David A Plummer

List of Publications by Year
in descending order

73 papers	8,179 citations	94433 37 h-index	82547 72 g-index
124 all docs	124 docs citations	124 times ranked	8940 citing authors

#	Article	IF	Citations
1	Three decades of global methane sources and sinks. Nature Geoscience, 2013, 6, 813-823.	12.9	1,649
2	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.	4.9	570
3	Assessment of temperature, trace species, and ozone in chemistry-climate model simulations of the recent past. Journal of Geophysical Research, 2006, 111, .	3.3	414
4	Global premature mortality due to anthropogenic outdoor air pollution and the contribution of past climate change. Environmental Research Letters, 2013, 8, 034005.	5.2	381
5	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.	4.9	361
6	Multimodel projections of stratospheric ozone in the 21st century. Journal of Geophysical Research, 2007, 112, .	3.3	308
7	The Canadian Fourth Generation Atmospheric Global Climate Model (CanAM4). Part I: Representation of Physical Processes. Atmosphere - Ocean, 2013, 51, 104-125.	1.6	304
8	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.	4.9	288
9	Chemistryâ€"Climate Model Simulations of Twenty-First Century Stratospheric Climate and Circulation Changes. Journal of Climate, 2010, 23, 5349-5374.	3.2	280
10	Review of the global models used within phase 1 of the Chemistryâ€"Climate Model Initiative (CCMI). Geoscientific Model Development, 2017, 10, 639-671.	3.6	277
11	Analysis of present day and future OH and methane lifetime in the ACCMIP simulations. Atmospheric Chemistry and Physics, 2013, 13, 2563-2587.	4.9	257
12	Multi-model assessment of stratospheric ozone return dates and ozone recovery in CCMVal-2 models. Atmospheric Chemistry and Physics, 2010, 10, 9451-9472.	4.9	215
13	Climate and Climate Change over North America as Simulated by the Canadian RCM. Journal of Climate, 2006, 19, 3112-3132.	3.2	211
14	Separating the Dynamical Effects of Climate Change and Ozone Depletion. Part II: Southern Hemisphere Troposphere. Journal of Climate, 2011, 24, 1850-1868.	3.2	187
15	Review of the formulation of presentâ€generation stratospheric chemistryâ€climate models and associated external forcings. Journal of Geophysical Research, 2010, 115, .	3.3	150
16	Vertical structure of stratospheric water vapour trends derived from merged satellite data. Nature Geoscience, 2014, 7, 768-776.	12.9	149
17	Estimates of ozone return dates from Chemistry-Climate Model Initiative simulations. Atmospheric Chemistry and Physics, 2018, 18, 8409-8438.	4.9	128
18	Stratosphereâ€troposphere coupling and annular mode variability in chemistryâ€climate models. Journal of Geophysical Research, 2010, 115, .	3.3	107

