Donald J Wuebbles

List of Publications by Year
in descending order

86 papers	6,276 citations	136950 32 h-index	91884 69 g-index
93 all docs	93 docs citations	93 times ranked	8516 citing authors

#	Article	IF	Citations
1	Factors affecting the detection of trends: Statistical considerations and applications to environmental data. Journal of Geophysical Research, 1998, 103, 17149-17161.	3.3	679
2	Atmospheric methane and global change. Earth-Science Reviews, 2002, 57, 177-210.	9.1	631
3	Air Pollution and Noncommunicable Diseases. Chest, 2019, 155, 417-426.	0.8	497
4	Monitoring and Understanding Trends in Extreme Storms: State of Knowledge. Bulletin of the American Meteorological Society, 2013, 94, 499-514.	3.3	426
5	Monitoring and Understanding Changes in Heat Waves, Cold Waves, Floods, and Droughts in the United States: State of Knowledge. Bulletin of the American Meteorological Society, 2013, 94, 821-834.	3.3	365
6	Air Pollution and Noncommunicable Diseases. Chest, 2019, 155, 409-416.	0.8	342
7	Regional climate change projections for Chicago and the US Great Lakes. Journal of Great Lakes Research, 2010, 36, 7-21.	1.9	252
8	Nitrous Oxide: No Laughing Matter. Science, 2009, 326, 56-57.	12.6	233
9	Regional climate change projections for the Northeast USA. Mitigation and Adaptation Strategies for Global Change, 2008, 13, 425-436.	2.1	219
10	A Preliminary Synthesis of Modeled Climate Change Impacts on U.S. Regional Ozone Concentrations. Bulletin of the American Meteorological Society, 2009, 90, 1843-1864.	3.3	175
11	Chlorocarbon emission scenarios: Potential impact on stratospheric ozone. Journal of Geophysical Research, 1983, 88, 1433-1443.	3.3	169
12	An asynchronous regional regression model for statistical downscaling of daily climate variables. International Journal of Climatology, 2013, 33, 2473-2494.	3.5	152
13	Observationalâ€•and modelâ€based trends and projections of extreme precipitation over the contiguous United States. Earth's Future, 2014, 2, 99-113.	6.3	131
14	Climate Change Projections for the United States Midwest. Mitigation and Adaptation Strategies for Global Change, 2004, 9, 335-363.	2.1	128
15	Radiative forcings and global warming potentials of 39 greenhouse gases. Journal of Geophysical Research, 2000, 105, 20773-20790.	3.3	125
16	Assessing General Circulation Model Simulations of Atmospheric Teleconnection Patterns. Journal of Climate, 2009, 22, 4348-4372.	3.2	123
17	Health Benefits of Air Pollution Reduction. Annals of the American Thoracic Society, 2019, 16, 1478-1487.	3.2	105
18	Monitoring and Understanding Changes in Extremes: Extratropical Storms, Winds, and Waves. Bulletin of the American Meteorological Society, 2014, 95, 377-386.	3.3	94

