Martyn Chipperfield

List of Publications by Year
in descending order

353 papers	19,464 citations	14614 66 h-index	24915 109 g-index
508 all docs	508 docs citations	508 times ranked	10438 citing authors

#	Article	IF	Citations
1	A comprehensive quantification of global nitrous oxide sources and sinks. Nature, 2020, 586, 248-256.	13.7	814
2	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
3	New version of the TOMCAT/SLIMCAT off-line chemical transport model: Intercomparison of stratospheric tracer experiments. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 1179-1203.	1.0	407
4	Description and evaluation of GLOMAP-mode: a modal global aerosol microphysics model for the UKCA composition-climate model. Geoscientific Model Development, 2010, 3, 519-551.	1.3	406
5	Contribution of particle formation to global cloud condensation nuclei concentrations. Geophysical Research Letters, 2008, 35, .	1.5	400
6	Multiannual simulations with a three-dimensional chemical transport model. Journal of Geophysical Research, 1999, 104, 1781-1805.	3.3	383
7	TransCom model simulations of CH₄ and related species: linking transport, surface flux and chemical loss with CH₄ variability in the troposphere and lower stratosphere. Atmospheric Chemistry and Physics, 2011, 11, 12813-12837.	1.9	331
8	Multimodel projections of stratospheric ozone in the 21st century. Journal of Geophysical Research, 2007, 112, .	3.3	308
9	Arctic ozone loss and climate change. Geophysical Research Letters, 2004, 31, .	1.5	284
10	Chemistryâ€“Climate Model Simulations of Twenty-First Century Stratospheric Climate and Circulation Changes. Journal of Climate, 2010, 23, 5349-5374.	1.2	280
11	Impact of stratospheric ozone on Southern Hemisphere circulation change: A multimodel assessment. Journal of Geophysical Research, 2010, 115, .	3.3	280
12	Review of the global models used within phase 1 of the Chemistryâ€“Climate Model Initiative (CCMI). Geoscientific Model Development, 2017, 10, 639-671.	1.3	277
13	Evaluation and intercomparison of global atmospheric transport models using222Rn and other short-lived tracers. Journal of Geophysical Research, 1997, 102, 5953-5970.	3.3	267
14	A global off-line model of size-resolved aerosol microphysics: I. Model development and prediction of aerosol properties. Atmospheric Chemistry and Physics, 2005, 5, 2227-2252.	1.9	257
15	Acceleration of global N2O emissions seen from two decades of atmospheric inversion. Nature Climate Change, 2019, 9, 993-998.	8.1	229
16	Prolonged stratospheric ozone loss in the 1995â€“96 Arctic winter. Nature, 1997, 389, 835-838.	13.7	216
17	Multi-model assessment of stratospheric ozone return dates and ozone recovery in CCMVal-2 models. Atmospheric Chemistry and Physics, 2010, 10, 9451-9472.	1.9	215
18	Persistent shift of the Arctic polar vortex towards the Eurasian continent in recent decades. Nature Climate Change, 2016, 6, 1094-1099.	8.1	207

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19	Detecting recovery of the stratospheric ozone layer. Nature, 2017, 549, 211-218.	13.7	182
20	Multimodel assessment of the upper troposphere and lower stratosphere: Tropics and global trends. Journal of Geophysical Research, 2010, 115, .	3.3	171
21	Arctic winter 2005: Implications for stratospheric ozone loss and climate change. Geophysical Research Letters, 2006, 33, .	1.5	151
22	Review of the formulation of presentâ€generation stratospheric chemistryâ€climate models and associated external forcings. Journal of Geophysical Research, 2010, 115, .	3.3	150
23	The increasing threat to stratospheric ozone from dichloromethane. Nature Communications, 2017, 8, 15962.	5.8	147
24	Efficiency of short-lived halogens at influencing climate through depletion of stratospheric ozone. Nature Geoscience, 2015, 8, 186-190.	5.4	146
25	A Strategy for Process-Oriented Validation of Coupled Chemistryâ€“Climate Models. Bulletin of the American Meteorological Society, 2005, 86, 1117-1134.	1.7	139
26	Multimodel climate and variability of the stratosphere. Journal of Geophysical Research, 2011, 116, .	3.3	139