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19	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.	4.9	101
20	Separating the Dynamical Effects of Climate Change and Ozone Depletion. Part I: Southern Hemisphere Stratosphere. Journal of Climate, 2010, 23, 5002-5020.	3.2	90
21	Reconciliation of halogen-induced ozone loss with the total-column ozone record. Nature Geoscience, 2014, 7, 443-449.	12.9	78
22	Historical Tropospheric and Stratospheric Ozone Radiative Forcing Using the CMIP6 Database. Geophysical Research Letters, 2018, 45, 3264-3273.	4.0	78
23	Projections of UV radiation changes in the 21st century: impact of ozone recovery and cloud effects. Atmospheric Chemistry and Physics, 2011, 11, 7533-7545.	4.9	75
24	Evidence for changes in stratospheric transport and mixing over the past three decades based on multiple data sets and tropical leaky pipe analysis. Journal of Geophysical Research, 2010, 115, .	3.3	69
25	The Impact of Stratospheric Ozone Recovery on Tropopause Height Trends. Journal of Climate, 2009, 22, 429-445.	3.2	68
26	Using transport diagnostics to understand chemistry climate model ozone simulations. Journal of Geophysical Research, 2011, 116, .	3.3	68
27	Multimodel assessment of the factors driving stratospheric ozone evolution over the 21st century. Journal of Geophysical Research, 2010, 115, .	3.3	66
28	Evaluation of ACCMIP outgoing longwave radiation from tropospheric ozone using TES satellite observations. Atmospheric Chemistry and Physics, 2013, 13, 4057-4072.	4.9	61
29	Projections of mid-century summer air-quality for North America: effects of changes in climate and precursor emissions. Atmospheric Chemistry and Physics, 2012, 12, 5367-5390.	4.9	60
30	Sensitivity of climate to dynamicallyâ€consistent zonal asymmetries in ozone. Geophysical Research Letters, 2009, 36, .	4.0	56
31	Ozone sensitivity to varying greenhouse gases and ozone-depleting substances in CCMI-1 simulations. Atmospheric Chemistry and Physics, 2018, 18, 1091-1114.	4.9	56
32	Inter-model comparison of global hydroxyl radical (OH) distributions and their impact on atmospheric methane over the 2000â€“2016 period. Atmospheric Chemistry and Physics, 2019, 19, 13701-13723.	4.9	52
33	Tropospheric Ozone Assessment Report. Elementa, 2020, 8, .	3.2	52
34	Revisiting the Mystery of Recent Stratospheric Temperature Trends. Geophysical Research Letters, 2018, 45, 9919-9933.	4.0	51
35	Use of North American and European air quality networks to evaluate global chemistryâ€“climate modeling of surface ozone. Atmospheric Chemistry and Physics, 2015, 15, 10581-10596.	4.9	50
36	No robust evidence of future changes in major stratospheric sudden warmings: a multi-model assessment from CCMI. Atmospheric Chemistry and Physics, 2018, 18, 11277-11287.	4.9	41

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37	Quantifying the contributions to stratospheric ozone changes from ozone depleting substances and greenhouse gases. Atmospheric Chemistry and Physics, 2010, 10, 8803-8820.	4.9	39
38	Tropospheric jet response to Antarctic ozone depletion: An update with Chemistry-Climate Model Initiative (CCMI) models. Environmental Research Letters, 2018, 13, 054024.	5.2	38
39	Technical Note: A simple procedure for removing temporal discontinuities in ERA-Interim upper stratospheric temperatures for use in nudged chemistry-climate model simulations. Atmospheric Chemistry and Physics, 2014, 14, 1547-1555.	4.9	36
40	Stratospheric Injection of Brominated Very Shortâ€Lived Substances: Aircraft Observations in the Western Pacific and Representation in Global Models. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5690-5719.	3.3	36
41	Impact of sudden Arctic seaâ€ice loss on stratospheric polar ozone recovery. Geophysical Research Letters, 2009, 36, .	4.0	35
42	Formaldehyde in the Tropical Western Pacific: Chemical Sources and Sinks, Convective Transport, and Representation in CAMâ€Chem and the CCMI Models. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11201-11226.	3.3	32
43	Large-scale tropospheric transport in the Chemistryâ€"Climate Model Initiative (CCMI) simulations. Atmospheric Chemistry and Physics, 2018, 18, 7217-7235.	4.9	32
44	Quantifying the effect of mixing on the mean age of air in CCMVal-2 and CCMI-1 models. Atmospheric Chemistry and Physics, 2018, 18, 6699-6720.	4.9	32
45	The influence of mixing on the stratospheric age of air changes in the 21st century. Atmospheric Chemistry and Physics, 2019, 19, 921-940.	4.9	29
46	Large Impacts, Past and Future, of Ozoneâ€Depleting Substances on Brewerâ€Dobson Circulation Trends: A Multimodel Assessment. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6669-6680.	3.3	28
47	Tropospheric ozone in CCMI models and Gaussian process emulation to understand biases in the SOCOLv3 chemistryâ€"climate model. Atmospheric Chemistry and Physics, 2018, 18, 16155-16172.	4.9	27
48	The effect of atmospheric nudging on the stratospheric residual circulation in chemistryâ€"climate models. Atmospheric Chemistry and Physics, 2019, 19, 11559-11586.	4.9	27
49	Future trends in stratosphere-to-troposphere transport in CCMI models. Atmospheric Chemistry and Physics, 2020, 20, 6883-6901.	4.9	25
50	Contribution of different processes to changes in tropical lower-stratospheric water vapor in chemistryâ€"climate models. Atmospheric Chemistry and Physics, 2017, 17, 8031-8044.	4.9	23
51	An assessment of natural methane fluxes simulated by the CLASS-CTEM model. Biogeosciences, 2018, 15, 4683-4709.	3.3	23
52	Clear-sky ultraviolet radiation modelling using output from the Chemistry Climate Model Initiative. Atmospheric Chemistry and Physics, 2019, 19, 10087-10110.	4.9	22
53	Characterising the seasonal and geographical variability in tropospheric ozone, stratospheric influence and recent changes. Atmospheric Chemistry and Physics, 2019, 19, 3589-3620.	4.9	19
54	The representation of solar cycle signals in stratospheric ozone â€" PartÂ2: Analysis of global models. Atmospheric Chemistry and Physics, 2018, 18, 11323-11343.	4.9	18