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19	Global model simulation of summertime U.S. ozone diurnal cycle and its sensitivity to PBL mixing, spatial resolution, and emissions. Atmospheric Environment, 2008, 42, 8470-8483.	4.1	91
20	Nitrogen oxides from highâ€altitude aircraft: An update of potential effects on ozone. Journal of Geophysical Research, 1989, 94, 16351-16363.	3.3	81
21	Severe Weather in United States Under a Changing Climate. Eos, 2014, 95, 149-150.	0.1	74
22	Consistent sets of atmospheric lifetimes and radiative forcings on climate for CFC replacements: HCFCs and HFCs. Journal of Geophysical Research, 2000, 105, 6903-6914.	3.3	67
23	Effects of Future Climate and Biogenic Emissions Changes on Surface Ozone over the United States and China. Journal of Applied Meteorology and Climatology, 2008, 47, 1888-1909.	1.5	67
24	New methodology for Ozone Depletion Potentials of short-lived compounds: n-Propyl bromide as an example. Journal of Geophysical Research, 2001, 106, 14551-14571.	3.3	61
25	Projected risk of high ozone episodes in 2050. Atmospheric Environment, 2012, 59, 567-577.	4.1	60
26	Effects of intercontinental transport on surface ozone over the United States: Present and future assessment with a global model. Geophysical Research Letters, 2008, 35, .	4.0	54
27	Seasonal and regional variations in extreme precipitation event frequency using CMIP5. Geophysical Research Letters, 2016, 43, 5385-5393.	4.0	49
28	Impacts of aircraft emissions on the air quality near the ground. Atmospheric Chemistry and Physics, 2013, 13, 5505-5522.	4.9	44
29	Highâ€Resolution Dynamical Downscaling Ensemble Projections of Future Extreme Temperature Distributions for the United States. Earth's Future, 2017, 5, 1234-1251.	6.3	42
30	Change in ozone air pollution over Chicago associated with global climate change. Journal of Geophysical Research, 2008, 113, .	3.3	41
31	Atmospheric lifetimes and Ozone Depletion Potentials of trans-1-chloro-3,3,3-trifluoropropylene and trans-1,2-dichloroethylene in a three-dimensional model. Atmospheric Chemistry and Physics, 2010, 10, 10867-10874.	4.9	41
32	An integrated framework for quantifying and valuing climate change impacts on urban energy and infrastructure: A Chicago case study. Journal of Great Lakes Research, 2010, 36, 94-105.	1.9	35
33	Introduction: Assessing the effects of climate change on Chicago and the Great Lakes. Journal of Great Lakes Research, 2010, 36, 1-6.	1.9	34
34	The Need for an Integrated Landâ€Lakeâ€Atmosphere Modeling System, Exemplified by North America's Great Lakes Region. Earth's Future, 2018, 6, 1366-1379.	6.3	34
35	Evaluations of high-resolution dynamically downscaled ensembles over the contiguous United States. Climate Dynamics, 2018, 50, 863-884.	3.8	33
36	An Environmental Rationale for Retention of Endangered Chemicals. Science, 1997, 278, 1090-1091.	12.6	28

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37	Comparison of model estimates of the effects of aviation emissions on atmospheric ozone and methane. Geophysical Research Letters, 2013, 40, 6004-6009.	4.0	27
38	Analyses for Highâ€Resolution Projections Through the End of the 21st Century for Precipitation Extremes Over the United States. Earth's Future, 2018, 6, 1471-1490.	6.3	27
39	Potential impact of iodinated replacement compounds CF₃I and CH₃I on atmospheric ozone: a three-dimensional modeling study. Atmospheric Chemistry and Physics, 2010, 10, 10129-10144.	4.9	26
40	Three-dimensional model evaluation of the Ozone Depletion Potentials for n-propyl bromide, trichloroethylene and perchloroethylene. Atmospheric Chemistry and Physics, 2011, 11, 2371-2380.	4.9	24
41	Designing the Climate Observing System of the Future. Earth's Future, 2018, 6, 80-102.	6.3	24
42	Potential impacts of CF₃I on ozone as a replacement for CF₃Br in aircraft applications. Atmospheric Chemistry and Physics, 2006, 6, 4559-4568.	4.9	22
43	An intercomparative study of the effects of aircraft emissions on surface air quality. Journal of Geophysical Research D: Atmospheres, 2017, 122, 8325-8344.	3.3	21
44	Impacts of longâ€range transport of global pollutants and precursor gases on U.S. air quality under future climatic conditions. Journal of Geophysical Research, 2008, 113, .	3.3	20
45	Domestic versus international contributions on 2050 ozone air quality: How much is convertible by regional control?. Atmospheric Environment, 2013, 68, 315-325.	4.1	18
46	Air Quality in a Cleaner Energy World. Current Pollution Reports, 2015, 1, 117-129.	6.6	17
47	The Need for Urbanâ€Resolving Climate Modeling Across Scales. AGU Advances, 2021, 2, e2020AV000271.	5.4	17
48	Analyses of new shortâ€lived replacements for HFCs with large GWPs. Geophysical Research Letters, 2013, 40, 4767-4771.	4.0	16
49	A three-dimensional model of the atmospheric chemistry of E and Z-CF3CH=CHCl (HCFO-1233(zd) (E/Z)). Atmospheric Environment, 2018, 179, 250-259.	4.1	16
50	Title is missing!. Climatic Change, 1999, 42, 439-474.	3.6	15
51	Revising the Ozone Depletion Potentials Metric for Shortâ€Lived Chemicals Such as CF₃I and CH₃I. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032414.	3.3	14
52	OH reaction rate constant, IR absorption spectrum, ozone depletion potentials and global warming potentials of 2-bromo-3,3,3-trifluoropropene. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	13
53	Impact of a future H₂-based road transportation sector on the composition and chemistry of the atmosphere â€“ Part 1: Tropospheric composition and air quality. Atmospheric Chemistry and Physics, 2013, 13, 6117-6137.	4.9	13
54	Potential effects of climate and emissions changes on surface ozone in the Chicago area. Journal of Great Lakes Research, 2010, 36, 59-64.	1.9	12

