D T Shindell

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7924283/publications.pdf

Version: 2024-02-01

286 papers 48,614 citations

101 h-index 202 g-index

341 all docs

341 docs citations

341 times ranked

33484 citing authors

#	Article	IF	CITATIONS
1	Bounding the role of black carbon in the climate system: A scientific assessment. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5380-5552.	1.2	4,319
2	Historical (1850–2000) gridded anthropogenic and biomass burning emissions of reactive gases and aerosols: methodology and application. Atmospheric Chemistry and Physics, 2010, 10, 7017-7039.	1.9	2,020
3	Global Signatures and Dynamical Origins of the Little Ice Age and Medieval Climate Anomaly. Science, 2009, 326, 1256-1260.	6.0	1,894
4	Three decades of global methane sources and sinks. Nature Geoscience, 2013, 6, 813-823.	5.4	1,649
5	Simultaneously Mitigating Near-Term Climate Change and Improving Human Health and Food Security. Science, 2012, 335, 183-189.	6.0	1,107
6	Efficacy of climate forcings. Journal of Geophysical Research, 2005, 110, .	3.3	1,104
7	SOLAR INFLUENCES ON CLIMATE. Reviews of Geophysics, 2010, 48, .	9.0	1,014
8	Nitrogen and sulfur deposition on regional and global scales: A multimodel evaluation. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	1.9	846
9	Present-Day Atmospheric Simulations Using GISS ModelE: Comparison to In Situ, Satellite, and Reanalysis Data. Journal of Climate, 2006, 19, 153-192.	1.2	832
10	Anthropogenic and Natural Radiative Forcing. , 2014, , 659-740.		786
11	Multimodel ensemble simulations of present-day and near-future tropospheric ozone. Journal of Geophysical Research, 2006, 111 , .	3.3	743
12	Improved Attribution of Climate Forcing to Emissions. Science, 2009, 326, 716-718.	6.0	739
13	Solar Forcing of Regional Climate Change During the Maunder Minimum. Science, 2001, 294, 2149-2152.	6.0	688
14	Warming of the Antarctic ice-sheet surface since the 1957 International Geophysical Year. Nature, 2009, 457, 459-462.	13.7	620
15	Configuration and assessment of the GISS ModelE2 contributions to the CMIP5 archive. Journal of Advances in Modeling Earth Systems, 2014, 6, 141-184.	1.3	597
16	Climate response to regional radiative forcing during the twentieth century. Nature Geoscience, 2009, 2, 294-300.	5.4	584
17	Driving forces of global wildfires over the past millennium and the forthcoming century. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19167-19170.	3.3	579
18	Agriculture production as a major driver of the Earth system exceeding planetary boundaries. Ecology and Society, 2017, 22, .	1.0	576

#	Article	IF	Citations
19	Pre-industrial to end 21st century projections of tropospheric ozone from the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 2063-2090.	1.9	570
20	Solar Cycle Variability, Ozone, and Climate. Science, 1999, 284, 305-308.	6.0	524
21	Increased polar stratospheric ozone losses and delayed eventual recovery owing to increasing greenhouse-gas concentrations. Nature, 1998, 392, 589-592.	13.7	509
22	Simulation of recent northern winter climate trends by greenhouse-gas forcing. Nature, 1999, 399, 452-455.	13.7	489
23	Evaluation of Climate Models. , 2014, , 741-866.		458
24	Multimodel estimates of intercontinental sourceâ€receptor relationships for ozone pollution. Journal of Geophysical Research, 2009, 114, .	3.3	430
25	Global air quality and climate. Chemical Society Reviews, 2012, 41, 6663.	18.7	428
26	A multi-model assessment of pollution transport to the Arctic. Atmospheric Chemistry and Physics, 2008, 8, 5353-5372.	1.9	419
27	Radiative forcing in the ACCMIP historical and future climate simulations. Atmospheric Chemistry and Physics, 2013, 13, 2939-2974.	1.9	395
28	The Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP): overview and description of models, simulations and climate diagnostics. Geoscientific Model Development, 2013, 6, 179-206.	1.3	388
29	Global premature mortality due to anthropogenic outdoor air pollution and the contribution of past climate change. Environmental Research Letters, 2013, 8, 034005.	2.2	381
30	Simulations of anthropogenic change in the strength of the Brewer–Dobson circulation. Climate Dynamics, 2006, 27, 727-741.	1.7	371
31	Global distribution and trends of tropospheric ozone: An observation-based review. Elementa, 2014, 2,	1.1	365
32	The AeroCom evaluation and intercomparison of organic aerosol in global models. Atmospheric Chemistry and Physics, 2014, 14, 10845-10895.	1.9	363
33	Tropospheric ozone changes, radiative forcing and attribution to emissions in the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 3063-3085.	1.9	361
34	Climate forcing reconstructions for use in PMIP simulations of the last millennium (v1.0). Geoscientific Model Development, 2011, 4, 33-45.	1.3	349
35	Short-lived pollutants in the Arctic: their climate impact and possible mitigation strategies. Atmospheric Chemistry and Physics, 2008, 8, 1723-1735.	1.9	346
36	Global Air Quality and Health Co-benefits of Mitigating Near-Term Climate Change through Methane and Black Carbon Emission Controls. Environmental Health Perspectives, 2012, 120, 831-839.	2.8	340