27	Climate change projections and stratosphereâ€“troposphere interaction. Climate Dynamics, 2012, 38, 2089-2097.	1.7	137
28	Coupled chemistry climate model simulations of the solar cycle in ozone and temperature. Journal of Geophysical Research, 2008, 113, .	3.3	134
29	Estimates of ozone return dates from Chemistry-Climate Model Initiative simulations. Atmospheric Chemistry and Physics, 2018, 18, 8409-8438.	1.9	128
30	Heterogeneous atmospheric bromine chemistry. Journal of Geophysical Research, 1996, 101, 1489-1504.	3.3	116
31	A comparison of scavenging and deposition processes in global models: results from the WCRP Cambridge Workshop of 1995. Tellus, Series B: Chemical and Physical Meteorology, 2000, 52, 1025-1056.	0.8	113
32	The contribution of anthropogenic bromine emissions to past stratospheric ozone trends: a modelling study. Atmospheric Chemistry and Physics, 2009, 9, 2863-2871.	1.9	112
33	Bromoform and dibromomethane in the tropics: a 3-D model study of chemistry and transport. Atmospheric Chemistry and Physics, 2010, 10, 719-735.	1.9	112
34	A global off-line model of size-resolved aerosol microphysics: II. Identification of key uncertainties. Atmospheric Chemistry and Physics, 2005, 5, 3233-3250.	1.9	111
35	Mean age of air and transport in a CTM: Comparison of different ECMWF analyses. Geophysical Research Letters, 2007, 34, .	1.5	110
36	Recent Northern Hemisphere stratospheric HCl increase due to atmospheric circulation changes. Nature, 2014, 515, 104-107.	13.7	110

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37	Description and evaluation of the UKCA stratosphereâ€“troposphere chemistry scheme (StratTrop vn) Tj ETQq1 1 0.784314 rgBT /Ov	1.3	109
38	Stratosphereâ€troposphere coupling and annular mode variability in chemistryâ€climate models. Journal of Geophysical Research, 2010, 115, .	3.3	107
39	A global atmospheric model of meteoric iron. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9456-9474.	1.2	105
40	Relative influences of atmospheric chemistry and transport on Arctic ozone trends. Nature, 1999, 400, 551-554.	13.7	104
41	Intercomparison of modal and sectional aerosol microphysics representations within the same 3-D global chemical transport model. Atmospheric Chemistry and Physics, 2012, 12, 4449-4476.	1.9	101
42	A three-dimensional model study of the effect of new temperature-dependent quantum yields for acetone photolysis. Journal of Geophysical Research, 2005, 110, .	3.3	99
43	Quantifying the ozone and ultraviolet benefits already achieved by the Montreal Protocol. Nature Communications, 2015, 6, 7233.	5.8	99
44	A threeâ€dimensional modeling study of trace species in the Arctic lower stratosphere during winter 1989â€“1990. Journal of Geophysical Research, 1993, 98, 7199-7218.	3.3	97
45	The effects of mixing on tracer relationships in the polar vortices. Journal of Geophysical Research, 2000, 105, 10047-10062.	3.3	95
46	First profile measurements of tropospheric BrO. Geophysical Research Letters, 2000, 27, 2921-2924.	1.5	95
47	Chemical depletion of Arctic ozone in winter 1999/2000. Journal of Geophysical Research, 2002, 107, SOL 18-1.	3.3	95
48	The Mediterranean summertime ozone maximum: global emission sensitivities and radiative impacts. Atmospheric Chemistry and Physics, 2013, 13, 2331-2345.	1.9	93
49	Bromine in the tropical troposphere and stratosphere as derived from balloon-borne BrO observations. Atmospheric Chemistry and Physics, 2008, 8, 7265-7271.	1.9	92
50	Mid-latitude ozone changes: studies with a 3-D CTM forced by ERA-40 analyses. Atmospheric Chemistry and Physics, 2007, 7, 2357-2369.	1.9	91
51	Chemical Ozone Loss in the Arctic Winter 1994/95 as Determined by the Match Technique. Journal of Atmospheric Chemistry, 1999, 32, 35-59.	1.4	90
52	Lower stratospheric organic and inorganic bromine budget for the Arctic winter 1998/99. Geophysical Research Letters, 2000, 27, 3305-3308.	1.5	90
53	Analysis of UARS data in the southern polar vortex in September 1992 using a chemical transport model. Journal of Geophysical Research, 1996, 101, 18861-18881.	3.3	89