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55	Description and Evaluation of the specified-dynamics experiment in the Chemistry-Climate Model Initiative. Atmospheric Chemistry and Physics, 2020, 20, 3809-3840.	4.9	16
56	Projecting ozone hole recovery using an ensemble of chemistryâ€“climate models weighted by model performance and independence. Atmospheric Chemistry and Physics, 2020, 20, 9961-9977.	4.9	16
57	Model evaluation of short-lived climate forcers for the Arctic Monitoring and Assessment Programme: a multi-species, multi-model study. Atmospheric Chemistry and Physics, 2022, 22, 5775-5828.	4.9	15
58	Multi-model impacts of climate change on pollution transport from global emission source regions. Atmospheric Chemistry and Physics, 2017, 17, 14219-14237.	4.9	14
59	Trend differences in lower stratospheric water vapour between Boulder and the zonal mean and their role in understanding fundamental observational discrepancies. Atmospheric Chemistry and Physics, 2018, 18, 8331-8351.	4.9	14
60	Evaluating the Relationship between Interannual Variations in the Antarctic Ozone Hole and Southern Hemisphere Surface Climate in Chemistryâ€“Climate Models. Journal of Climate, 2019, 32, 3131-3151.	3.2	13
61	Comparison of the CMAM30 data set with ACE-FTS and OSIRIS: polar regions. Atmospheric Chemistry and Physics, 2015, 15, 12465-12485.	4.9	12
62	Extremal dependence between temperature and ozone over the continental US. Atmospheric Chemistry and Physics, 2018, 18, 11927-11948.	4.9	12
63	Assessing stratospheric transport in the CMAM30 simulations using ACE-FTS measurements. Atmospheric Chemistry and Physics, 2018, 18, 6801-6828.	4.9	10
64	Extratropical age of air trends and causative factors in climate projection simulations. Atmospheric Chemistry and Physics, 2019, 19, 7627-7647.	4.9	10
65	Contributions to twentieth century total column ozone change from halocarbons, tropospheric ozone precursors, and climate change. Geophysical Research Letters, 2013, 40, 6276-6281.	4.0	9
66	An idealized stratospheric model useful for understanding differences between longâ€lived trace gas measurements and global chemistryâ€climate model output. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5356-5367.	3.3	9
67	The Climate Impact of Past Changes in Halocarbons and CO2 in the Tropical UTLS Region. Journal of Climate, 2014, 27, 8646-8660.	3.2	8
68	Large-scale transport into the Arctic: the roles of the midlatitude jet and the Hadley Cell. Atmospheric Chemistry and Physics, 2019, 19, 5511-5528.	4.9	8
69	Attribution of Chemistry-Climate Model Initiative (CCMI) ozone radiative flux bias from satellites. Atmospheric Chemistry and Physics, 2020, 20, 281-301.	4.9	6
70	The response of mesospheric H₂O and CO to solar irradiance variability in models and observations. Atmospheric Chemistry and Physics, 2021, 21, 201-216.	4.9	6
71	Ultraviolet Radiation modelling using output from the Chemistry Climate Model Initiative. , 2019, 19, 10087-10110.		5
72	Upper tropospheric water vapour variability at high latitudes â€“ Part 1: Influence of the annular modes. Atmospheric Chemistry and Physics, 2016, 16, 3265-3278.	4.9	4

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73	Model estimations of geophysical variability between satellite measurements of ozone profiles. Atmospheric Measurement Techniques, 2021, 14, 1425-1438.	3.1	4