#	Article	IF	Citations
37	Climate and air-quality benefits of a realistic phase-out of fossil fuels. Nature, 2019, 573, 408-411.	13.7	340
38	The Global Atmospheric Environment for the Next Generation. Environmental Science & Emp; Technology, 2006, 40, 3586-3594.	4.6	338
39	Forced annular variations in the 20th century Intergovernmental Panel on Climate Change Fourth Assessment Report models. Journal of Geophysical Research, 2006, 111 , .	3.3	311
40	Climate forcings in Goddard Institute for Space Studies SI2000 simulations. Journal of Geophysical Research, 2002, 107, ACL 2-1.	3.3	302
41	Preindustrial to present-day changes in tropospheric hydroxyl radical and methane lifetime from the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 5277-5298.	1.9	288
42	Multi-model mean nitrogen and sulfur deposition from the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP): evaluation of historical and projected future changes. Atmospheric Chemistry and Physics, 2013, 13, 7997-8018.	1.9	279
43	Southern Hemisphere climate response to ozone changes and greenhouse gas increases. Geophysical Research Letters, 2004, 31, .	1.5	277
44	Uncertainties and assessments of chemistry-climate models of the stratosphere. Atmospheric Chemistry and Physics, 2003, 3, 1-27.	1.9	272
45	Health and climate impacts of ocean-going vessels in East Asia. Nature Climate Change, 2016, 6, 1037-1041.	8.1	272
46	Energy budget constraints on climate response. Nature Geoscience, 2013, 6, 415-416.	5.4	270
47	On the lack of stratospheric dynamical variability in lowâ€top versions of the CMIP5 models. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2494-2505.	1.2	268
48	Assessing future nitrogen deposition and carbon cycle feedback using a multimodel approach: Analysis of nitrogen deposition. Journal of Geophysical Research, 2005, 110 , .	3.3	266
49	The Changing Face of Arctic Snow Cover: A Synthesis of Observed and Projected Changes. Ambio, 2011, 40, 17-31.	2.8	264
50	Northern hemisphere winter climate response to greenhouse gas, ozone, solar, and volcanic forcing. Journal of Geophysical Research, 2001, 106, 7193-7210.	3.3	260
51	Analysis of present day and future OH and methane lifetime in the ACCMIP simulations. Atmospheric Chemistry and Physics, 2013, 13, 2563-2587.	1.9	257
52	Multimodel simulations of carbon monoxide: Comparison with observations and projected near-future changes. Journal of Geophysical Research, 2006, 111 , .	3.3	254
53	El Ni $ ilde{A}$ ±0 and health risks from landscape fire emissions in southeast Asia. Nature Climate Change, 2013, 3, 131-136.	8.1	250
54	Ozone database in support of CMIP5 simulations: results and corresponding radiative forcing. Atmospheric Chemistry and Physics, 2011, 11, 11267-11292.	1.9	244

#	Article	IF	Citations
55	Atmospheric composition change: Climate–Chemistry interactions. Atmospheric Environment, 2009, 43, 5138-5192.	1.9	243
56	Longâ€term ozone changes and associated climate impacts in CMIP5 simulations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5029-5060.	1.2	243
57	Nitrate aerosols today and in 2030: a global simulation including aerosols and tropospheric ozone. Atmospheric Chemistry and Physics, 2007, 7, 5043-5059.	1.9	238
58	Climate forcing reconstructions for use in PMIP simulations of the Last Millennium (v1.1). Geoscientific Model Development, 2012, 5, $185-191$.	1.3	238
59	GISSâ€E2.1: Configurations and Climatology. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002025.	1.3	234
60	Volcanic and Solar Forcing of Climate Change during the Preindustrial Era. Journal of Climate, 2003, 16, 4094-4107.	1.2	230
61	Climate simulations for 1880–2003 with GISS modelE. Climate Dynamics, 2007, 29, 661-696.	1.7	227
62	Inverse modeling and mapping US air quality influences of inorganic PM _{2.5} precursor emissions using the adjoint of GEOS-Chem. Atmospheric Chemistry and Physics, 2009, 9, 5877-5903.	1.9	226
63	Reconciling warming trends. Nature Geoscience, 2014, 7, 158-160.	5.4	224
64	Attribution of climate forcing to economic sectors. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3382-3387.	3.3	223
65	Dangerous human-made interference with climate: a GISS modelE study. Atmospheric Chemistry and Physics, 2007, 7, 2287-2312.	1.9	211
66	Dynamic winter climate response to large tropical volcanic eruptions since 1600. Journal of Geophysical Research, 2004, 109, .	3.3	209
67	AerChemMIP: quantifying the effects of chemistry and aerosols in CMIP6. Geoscientific Model Development, 2017, 10, 585-607.	1.3	202
68	A comparison of model-simulated trends in stratospheric temperatures. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 1565-1588.	1.0	189
69	Modeling atmospheric stable water isotopes and the potential for constraining cloud processes and stratosphere-troposphere water exchange. Journal of Geophysical Research, 2005, 110, .	3.3	182
70	Fast and slow precipitation responses to individual climate forcers: A PDRMIP multimodel study. Geophysical Research Letters, 2016, 43, 2782-2791.	1.5	179
71	Future global mortality from changes in air pollution attributable to climate change. Nature Climate Change, 2017, 7, 647-651.	8.1	177
72	Consistent simulations of multiple proxy responses to an abrupt climate change event. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 837-842.	3.3	168