54	A study of stratospheric chlorine partitioning based on new satellite measurements and modeling. Journal of Geophysical Research, 2008, 113, .	3.3	88

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55	On the Cause of Recent Variations in Lower Stratospheric Ozone. Geophysical Research Letters, 2018, 45, 5718-5726.	1.5	87
56	Effect of interannual meteorological variability on mid-latitude O3. Geophysical Research Letters, 1997, 24, 2993-2996.	1.5	86
57	Trends in stratospheric humidity and the sensitivity of ozone to these trends. Journal of Geophysical Research, 1998, 103, 8715-8725.	3.3	86
58	Long-term trends of inorganic chlorine from ground-based infrared solar spectra: Past increases and evidence for stabilization. Journal of Geophysical Research, 2003, 108, .	3.3	86
59	A global model of tropospheric chlorine chemistry: Organic versus inorganic sources and impact on methane oxidation. Journal of Geophysical Research D: Atmospheres, 2016, 121, 14,271.	1.2	86
60	Impact on short-lived climate forcers increases projected warming due to deforestation. Nature Communications, 2018, 9, 157.	5.8	86
61	Model sensitivity studies of Arctic ozone depletion. Journal of Geophysical Research, 1998, 103, 28389-28403.	3.3	83
62	Multi-model study of chemical and physical controls on transport of anthropogenic and biomass burning pollution to the Arctic. Atmospheric Chemistry and Physics, 2015, 15, 3575-3603.	1.9	83
63	A Two-Dimensional Model Study of the QBO Signal in SAGE II NO2and O3. Geophysical Research Letters, 1994, 21, 589-592.	1.5	82
64	A tropospheric chemical-transport model: Development and validation of the model transport schemes. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 1747-1783.	1.0	82
65	A new coupled chemistryâ€“climate model for the stratosphere: The importance of coupling for future O₃-climate predictions. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 281-303.	1.0	81
66	Regional and global trends in sulfate aerosol since the 1980s. Geophysical Research Letters, 2007, 34, .	1.5	81
67	Trends in atmospheric halogen containing gases since 2004. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2552-2566.	1.1	81
68	A vortex-scale simulation of the growth and sedimentation of large nitric acid hydrate particles. Journal of Geophysical Research, 2002, 107, SOL 43-1.	3.3	80
69	Intercomparison of BrO measurements from ERS-2 GOME, ground-based and balloon platforms. Advances in Space Research, 2002, 29, 1661-1666.	1.2	80
70	Impact of BrO on dimethylsulfide in the remote marine boundary layer. Geophysical Research Letters, 2010, 37, .	1.5	75
71	Analysis of reactive bromine production and ozone depletion in the Arctic boundary layer using 3-D simulations with GEM-AQ: inference from synoptic-scale patterns. Atmospheric Chemistry and Physics, 2011, 11, 3949-3979.	1.9	75
72	Projections of UV radiation changes in the 21st century: impact of ozone recovery and cloud effects. Atmospheric Chemistry and Physics, 2011, 11, 7533-7545.	1.9	75

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73	Decline and recovery of total column ozone using a multimodel time series analysis. Journal of Geophysical Research, 2010, 115, .	3.3	74
74	Large loss of total ozone during the Arctic winter of 1999/2000. Geophysical Research Letters, 2000, 27, 3473-3476.	1.5	73
75	Observed and simulated time evolution of HCl, ClONO₂, and HF total column abundances. Atmospheric Chemistry and Physics, 2012, 12, 3527-3556.	1.9	72
76	Modelling NOx from lightning and its impact on global chemical fields. Atmospheric Environment, 1999, 33, 4477-4493.	1.9	71
77	Improved predictability of the troposphere using stratospheric final warmings. Journal of Geophysical Research, 2011, 116, .	3.3	70
78	Stratospheric ozone loss over the Eurasian continent induced by the polar vortex shift. Nature Communications, 2018, 9, 206.	5.8	69
79	Effects of the Tibetan Plateau on total column ozone distribution. Tellus, Series B: Chemical and Physical Meteorology, 2022, 60, 622.	0.8	68
