100% wind, water, sunlight (WWS) all-sector energy plan for Washington State. <i>Renewable Energy</i> , 2016, 86, 75-88.	4.3	37
118	The effects of aircraft on climate and pollution. Part II: 20-year impacts of exhaust from all commercial aircraft worldwide treated individually at the subgrid scale. <i>Faraday Discussions</i> , 2013, 165, 369.	1.6	36
119	Effects of aggregating electric load in the United States. <i>Energy Policy</i> , 2012, 46, 399-416.	4.2	35
120	Size distributions of ionic aerosols measured at Waliguan Observatory: Implication for nitrate gas-to-particle transfer processes in the free troposphere. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	34
121	A comparative study of nucleation parameterizations: 2. Three-dimensional model application and evaluation. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	33
122	Large eddy simulations of contrail development: Sensitivity to initial and ambient conditions over first twenty minutes. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	33
123	Zero air pollution and zero carbon from all energy at low cost and without blackouts in variable weather throughout the U.S. with 100% wind-water-solar and storage. <i>Renewable Energy</i> , 2022, 184, 430-442.	4.3	33
124	Hygroscopic growth of common organic aerosol solutes, including humic substances, as derived from water activity measurements. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	31
125	Co-optimized trading of hybrid wind power plant with retired EV batteries in energy and reserve markets under uncertainties. <i>International Journal of Electrical Power and Energy Systems</i> , 2020, 117, 105631.	3.3	31
126	The effects of aircraft on climate and pollution. Part I: Numerical methods for treating the subgrid evolution of discrete size- and composition-resolved contrails from all commercial flights worldwide. <i>Journal of Computational Physics</i> , 2011, 230, 5115-5132.	1.9	30



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127	Point and column aerosol radiative closure during ACE 1: Effects of particle shape and size. <i>Journal of Geophysical Research</i> , 2003, 108, n/a-n/a.	3.3	29
128	A timescale investigation of volatile chemical retention during hydrometeor freezing: Nonrime freezing and dry growth riming without spreading. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	28
129	Recent shift from forest to savanna burning in the Amazon Basin observed by satellite. <i>Environmental Research Letters</i> , 2012, 7, 024020.	2.2	28
130	Optimizing the layout of onshore wind farms to minimize noise. <i>Applied Energy</i> , 2020, 267, 114896.	5.1	28
131	Investigating the Effect of Large Wind Farms on Energy in the Atmosphere. <i>Energies</i> , 2009, 2, 816-838.	1.6	27
132	Examining the impacts of ethanol (E85) versus gasoline photochemical production of smog in a fog using near-explicit gas- and aqueous-chemistry mechanisms. <i>Environmental Research Letters</i> , 2012, 7, 045901.	2.2	27
133	Comparison of model estimates of the effects of aviation emissions on atmospheric ozone and methane. <i>Geophysical Research Letters</i> , 2013, 40, 6004-6009.	1.5	27
134	Meeting the world's energy needs entirely with wind, water, and solar power. <i>Bulletin of the Atomic Scientists</i> , 2013, 69, 30-40.	0.2	26
135	Comparison of low-carbon pathways for California. <i>Climatic Change</i> , 2015, 131, 545-557.	1.7	26
136	The cost of grid stability with 100% clean, renewable energy for all purposes when countries are isolated versus interconnected. <i>Renewable Energy</i> , 2021, 179, 1065-1075.	4.3	26
137	Vertical mixing of commercial aviation emissions from cruise altitude to the surface. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	25
138	Comment on "Radiative Absorption Enhancements Due to the Mixing State of Atmospheric Black Carbon". <i>Science</i> , 2013, 339, 393-393.	6.0	24
139	Toward battery electric and hydrogen fuel cell military vehicles for land, air, and sea. <i>Energy</i> , 2022, 254, 124355.	4.5	24
140	Chemical retention during dry growth riming. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	22
141	Transitioning All Energy in 74 Metropolitan Areas, Including 30 Megacities, to 100% Clean and Renewable Wind, Water, and Sunlight (WWS). <i>Energies</i> , 2020, 13, 4934.	1.6	22
142	An intercomparative study of the effects of aircraft emissions on surface air quality. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 8325-8344.	1.2	21
143	Carbon emissions and costs associated with subsidizing New York nuclear instead of replacing it with renewables. <i>Journal of Cleaner Production</i> , 2018, 205, 884-894.	4.6	21
144	A mass, energy, vorticity, and potential enstrophy conserving lateral fluid's land boundary scheme for the shallow water equations. <i>Journal of Computational Physics</i> , 2009, 228, 1-32.	1.9	20

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145	Fine scale modeling of wintertime aerosol mass, number, and size distributions in central California. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	20
146	On the correlation between building heat demand and wind energy supply and how it helps to avoid blackouts. <i>Smart Energy</i> , 2021, 1, 100009.	2.6	20
147	Parameterization of subgrid plume dilution for use in large-scale atmospheric simulations. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 2551-2560.	1.9	19
148	Ocean Acidification Science Needs for Natural Resource Managers of the North American West Coast. <i>Oceanography</i> , 2015, 25, 170-181.	0.5	19
149	Clean grids with current technology. <i>Nature Climate Change</i> , 2016, 6, 441-442.	8.1	18
150	Global-through-urban nested three-dimensional simulation of air pollution with a 13,600-reaction photochemical mechanism. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	17
151	Analysis of gas-aerosol partitioning in the Arctic: Comparison of size-resolved equilibrium model results with field data. <i>Journal of Geophysical Research</i> , 2000, 105, 19891-19903.	3.3	15
152	Measuring and modeling the hygroscopic growth of two humic substances in mixed aerosol particles of atmospheric relevance. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 8973-8989.	1.9	15
153	Exploring wind energy potential off the California coast. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	14
154	Short-term effects of agriculture on air pollution and climate in California. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	14
155	Response to "A critique of Jacobson and Delucchi's proposals for a world renewable energy supply" by Ted Trainer. <i>Energy Policy</i> , 2012, 44, 482-484.	4.2	14
156	Short-term Impacts of the Megaurbanizations of New Delhi and Los Angeles Between 2000 and 2009. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 35-56.	1.2	14
157	The Santa Cruz Eddy. Part I: Observations and Statistics. <i>Monthly Weather Review</i> , 2005, 133, 767-782.	0.5	13
158	A numerical model of the partitioning of trace chemical solutes during drop freezing. <i>Journal of Atmospheric Chemistry</i> , 2006, 53, 13-42.	1.4	13
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