#	Article	IF	Citations
73	Global and regional trends of atmospheric sulfur. Scientific Reports, 2019, 9, 953.	1.6	166
74	Large Reductions in Solar Energy Production Due to Dust and Particulate Air Pollution. Environmental Science and Technology Letters, 2017, 4, 339-344.	3.9	159
75	Modelling future changes in surface ozone: a parameterized approach. Atmospheric Chemistry and Physics, 2012, 12, 2037-2054.	1.9	155
76	Climate, health, agricultural and economic impacts of tighter vehicle-emission standards. Nature Climate Change, 2011, 1, 59-66.	8.1	153
77	Interactive ozone and methane chemistry in GISS-E2 historical and future climate simulations. Atmospheric Chemistry and Physics, 2013, 13, 2653-2689.	1.9	150
78	Simulations of preindustrial, present-day, and 2100 conditions in the NASA GISS composition and climate model G-PUCCINI. Atmospheric Chemistry and Physics, 2006, 6, 4427-4459.	1.9	149
79	Impacts of climate change on surface ozone and intercontinental ozone pollution: A multiâ€model study. Journal of Geophysical Research D: Atmospheres, 2013, 118, 3744-3763.	1.2	149
80	Longâ€term changes in lower tropospheric baseline ozone concentrations: Comparing chemistryâ€climate models and observations at northern midlatitudes. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5719-5736.	1.2	149
81	Origin and variability of upper tropospheric nitrogen oxides and ozone at northern mid-latitudes. Atmospheric Environment, 2001, 35, 3421-3433.	1.9	145
82	Detection and Attribution of Climate Change: from Global to Regional. , 2014, , 867-952.		144
83	Impact of Future Climate and Emission Changes on Stratospheric Aerosols and Ozone. Journals of the Atmospheric Sciences, 2002, 59, 414-440.	0.6	142
84	The influence of foreign vs. North American emissions on surface ozone in the US. Atmospheric Chemistry and Physics, 2009, 9, 5027-5042.	1.9	141
85	Climate and ozone response to increased stratospheric water vapor. Geophysical Research Letters, 2001, 28, 1551-1554.	1.5	139
86	Did the Toba volcanic eruption of $\hat{a}^1/474$ ka B.P. produce widespread glaciation?. Journal of Geophysical Research, 2009, 114, .	3.3	136
87	Inhomogeneous forcing and transient climate sensitivity. Nature Climate Change, 2014, 4, 274-277.	8.1	134
88	CMIP5 historical simulations (1850–2012) with GISS ModelE2. Journal of Advances in Modeling Earth Systems, 2014, 6, 441-478.	1.3	133
89	A 4-D climatology (1979–2009) of the monthly tropospheric aerosol optical depth distribution over the Mediterranean region from a comparative evaluation and blending of remote sensing and model products. Atmospheric Measurement Techniques, 2013, 6, 1287-1314.	1.2	131
90	Northern winter climate change: Assessment of uncertainty in CMIP5 projections related to stratosphere-troposphere coupling. Journal of Geophysical Research D: Atmospheres, 2014, 119, 7979-7998.	1.2	131

#	Article	IF	CITATIONS
91	An emissions-based view of climate forcing by methane and tropospheric ozone. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	129
92	Impacts of climate change on methane emissions from wetlands. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	128
93	Quantified, localized health benefits of accelerated carbon dioxide emissions reductions. Nature Climate Change, 2018, 8, 291-295.	8.1	128
94	Intercontinental Impacts of Ozone Pollution on Human Mortality. Environmental Science & Eamp; Technology, 2009, 43, 6482-6487.	4.6	126
95	Evaluation of preindustrial to present-day black carbon and its albedo forcing from Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 2607-2634.	1.9	125
96	Global and regional temperature-change potentials for near-term climate forcers. Atmospheric Chemistry and Physics, 2013, 13, 2471-2485.	1.9	122
97	The impact of greenhouse gases and halogenated species on future solar UV radiation doses. Geophysical Research Letters, 2000, 27, 1127-1130.	1.5	119
98	Rapid Adjustments Cause Weak Surface Temperature Response to Increased Black Carbon Concentrations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11462-11481.	1,2	118
99	The social cost of atmospheric release. Climatic Change, 2015, 130, 313-326.	1.7	117
100	PDRMIP: A Precipitation Driver and Response Model Intercomparison Projectâ€"Protocol and Preliminary Results. Bulletin of the American Meteorological Society, 2017, 98, 1185-1198.	1.7	116
101	Disentangling the effects of CO ₂ and short-lived climate forcer mitigation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16325-16330.	3.3	114
102	Global assessment of oil and gas methane ultra-emitters. Science, 2022, 375, 557-561.	6.0	114
103	Understanding Rapid Adjustments to Diverse Forcing Agents. Geophysical Research Letters, 2018, 45, 12023-12031.	1.5	113
104	Climate Change and the Middle Atmosphere. Part III: The Doubled CO2Climate Revisited. Journal of Climate, 1998, 11, 876-894.	1.2	112
105	Modeling the distribution of the volcanic aerosol cloud from the 1783–1784 Laki eruption. Journal of Geophysical Research, 2006, 111, .	3.3	112
106	Future climate change under RCP emission scenarios with GISS <scp>M</scp> odelE2. Journal of Advances in Modeling Earth Systems, 2015, 7, 244-267.	1.3	112
107	Dominant control of agriculture and irrigation on urban heat island in India. Scientific Reports, 2017, 7, 14054.	1.6	106
108	The effect of future ambient air pollution on human premature mortality to 2100 using output from the ACCMIP model ensemble. Atmospheric Chemistry and Physics, 2016, 16, 9847-9862.	1.9	101