80	Using transport diagnostics to understand chemistry climate model ozone simulations. Journal of Geophysical Research, 2011, 116, .	3.3	68
81	Impact of transport model errors on the global and regional methane emissions estimated by inverse modelling. Atmospheric Chemistry and Physics, 2013, 13, 9917-9937.	1.9	68
82	Role of OH variability in the stalling of the global atmospheric CH₄ growth rate from 1999 to 2006. Atmospheric Chemistry and Physics, 2016, 16, 7943-7956.	1.9	68
83	Validation and intercomparison of wet and dry deposition schemes using210Pb in a global three-dimensional off-line chemical transport model. Journal of Geophysical Research, 1999, 104, 23761-23784.	3.3	67
84	Long-term observations of stratospheric bromine reveal slow down in growth. Geophysical Research Letters, 2006, 33, .	1.5	67
85	Multimodel assessment of the upper troposphere and lower stratosphere: Extratropics. Journal of Geophysical Research, 2010, 115, .	3.3	67
86	Early unusual ozone loss during the Arctic winter 2002/2003 compared to other winters. Atmospheric Chemistry and Physics, 2005, 5, 665-677.	1.9	66
87	Multimodel assessment of the factors driving stratospheric ozone evolution over the 21st century. Journal of Geophysical Research, 2010, 115, .	3.3	66
88	Evaluating global emission inventories of biogenic bromocarbons. Atmospheric Chemistry and Physics, 2013, 13, 11819-11838.	1.9	66
89	The relationship between aerosol and cloud drop number concentrations in a global aerosol microphysics model. Atmospheric Chemistry and Physics, 2009, 9, 4131-4144.	1.9	65
90	Chlorine deactivation in the lower stratospheric polar regions during late winter: Results from UARS. Journal of Geophysical Research, 1996, 101, 18835-18859.	3.3	63

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91	The contribution of natural and anthropogenic very short-lived species to stratospheric bromine. Atmospheric Chemistry and Physics, 2012, 12, 371-380.	1.9	63
92	Three-dimensional tracer initialization and general diagnostics using equivalent PV latitudeâ€“potential-temperature coordinates. Quarterly Journal of the Royal Meteorological Society, 1995, 121, 187-210.	1.0	62
93	Comparison of measurements and model calculations of stratospheric bromine monoxide. Journal of Geophysical Research, 2002, 107, ACH 11-1.	3.3	62
94	Three-dimensional model study of the Arctic ozone loss in 2002/2003 and comparison with 1999/2000 and 2003/2004. Atmospheric Chemistry and Physics, 2005, 5, 139-152.	1.9	62
95	Retrieval of stratospheric and tropospheric BrO profiles and columns using ground-based zenith-sky DOAS observations at Harestua, 60Â° N. Atmospheric Chemistry and Physics, 2007, 7, 4869-4885.	1.9	62
96	Aerosol microphysics simulations of the Mt.~Pinatubo eruption with the UM-UKCA composition-climate model. Atmospheric Chemistry and Physics, 2014, 14, 11221-11246.	1.9	62
97	Balloon-borne stratospheric BrO measurements: comparison with Envisat/SCIAMACHY BrO limb profiles. Atmospheric Chemistry and Physics, 2006, 6, 2483-2501.	1.9	60
98	Pressure and temperature-dependent quantum yields for the photodissociation of acetone between 279 and 327.5 nm. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	59
99	Subtropical trace gas profiles determined by ground-based FTIR spectroscopy at IzaÃ±a (28Â° N, 16Â° W): Five-year record, error analysis, and comparison with 3-D CTMs. Atmospheric Chemistry and Physics, 2005, 5, 153-167.	1.9	59
100	Quasi-biennial oscillation and tracer distributions in a coupled chemistry-climate model. Journal of Geophysical Research, 2006, 111, .	3.3	59
101	Delay in recovery of the Antarctic ozone hole from unexpected CFC-11 emissions. Nature Communications, 2019, 10, 5781.	5.8	58
102	Ozone sensitivity to varying greenhouse gases and ozone-depleting substances in CCMI-1 simulations. Atmospheric Chemistry and Physics, 2018, 18, 1091-1114.	1.9	56
103	A model study of the impact of magnetic field structure on atmospheric composition during solar proton events. Geophysical Research Letters, 2003, 30, .	1.5	55