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55	The Impact on the Ozone Layer of a Potential Fleet of Civil Hypersonic Aircraft. Earth's Future, 2020, 8, e2020EF001626.	6.3	10
56	Potential Impacts of Supersonic Aircraft Emissions on Ozone and Resulting Forcing on Climate: An Update on Historical Analysis. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034130.	3.3	10
57	Explicit calculation of indirect global warming potentials for halons using atmospheric models. Atmospheric Chemistry and Physics, 2009, 9, 8719-8733.	4.9	9
58	Three-Dimensional Modeling of HCFC-123 in the Atmosphere: Assessing Its Potential Environmental Impacts and Rationale for Continued Use. Environmental Science & Technology, 2009, 43, 3208-3213.	10.0	8
59	Stratospheric Ozone and Climate Forcing Sensitivity to Cruise Altitudes for Fleets of Potential Supersonic Transport Aircraft. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034971.	3.3	7
60	Urban-Scale Processes in High-Spatial-Resolution Earth System Models. Bulletin of the American Meteorological Society, 2020, 101, E1555-E1561.	3.3	7
61	The Potential Impact of a Clean Energy Society on Air Quality. Earth's Future, 2022, 10, .	6.3	7
62	Climate Change in the 21st Century: Looking Beyond the Paris Agreement. Climate Change Management, 2018, , 15-38.	0.8	6
63	Aviation impact on air quality present day and mid-century simulated in the Community Atmosphere Model (CAM). Atmospheric Environment, 2019, 196, 125-132.	4.1	5
64	Ethics in climate change: a climate scientist's perspective. Geological Society Special Publication, 2021, 508, 285-296.	1.3	5
65	Diagnostic tools for evaluating quasiâ€horizontal transport in globalâ€scale chemistry models. Journal of Geophysical Research, 2012, 117, .	3.3	3
66	Potential effects of climate change on global security. Environment Systems and Decisions, 2014, 34, 564.	3.4	3
67	Correction to â€œOH reaction rate constant, IR absorption spectrum, ozone depletion potentials and global warming potentials of 2â€bromoâ€3,3,3â€trifluoropropeneâ€• Journal of Geophysical Research, 2012, 117, .	3.3	2
68	Empirical-Statistical Downscaling. , 2021, , 82-101.		2
69	Added Value of Downscaling. , 2021, , 102-120.		1
70	Confronting Racism to Advance Our Science. AGU Advances, 2021, 2, e2020AV000296.	5.4	1
71	Converging on Solutions to Plan Sustainable Cities. Eos, 2020, 101, .	0.1	1
72	Harold S. Johnston (1920-2012). Eos, 2013, 94, 88-88.	0.1	0

#	Article	IF	Citations
73	Thank You to Our 2019 Reviewers. AGU Advances, 2020, 1, e2020AV000181.	5.4	0
74	AGU Advances Goes Online. AGU Advances, 2020, 1, e2019AV000105.	5.4	0
75	Dynamical Downscaling. , 2021, , 64-81.		0
76	Uncertainty in Future Projections, and Approaches for Representing Uncertainty. , 2021, , 121-138.		0
77	Guidance and Recommendations for Use of (Downscaled) Climate Information. , 2021, , 139-156.		0
78	Impacts, Adaptation, Vulnerability, and Decision-Making. , 2021, , 1-18.		0
79	Assessing Climate-Change Impacts at the Regional Scale. , 2021, , 40-63.		0
80	Global Climate Models. , 2021, , 19-39.		0
81	The Future of Regional Downscaling. , 2021, , 157-165.		0
82	Thank You to Our 2020 Peer Reviewers. AGU Advances, 2021, 2, e2021AV000426.	5.4	0
83	Screening Techniques for Environmental Impact of Cleaning Agents. , 2011, , 501-519.		0
84	Setting the Stage for Risk Management: Severe Weather Under a Changing Climate. , 2016, , 61-80.		0
85	Community-Scale Response To Climate Change Impacts On Rural Agricultural Economies. , 2021, , .		0
86	Thank You to Our 2021 Peer Reviewers. AGU Advances, 2022, 3, .	5.4	0