#	Article	IF	Citations
109	A climate policy pathway for near- and long-term benefits. Science, 2017, 356, 493-494.	6.0	100
110	Preindustrial-to-present-day radiative forcing by tropospheric ozone from improved simulations with the GISS chemistry-climate GCM. Atmospheric Chemistry and Physics, 2003, 3, 1675-1702.	1.9	99
111	Air pollution: Clean up our skies. Nature, 2014, 515, 335-337.	13.7	99
112	Coupled Aerosol-Chemistry–Climate Twentieth-Century Transient Model Investigation: Trends in Short-Lived Species and Climate Responses. Journal of Climate, 2011, 24, 2693-2714.	1.2	98
113	Role of tropospheric ozone increases in 20th-century climate change. Journal of Geophysical Research, 2006, 111, .	3.3	97
114	The role of forcing and internal dynamics in explaining the "Medieval Climate Anomaly― Climate Dynamics, 2012, 39, 2847-2866.	1.7	97
115	The influence of ozone precursor emissions from four world regions on tropospheric composition and radiative climate forcing. Journal of Geophysical Research, 2012, 117, .	3.3	97
116	The Relative Importance of Solar and Anthropogenic Forcing of Climate Change between the Maunder Minimum and the Present. Journal of Climate, 2004, 17, 906-929.	1.2	96
117	Information from Paleoclimate Archives. , 2014, , 383-464.		95
118	The quest for improved air quality may push China to continue its CO ₂ reduction beyond the Paris Commitment. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29535-29542.	3.3	93
119	Cross influences of ozone and sulfate precursor emissions changes on air quality and climate. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4377-4380.	3.3	91
120	Fire parameterization on a global scale. Journal of Geophysical Research, 2009, 114, .	3.3	90
121	Solar and anthropogenic forcing of tropical hydrology. Geophysical Research Letters, 2006, 33, .	1.5	89
122	Multi-model simulations of aerosol and ozone radiative forcing due to anthropogenic emission changes during the periodÂ1990–2015. Atmospheric Chemistry and Physics, 2017, 17, 2709-2720.	1.9	87
123	A PDRMIP Multimodel Study on the Impacts of Regional Aerosol Forcings on Global and Regional Precipitation. Journal of Climate, 2018, 31, 4429-4447.	1.2	83
124	The added value to global model projections of climate change by dynamical downscaling: A case study over the continental U.S. using the GISSâ€ModelE2 and WRF models. Journal of Geophysical Research, 2012, 117, .	3.3	82
125	Spatial scales of climate response to inhomogeneous radiative forcing. Journal of Geophysical Research, 2010, 115, .	3.3	79
126	How linear is the Arctic Oscillation response to greenhouse gases?. Journal of Geophysical Research, 2002, 107, ACL 1-1.	3.3	78

#	Article	IF	Citations
127	Atmospheric composition, radiative forcing, and climate change as a consequence of a massive methane release from gas hydrates. Paleoceanography, 2003, 18, n/a-n/a.	3.0	77
128	A multi-model study of the hemispheric transport and deposition of oxidised nitrogen. Geophysical Research Letters, 2008, 35, .	1.5	76
129	Short-lived climate pollutant mitigation and the Sustainable Development Goals. Nature Climate Change, 2017, 7, 863-869.	8.1	76
130	Influences of man-made emissions and climate changes on tropospheric ozone, methane, and sulfate at 2030 from a broad range of possible futures. Journal of Geophysical Research, 2006, 111, .	3.3	75
131	Evaluation of observed and modelled aerosol lifetimes using radioactive tracers of opportunity and an ensemble of 19 global models. Atmospheric Chemistry and Physics, 2016, 16, 3525-3561.	1.9	75
132	Effects of solar cycle variability on the lower stratosphere and the troposphere. Journal of Geophysical Research, 1999, 104, 27321-27339.	3.3	74
133	Multimodel projections of climate change from shortâ€lived emissions due to human activities. Journal of Geophysical Research, 2008, 113, .	3.3	74
134	Air Quality Response in China Linked to the 2019 Novel Coronavirus (COVIDâ€19) Lockdown. Geophysical Research Letters, 2020, 47, e2020GL089252.	1.5	74
135	Local and remote contributions to Arctic warming. Geophysical Research Letters, 2007, 34, .	1.5	73
136	Precipitation response to regional radiative forcing. Atmospheric Chemistry and Physics, 2012, 12, 6969-6982.	1.9	72
137	Implications of possible interpretations of †greenhouse gas balance†in the Paris Agreement. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20160445.	1.6	72
138	Aerosol climate effects and air quality impacts from 1980 to 2030. Environmental Research Letters, 2008, 3, 024004.	2.2	71
139	Climate and health impacts of US emissions reductions consistent with 2 °C. Nature Climate Change, 2016, 6, 503-507.	8.1	71
140	Accounting for the climate–carbon feedback in emission metrics. Earth System Dynamics, 2017, 8, 235-253.	2.7	71
141	On the characteristics of aerosol indirect effect based on dynamic regimes in global climate models. Atmospheric Chemistry and Physics, 2016, 16, 2765-2783.	1.9	67
142	Solar signals in CMIPâ€5 simulations: the stratospheric pathway. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2390-2403.	1.0	66
143	Chemistry-climate interactions in the Goddard Institute for Space Studies general circulation model: 1. Tropospheric chemistry model description and evaluation. Journal of Geophysical Research, 2001, 106, 8047-8075.	3.3	65
144	Impacts of intercontinental transport of anthropogenic fine particulate matter on human mortality. Air Quality, Atmosphere and Health, 2014, 7, 369-379.	1.5	64