104	Evaluating year-to-year anomalies in tropical wetland methane emissions using satellite CH4 observations. Remote Sensing of Environment, 2018, 211, 261-275.	4.6	55
105	A decline in global CFC-11 emissions during 2018â^'2019. Nature, 2021, 590, 428-432.	13.7	55
106	Upper limits of stratospheric IO and OIO inferred from center-to-limb-darkening-corrected balloon-borne solar occultation visible spectra: Implications for total gaseous iodine and stratospheric ozone. Journal of Geophysical Research, 2003, 108, .	3.3	54
107	Retrieved tropospheric and stratospheric BrO columns over Lauder, New Zealand. Journal of Geophysical Research, 2004, 109, .	3.3	53
108	Evidence of substantial ozone depletion in winter 1995/96 over northern Norway. Geophysical Research Letters, 1997, 24, 799-802.	1.5	52

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109	Impact of deep convection and dehydration on bromine loading in the upper troposphere and lower stratosphere. Atmospheric Chemistry and Physics, 2011, 11, 2671-2687.	1.9	52
110	Climatology of the stratospheric BrO vertical distribution by balloon-borne UVâ€“visible spectrometry. Journal of Geophysical Research, 2002, 107, ACH 23-1.	3.3	51
111	Chemistryâ€climate model simulations of spring Antarctic ozone. Journal of Geophysical Research, 2010, 115, .	3.3	51
112	Attribution of recent increases in atmospheric methane through 3-D inverse modelling. Atmospheric Chemistry and Physics, 2018, 18, 18149-18168.	1.9	51
113	Revisiting the Mystery of Recent Stratospheric Temperature Trends. Geophysical Research Letters, 2018, 45, 9919-9933.	1.5	51
114	Large chemical ozone loss in 2004/2005 Arctic winter/spring. Geophysical Research Letters, 2007, 34, .	1.5	50
115	Challenges for the recovery of the ozone layer. Nature Geoscience, 2019, 12, 592-596.	5.4	50
116	Stratospheric OClO measurements as a poor quantitative indicator of chlorine activation. Geophysical Research Letters, 1995, 22, 687-690.	1.5	49
117	Comment on: Stratospheric Ozone Depletion at northern mid-latitudes in the 21st century: The importance of future concentrations of greenhouse gases nitrous oxide and methane. Geophysical Research Letters, 2003, 30, .	1.5	49
118	Determination of the atmospheric lifetime and global warming potential of sulfur hexafluoride using a three-dimensional model. Atmospheric Chemistry and Physics, 2017, 17, 883-898.	1.9	49
119	Polar Stratospheric Clouds: Satellite Observations, Processes, and Role in Ozone Depletion. Reviews of Geophysics, 2021, 59, e2020RG000702.	9.0	49
120	2002-2003 Arctic ozone loss deduced from POAM III satellite observations and the SLIMCAT chemical transport model. Atmospheric Chemistry and Physics, 2005, 5, 597-609.	1.9	48
121	The impact of synoptic weather on UK surface ozone and implications for premature mortality. Environmental Research Letters, 2016, 11, 124004.	2.2	48
122	Revisiting the hemispheric asymmetry in midlatitude ozone changes following the Mount Pinatubo eruption: A 3â€D model study. Geophysical Research Letters, 2015, 42, 3038-3047.	1.5	47
123	Arctic ozone loss and climate sensitivity: Updated three-dimensional model study. Geophysical Research Letters, 2005, 32, .	1.5	46
124	Representation of tropical deep convection in atmospheric models â€“ Part 2: Tracer transport. Atmospheric Chemistry and Physics, 2011, 11, 8103-8131.	1.9	46
125	Interactions of meteoric smoke particles with sulphuric acid in the Earth's stratosphere. Atmospheric Chemistry and Physics, 2012, 12, 4387-4398.	1.9	45
126	Evidence for El NiÃ±oâ€“Southern Oscillation (ENSO) influence on Arctic CO interannual variability through biomass burning emissions. Geophysical Research Letters, 2012, 39, .	1.5	45

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127	Age of air as a diagnostic for transport timescales in global models. Geoscientific Model Development, 2018, 11, 3109-3130.	1.3	44
128	COVID-19 lockdown-induced changes in NO₂ levels across India observed by multi-satellite and surface observations. Atmospheric Chemistry and Physics, 2021, 21, 5235-5251.	1.9	44