#	Article	IF	Citations
145	Drivers of Precipitation Change: An Energetic Understanding. Journal of Climate, 2018, 31, 9641-9657.	1.2	63
146	The net climate impact of coal-fired power plant emissions. Atmospheric Chemistry and Physics, 2010, 10, 3247-3260.	1.9	62
147	Evaluation of ACCMIP outgoing longwave radiation from tropospheric ozone using TES satellite observations. Atmospheric Chemistry and Physics, 2013, 13, 4057-4072.	1.9	61
148	Increase of ozone concentrations, its temperature sensitivity and the precursor factor in South China. Tellus, Series B: Chemical and Physical Meteorology, 2022, 66, 23455.	0.8	61
149	Spatial patterns of radiative forcing and surface temperature response. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5385-5403.	1.2	61
150	Efficacy of Climate Forcings in PDRMIP Models. Journal of Geophysical Research D: Atmospheres, 2019, 124, 12824-12844.	1.2	55
151	Global multi-year O ₃ -CO correlation patterns from models and TES satellite observations. Atmospheric Chemistry and Physics, 2011, 11, 5819-5838.	1.9	54
152	Climate Change and the Middle Atmosphere. Part IV: Ozone Response to Doubled CO2. Journal of Climate, 1998, 11, 895-918.	1.2	53
153	Spatially Refined Aerosol Direct Radiative Forcing Efficiencies. Environmental Science & Emp; Technology, 2012, 46, 9511-9518.	4.6	53
154	Impacts of chemistry-aerosol coupling on tropospheric ozone and sulfate simulations in a general circulation model. Journal of Geophysical Research, 2005, 110 , n/a - n/a .	3.3	52
155	Air pollution radiative forcing from specific emissions sectors at 2030. Journal of Geophysical Research, 2008, 113, .	3.3	51
156	Climate forcing and air quality change due to regional emissions reductions by economic sector. Atmospheric Chemistry and Physics, 2008, 8, 7101-7113.	1.9	51
157	Modeling the QBOâ€"Improvements resulting from higherâ€model vertical resolution. Journal of Advances in Modeling Earth Systems, 2016, 8, 1092-1105.	1.3	51
158	Radiative cooling by stratospheric water vapor: Big differences in GCM results. Geophysical Research Letters, 2001, 28, 2791-2794.	1.5	50
159	Use of North American and European air quality networks to evaluate global chemistry–climate modeling of surface ozone. Atmospheric Chemistry and Physics, 2015, 15, 10581-10596.	1.9	50
160	Validation of UARS Microwave Limb Sounder ClO measurements. Journal of Geophysical Research, 1996, 101, 10091-10127.	3.3	49
161	A multimodel assessment of the influence of regional anthropogenic emission reductions on aerosol direct radiative forcing and the role of intercontinental transport. Journal of Geophysical Research D: Atmospheres, 2013, 118, 700-720.	1.2	49
162	CMIP6 Historical Simulations (1850–2014) With GISSâ€E2.1. Journal of Advances in Modeling Earth Systems, 2021, 13, e2019MS002034.	1.3	49

#	Article	IF	Citations
163	The social cost of methane: theory and applications. Faraday Discussions, 2017, 200, 429-451.	1.6	47
164	Regional and global temperature response to anthropogenic SO ₂ emissions from China in three climate models. Atmospheric Chemistry and Physics, 2016, 16, 9785-9804.	1.9	46
165	Effect of climate change on surface ozone over North America, Europe, and East Asia. Geophysical Research Letters, 2016, 43, 3509-3518.	1.5	46
166	General circulation modelling of Holocene climate variability. Quaternary Science Reviews, 2004, 23, 2167-2181.	1.4	45
167	Why Does Aerosol Forcing Control Historical Global-Mean Surface Temperature Change in CMIP5 Models?. Journal of Climate, 2015, 28, 6608-6625.	1.2	44
168	Sensible heat has significantly affected the global hydrological cycle over the historical period. Nature Communications, 2018, 9, 1922.	5.8	44
169	Historical total ozone radiative forcing derived from CMIP6 simulations. Npj Climate and Atmospheric Science, 2020, 3, .	2.6	44
170	Solar signals in CMIPâ€5 simulations: the ozone response. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2670-2689.	1.0	43
171	Attribution of historical ozone forcing to anthropogenic emissions. Nature Climate Change, 2013, 3, 567-570.	8.1	42
172	Interannual Variability of the Antarctic Ozone Hole in a GCM. Part I: The Influence of Tropospheric Wave Variability. Journals of the Atmospheric Sciences, 1997, 54, 2308-2319.	0.6	41
173	Interannual variability of tropospheric trace gases and aerosols: The role of biomass burning emissions. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7157-7173.	1.2	41
174	Climate response to projected changes in shortâ€lived species under an A1B scenario from 2000–2050 in the GISS climate model. Journal of Geophysical Research, 2007, 112, .	3.3	40
175	The vertical distribution of ozone instantaneous radiative forcing from satellite and chemistry climate models. Journal of Geophysical Research, 2011, 116, .	3.3	40
176	Dynamical response of Mediterranean precipitation to greenhouse gases and aerosols. Atmospheric Chemistry and Physics, 2018, 18, 8439-8452.	1.9	40
177	Measurement-based assessment of health burdens from long-term ozone exposure in the United States, Europe, and China. Environmental Research Letters, 2018, 13, 104018.	2.2	40
178	Climate forcing by the on-road transportation and power generation sectors. Atmospheric Environment, 2009, 43, 3077-3085.	1.9	39
179	Toward the next generation of air quality monitoring indicators. Atmospheric Environment, 2013, 80, 561-570.	1.9	39
180	Arctic Amplification Response to Individual Climate Drivers. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6698-6717.	1.2	39

#	Article	IF	Citations
181	The Effects of Heat Exposure on Human Mortality Throughout the United States. GeoHealth, 2020, 4, e2019GH000234.	1.9	39
182	GRIPS Solar Experiments Intercomparison Project: Initial Results. Papers in Meteorology and Geophysics, 2003, 54, 71-90.	0.9	38
183	Declining uncertainty in transient climate response as CO2 forcing dominates future climateÂchange. Nature Geoscience, 2015, 8, 181-185.	5.4	38
184	Connecting regional aerosol emissions reductions to local and remote precipitation responses. Atmospheric Chemistry and Physics, 2018, 18, 12461-12475.	1.9	38
185	Temporal and spatial distribution of health, labor, and crop benefits of climate change mitigation in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	38
186	On the origin of multidecadal to centennial Greenland temperature anomalies over the past 800 yr. Climate of the Past, 2013, 9, 583-596.	1.3	37
187	Indicate separate contributions of long-lived and short-lived greenhouse gases in emission targets. Npj Climate and Atmospheric Science, 2022, 5, 5.	2.6	36
188	Evaluation of the absolute regional temperature potential. Atmospheric Chemistry and Physics, 2012, 12, 7955-7960.	1.9	35
189	Carbon Dioxide Physiological Forcing Dominates Projected Eastern Amazonian Drying. Geophysical Research Letters, 2018, 45, 2815-2825.	1.5	35
190	Observationally constrained aerosol–cloud semi-direct effects. Npj Climate and Atmospheric Science, 2019, 2, .	2.6	35
191	The need for policies to reduce the costs of cleaner cooking in low income settings: Implications from systematic analysis of costs and benefits. Energy Policy, 2018, 121, 275-285.	4.2	34
192	Direct topâ€down estimates of biomass burning CO emissions using TES and MOPITT versus bottomâ€up GFED inventory. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8054-8066.	1.2	33
193	Weak hydrological sensitivity to temperature change over land, independent of climate forcing. Npj Climate and Atmospheric Science, $2018,1,\ldots$	2.6	33
194	CLIMATE CHANGE: Whither Arctic Climate?. Science, 2003, 299, 215-216.	6.0	32
195	Sensitivity of stratospheric geoengineering with black carbon to aerosol size and altitude of injection. Journal of Geophysical Research, 2012, 117, .	3.3	32
196	Do responses to different anthropogenic forcings add linearly in climate models?. Environmental Research Letters, 2015, 10, 104010.	2.2	32
197	Multimodel precipitation responses to removal of U.S. sulfur dioxide emissions. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5024-5038.	1.2	32
198	Global atmospheric chemistry – which air matters. Atmospheric Chemistry and Physics, 2017, 17, 9081-9102.	1.9	32

#	Article	IF	CITATIONS
199	GISS Model E2.2: A Climate Model Optimized for the Middle Atmosphere—Model Structure, Climatology, Variability, and Climate Sensitivity. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032204.	1.2	32
200	Chemistry-climate interactions in the Goddard Institute for Space Studies general circulation model: 2. New insights into modeling the preindustrial atmosphere. Journal of Geophysical Research, 2001, 106, 33435-33451.	3.3	31
201	The impact of orbital sampling, monthly averaging and vertical resolution on climate chemistry model evaluation with satellite observations. Atmospheric Chemistry and Physics, 2011, 11, 6493-6514.	1.9	31
202	Development of the Low Emissions Analysis Platform – Integrated Benefits Calculator (LEAP-IBC) tool to assess air quality and climate co-benefits: Application for Bangladesh. Environment International, 2020, 145, 106155.	4.8	30
203	Increased labor losses and decreased adaptation potential in a warmer world. Nature Communications, 2021, 12, 7286.	5.8	30
204	Seasonal cycles of O 3 in the marine boundary layer: Observation and model simulation comparisons. Journal of Geophysical Research D: Atmospheres, 2016, 121, 538-557.	1.2	29
205	Water vapour adjustments and responses differ between climate drivers. Atmospheric Chemistry and Physics, 2019, 19, 12887-12899.	1.9	29
206	The distribution of snow black carbon observed in the Arctic and compared to the GISS-PUCCINI model. Atmospheric Chemistry and Physics, 2012, 12, 7995-8007.	1.9	28
207	A note on the relationship between ice core methane concentrations and insolation. Geophysical Research Letters, 2004, 31, .	1.5	27
208	Impacts of aerosol-cloud interactions on past and future changes in tropospheric composition. Atmospheric Chemistry and Physics, 2009, 9, 4115-4129.	1.9	27
209	Evaluation of the global aerosol microphysical ModelE2-TOMAS model against satellite and ground-based observations. Geoscientific Model Development, 2015, 8, 631-667.	1.3	26
210	Quantifying the Importance of Rapid Adjustments for Global Precipitation Changes. Geophysical Research Letters, 2018, 45, 11399-11405.	1.5	26
211	Magnitude, trends, and impacts of ambient long-term ozone exposure in the United States from 2000 to 2015. Atmospheric Chemistry and Physics, 2020, 20, 1757-1775.	1.9	26
212	Stratospheric winter climate response to ENSO in three chemistry limate models. Geophysical Research Letters, 2008, 35, .	1.5	25
213	Understanding the drivers for the 20th century change of hydrogen peroxide in Antarctic ice-cores. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	25
214	Radiative forcing due to major aerosol emitting sectors in China and India. Geophysical Research Letters, 2013, 40, 4409-4414.	1.5	25
215	Climate System Scenario Tables. , 2014, , 1395-1446.		25
216	Local and remote mean and extreme temperature response to regional aerosol emissions reductions. Atmospheric Chemistry and Physics, 2020, 20, 3009-3027.	1.9	25