129	Resolving the strange behavior of extraterrestrial potassium in the upper atmosphere. Geophysical Research Letters, 2014, 41, 4753-4760.	1.5	43
130	On the ambiguous nature of the 11â€‰year solar cycle signal in upper stratospheric ozone. Geophysical Research Letters, 2016, 43, 7241-7249.	1.5	43
131	Comparison of measured and modeled stratospheric BrO: Implications for the total amount of stratospheric bromine. Geophysical Research Letters, 2000, 27, 3695-3698.	1.5	42
132	Modeling the effect of denitrification on Arctic ozone depletion during winter 1999/2000. Journal of Geophysical Research, 2002, 107, SOL 65-1-SOL 65-18.	3.3	42
133	Photodissociation of acetone: Atmospheric implications of temperature-dependent quantum yields. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	42
134	Radiative effect of ozone change on stratosphereâ€troposphere exchange. Journal of Geophysical Research, 2008, 113, .	3.3	42
135	Multimodel estimates of atmospheric lifetimes of longâ€lived ozoneâ€depleting substances: Present and future. Journal of Geophysical Research D: Atmospheres, 2014, 119, 2555-2573.	1.2	42
136	Growth in stratospheric chlorine from shortâ€lived chemicals not controlled by the Montreal Protocol. Geophysical Research Letters, 2015, 42, 4573-4580.	1.5	42
137	Contribution of regional sources to atmospheric methane over the Amazon Basin in 2010 and 2011. Global Biogeochemical Cycles, 2016, 30, 400-420.	1.9	42
138	Improvements in the stratospheric transport achieved by a chemistry transport model with ECMWF (re)analyses: identifying effects and remaining challenges. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 654-673.	1.0	41
139	The influence of synoptic weather regimes on <scp>UK</scp> air quality: analysis of satellite column <scp>NO₂</scp>. Atmospheric Science Letters, 2014, 15, 211-217.	0.8	41
140	Validation of an off-line three-dimensional chemical transport model using observed radon profiles: 2. Model results. Journal of Geophysical Research, 1998, 103, 8433-8445.	3.3	40
141	Impact of increasing stratospheric water vapor on ozone depletion and temperature change. Advances in Atmospheric Sciences, 2009, 26, 423-437.	1.9	40
142	Clear sky UV simulations for the 21st century based on ozone and temperature projections from Chemistry-Climate Models. Atmospheric Chemistry and Physics, 2009, 9, 1165-1172.	1.9	40
143	A three-dimensional model study of long-term mid-high latitude lower stratosphere ozone changes. Atmospheric Chemistry and Physics, 2003, 3, 1253-1265.	1.9	39
144	Three-Dimensional Model Study of the Antarctic Ozone Hole in 2002 and Comparison with 2000. Journals of the Atmospheric Sciences, 2005, 62, 822-837.	0.6	39

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145	Satellite constraint on the tropospheric ozone radiative effect. Geophysical Research Letters, 2015, 42, 5074-5081.	1.5	39
146	Quantification of the transport of chemically activated air from the northern hemisphere polar vortex. Journal of Geophysical Research, 1995, 100, 25817.	3.3	38
147	Polar stratospheric clouds climatology over Dumont d'Urville between 1989 and 1993 and the influence of volcanic aerosols on their formation. Journal of Geophysical Research, 1998, 103, 22163-22180.	3.3	38
148	Estimation of Antarctic ozone loss from ground-based total column measurements. Atmospheric Chemistry and Physics, 2010, 10, 6569-6581.	1.9	38
149	Modelling future changes to the stratospheric source gas injection of biogenic bromocarbons. Geophysical Research Letters, 2012, 39, .	1.5	38
150	Tropospheric jet response to Antarctic ozone depletion: An update with Chemistry-Climate Model Initiative (CCMI) models. Environmental Research Letters, 2018, 13, 054024.	2.2	38
151	Quantifying Arctic ozone loss during the 2004â€“2005 winter using satellite observations and a chemical transport model. Journal of Geophysical Research, 2007, 112, .	3.3	37
152	Role of regional wetland emissions in atmospheric methane variability. Geophysical Research Letters, 2016, 43, 11,433.	1.5	37