#	Article	IF	Citations
217	Impact of aerosol radiative effects on 2000–2010 surface temperatures. Climate Dynamics, 2015, 45, 2165-2179.	1.7	24
218	Chlorine monoxide in the Antarctic spring vortex: 1. Evolution of midday vertical profiles over McMurdo Station, 1993. Journal of Geophysical Research, 1995, 100, 13999.	3.3	23
219	Chlorine monoxide in the Antarctic spring vortex: 2. A comparison of measured and modeled diurnal cycling over McMurdo Station, 1993. Journal of Geophysical Research, 1996, 101, 1475-1487.	3.3	23
220	2 * CO2 and Solar Variability Influences on the Troposphere Through Wave-Mean Flow Interactions Journal of the Meteorological Society of Japan, 2002, 80, 863-876.	0.7	23
221	How aerosols and greenhouse gases influence the diurnal temperature range. Atmospheric Chemistry and Physics, 2020, 20, 13467-13480.	1.9	23
222	A global climate model study of CH4 emissions during the Holocene and glacial-interglacial transitions constrained by ice core data. Global Biogeochemical Cycles, 2007, 21, .	1.9	22
223	Future Climate Change Under SSP Emission Scenarios With GISSâ€E2.1. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	22
224	Separating the influence of halogen and climate changes on ozone recovery in the upper stratosphere. Journal of Geophysical Research, 2002, 107, ACL 3-1.	3.3	21
225	Extreme wet and dry conditions affected differently by greenhouse gases and aerosols. Npj Climate and Atmospheric Science, 2019, 2, .	2.6	21
226	Comparison of Effective Radiative Forcing Calculations Using Multiple Methods, Drivers, and Models. Journal of Geophysical Research D: Atmospheres, 2019, 124, 4382-4394.	1.2	21
227	Sensitivity studies of oxidative changes in the troposphere in 2100 using the GISS GCM. Atmospheric Chemistry and Physics, 2003, 3, 1267-1283.	1.9	20
228	The Influence of Solar Forcing on Tropical Circulation. Journal of Climate, 2009, 22, 5870-5885.	1.2	20
229	Crop yield changes induced by emissions of individual climateâ€altering pollutants. Earth's Future, 2016, 4, 373-380.	2.4	19
230	The long-term relationship between emissions and economic growth for SO ₂ , CO ₂ , and BC. Environmental Research Letters, 2018, 13, 124021.	2.2	19
231	An exploration of ozone changes and their radiative forcing prior to the chlorofluorocarbon era. Atmospheric Chemistry and Physics, 2002, 2, 363-374.	1.9	18
232	An overview of millimeter-wave spectroscopic measurements of chlorine monoxide at Thule, Greenland, February-March, 1992: Vertical profiles, diurnal variation, and longer-term trends. Geophysical Research Letters, 1994, 21, 1271-1274.	1.5	17
233	Estimating the potential for twenty-first century sudden climate change. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 2675-2694.	1.6	17
234	How well do integrated assessment models represent non-CO2 radiative forcing?. Climatic Change, 2015, 133, 565-582.	1.7	17

#	Article	IF	Citations
235	Reduce short-lived climate pollutants for multiple benefits. Lancet, The, 2015, 386, e28-e31.	6.3	17
236	Potential impact of a US climate policy and air quality regulations on future air quality and climate change. Atmospheric Chemistry and Physics, 2016, 16, 5323-5342.	1.9	17
237	Stratospheric ClO profiles from McMurdo Station, Antarctica, spring 1992. Journal of Geophysical Research, 1995, 100, 3049.	3.3	16
238	The role of temporal evolution in modeling atmospheric emissions from tropical fires. Atmospheric Environment, 2014, 89, 158-168.	1.9	16
239	Aligning evidence generation and use across health, development, and environment. Current Opinion in Environmental Sustainability, 2019, 39, 81-93.	3.1	16
240	Reappraisal of the Climate Impacts of Ozoneâ€Depleting Substances. Geophysical Research Letters, 2020, 47, e2020GL088295.	1.5	16
241	Inferring carbon monoxide pollution changes from space-based observations. Journal of Geophysical Research, 2005, 110 , .	3.3	15
242	Multimodel Surface Temperature Responses to Removal of U.S. Sulfur Dioxide Emissions. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2773-2796.	1.2	15
243	Distinct responses of Asian summer monsoon to black carbon aerosols and greenhouse gases. Atmospheric Chemistry and Physics, 2020, 20, 11823-11839.	1.9	15
244	Air Pollution and Health – A Science-Policy Initiative. Annals of Global Health, 2019, 85, 140.	0.8	15
245	Large uncertainties in global hydroxyl projections tied to fate of reactive nitrogen and carbon. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
246	The impact of horizontal transport on the chemical composition in the tropopause region: lightning NOx and streamers. Advances in Space Research, 2004, 33, 1058-1061.	1.2	14
247	Multi-model impacts of climate change on pollution transport from global emission source regions. Atmospheric Chemistry and Physics, 2017, 17, 14219-14237.	1.9	14
248	GISS Model E2.2: A Climate Model Optimized for the Middle Atmosphereâ€"2. Validation of Largeâ€Scale Transport and Evaluation of Climate Response. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033151.	1.2	14
249	Arctic chlorine monoxide observations during spring 1993 over Thule, Greenland, and implications for ozone depletion. Journal of Geophysical Research, 1994, 99, 25697.	3.3	13
250	Sources of Black Carbon Deposition to the Himalayan Glaciers in Current and Future Climates. Journal of Geophysical Research D: Atmospheres, 2018, 123, 7482-7505.	1.2	13
251	Spatial Patterns of Crop Yield Change by Emitted Pollutant. Earth's Future, 2019, 7, 101-112.	2.4	13
252	Sensitivity of modeled Indian monsoon to Chinese and Indian aerosol emissions. Atmospheric Chemistry and Physics, 2021, 21, 3593-3605.	1.9	13

#	Article	IF	Citations
253	Limits on heterogeneous processing in the Antarctic spring vortex from a comparison of measured and modeled chlorine. Journal of Geophysical Research, 1997, 102, 1441-1449.	3.3	12
254	Exploration of the Global Burden of Dementia Attributable to PM2.5: What Do We Know Based on Current Evidence?. GeoHealth, 2021, 5, e2020GH000356.	1.9	12
255	Dynamic-chemical coupling of the upper troposphere and lower stratosphere region. Chemosphere, 2002, 47, 851-861.	4.2	11
256	N2O as an indicator of Arctic vortex dynamics: Correlations with O3over Thule, Greenland in February and March, 1992. Geophysical Research Letters, 1994, 21, 1275-1278.	1.5	10
257	The northern annular mode in summer and its relation to solar activity variations in the GISS ModelE. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 730-741.	0.6	9
258	Interpreting $\langle \sup 10 \rangle 10 \rangle$ Be changes during the Maunder Minimum. Journal of Geophysical Research, 2009, 114, .	3.3	9
259	Coherence among the Northern Hemisphere land, cryosphere, and ocean responses to natural variability and anthropogenic forcing during the satellite era. Earth System Dynamics, 2016, 7, 717-734.	2.7	9
260	The chlorine budget of the lower polar stratosphere: Upper limits on ClO, and Implications of new Cl2O2photolysis cross sections. Geophysical Research Letters, 1995, 22, 3215-3218.	1.5	8
261	The Potential Influence of ClO·O2 on Stratospheric Ozone Depletion Chemistry. Journal of Atmospheric Chemistry, 1997, 26, 323-335.	1.4	8
262	Interannual Variability of the Antarctic Ozone Hole in a GCM. Part II: A Comparison of Unforced and QBO-Induced Variability. Journals of the Atmospheric Sciences, 1999, 56, 1873-1884.	0.6	8
263	Constraining the Sensitivity of Regional Climate with the Use of Historical Observations. Journal of Climate, 2010, 23, 6068-6073.	1.2	8
264	Influences of Solar Forcing at Ultraviolet and Longer Wavelengths on Climate. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031640.	1.2	8
265	Premature Deaths in Africa Due To Particulate Matter Under High and Low Warming Scenarios. GeoHealth, 2022, 6, e2022GH000601.	1.9	8
266	The effect of rapid adjustments to halocarbons and N2O on radiative forcing. Npj Climate and Atmospheric Science, 2020, 3, .	2.6	7
267	Call for comments: climate and clean air responses to covid-19. International Journal of Public Health, 2020, 65, 525-528.	1.0	7
268	Response of surface shortwave cloud radiative effect to greenhouse gases and aerosols and its impact on summer maximum temperature. Atmospheric Chemistry and Physics, 2020, 20, 8251-8266.	1.9	7
269	Correction to "Solar influences on climate― Reviews of Geophysics, 2012, 50, .	9.0	5
270	Linkages between ozone-depleting substances, tropospheric oxidation and aerosols. Atmospheric Chemistry and Physics, 2013, 13, 4907-4916.	1.9	5

#	Article	IF	CITATIONS
271	Evaluating Modeled Impact Metrics for Human Health, Agriculture Growth, and Nearâ€Term Climate. Journal of Geophysical Research D: Atmospheres, 2017, 122, 13,506.	1.2	5
272	Scientific data from precipitation driver response model intercomparison project. Scientific Data, 2022, 9, 123.	2.4	5
273	Reply to comment by Laprise on "The added value to global model projections of climate change by dynamical downscaling: A case study over the continental U.S. using the GISSâ€ModelE2 and WRF models― Journal of Geophysical Research D: Atmospheres, 2014, 119, 3882-3885.	1.2	4
274	Corrigendum to "Evaluation of preindustrial to present-day black carbon and its albedo forcing from Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP)" published in Atmos. Chem. Phys., 13, 2607–2634, 2013. Atmospheric Chemistry and Physics, 2013, 13, 6553-6554.	1.9	3
275	Reply to 'Questions of bias in climate models'. Nature Climate Change, 2014, 4, 742-743.	8.1	3
276	Peroxy acetyl nitrate (PAN) measurements at northern midlatitude mountain sites in April: a constraint on continental source–receptor relationships. Atmospheric Chemistry and Physics, 2018, 18, 15345-15361.	1.9	3
277	Protecting the environment can boost the economy. Nature, 2009, 459, 321-321.	13.7	2
278	Distinct surface response to black carbon aerosols. Atmospheric Chemistry and Physics, 2021, 21, 13797-13809.	1.9	2
279	Atmospheric chemistry and the biosphere: general discussion. Faraday Discussions, 2017, 200, 195-228.	1.6	1
280	The air we breathe: Past, present, and future: general discussion. Faraday Discussions, 2017, 200, 501-527.	1.6	1
281	Influences of Regional Climate Change on Air Quality Across the Continental U.S. Projected from Downscaling IPCC AR5 Simulations. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 9-12.	0.1	1
282	Summary for Policymakers. , 2014, , 45-64.		1
283	Technical Summary. , 0, , 27-158.		0
284	Reply to comment by W. F. Ruddiman on "A note on the relationship between ice core methane concentrations and insolation― Geophysical Research Letters, 2005, 32, .	1.5	0
285	Expanding standards. Nature Climate Change, 2011, 1, 68-68.	8.1	0
286	The clean air dividend. New Scientist, 2012, 214, 22-23.	0.0	0