153	Tropical land carbon cycle responses to 2015/16 El NiÃ±o as recorded by atmospheric greenhouse gas and remote sensing data. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170302.	1.8	37
154	Model calculations of ozone depletion in the Arctic Polar Vortex for 1991/92 to 1994/95. Geophysical Research Letters, 1996, 23, 559-562.	1.5	36
155	Tropospheric and stratospheric BrO columns over Arrival Heights, Antarctica, 2002. Journal of Geophysical Research, 2006, 111, .	3.3	36
156	Nitrous oxide delays ozone recovery. Nature Geoscience, 2009, 2, 742-743.	5.4	36
157	Representation of tropical deep convection in atmospheric models â€“ Part 1: Meteorology and comparison with satellite observations. Atmospheric Chemistry and Physics, 2011, 11, 2765-2786.	1.9	36
158	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.	1.2	36
159	A 3D transport model study of chlorine activation during EASOE. Geophysical Research Letters, 1994, 21, 1467-1470.	1.5	35
160	On the use of HF as a reference for the comparison of stratospheric observations and models. Journal of Geophysical Research, 1997, 102, 12901-12919.	3.3	35
161	Ozone depletion at the edge of the Arctic polar vortex 1996/1997. Journal of Geophysical Research, 1999, 104, 1837-1845.	3.3	35
162	NO₂ climatology in the northern subtropical region: diurnal, seasonal and interannual variability. Atmospheric Chemistry and Physics, 2008, 8, 1635-1648.	1.9	35

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163	Modelling the effect of denitrification on polar ozone depletion for Arctic winter 2004/2005. Atmospheric Chemistry and Physics, 2011, 11, 6559-6573.	1.9	35
164	The TOMCAT global chemical transport model v1.6: description of chemical mechanism and model evaluation. Geoscientific Model Development, 2017, 10, 3025-3057.	1.3	35
165	Hydrogen fluoride total and partial column time series above the Jungfraujoch from longâ€term FTIR measurements: Impact of the lineâ€shape model, characterization of the error budget and seasonal cycle, and comparison with satellite and model data. Journal of Geophysical Research, 2010, 115, .	3.3	34
166	Unusually low ozone, HCl, and HNO₃ column measurements at Eureka, Canada during winter/spring 2011. Atmospheric Chemistry and Physics, 2012, 12, 3821-3835.	1.9	34
167	TransCom N₂O model inter-comparison â€“ Part 1: Assessing the influence of transport and surface fluxes on tropospheric N₂O variability. Atmospheric Chemistry and Physics, 2014, 14, 4349-4368.	1.9	34
168	Recent Trends in Stratospheric Chlorine From Very Shortâ€Lived Substances. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2318-2335.	1.2	34
169	Arctic Ozone Depletion in 2019/20: Roles of Chemistry, Dynamics and the Montreal Protocol. Geophysical Research Letters, 2021, 48, e2020GL091911.	1.5	34
170	Twoâ€dimensional model studies of the interannual variability of trace gases in the middle atmosphere. Journal of Geophysical Research, 1992, 97, 5963-5980.	3.3	33
171	The variability of ClONO2and HNO3in the Arctic polar vortex: Comparison of Transall Michelson interferometer for passive atmospheric sounding measurements and three-dimensional model results. Journal of Geophysical Research, 1995, 100, 9115.	3.3	33
172	Constraints on inorganic gaseous iodine in the tropical upper troposphere and stratosphere inferred from balloon-borne solar occultation observations. Atmospheric Chemistry and Physics, 2009, 9, 7229-7242.	1.9	33
173	Impact of El NiÃ±oâ€“Southern Oscillation on the interannual variability of methane and tropospheric ozone. Atmospheric Chemistry and Physics, 2019, 19, 8669-8686.	1.9	33
174	Twoâ€dimensional modelling of the Antarctic lower stratosphere. Geophysical Research Letters, 1988, 15, 875-878.	1.5	32
175	Modeled Arctic ozone depletion in winter 1997/1998 and comparison with previous winters. Journal of Geophysical Research, 2000, 105, 22185-22200.	3.3	32
176	Chemistry-transport model comparison with ozone observations in the midlatitude lowermost stratosphere. Journal of Geophysical Research, 2001, 106, 17479-17496.	3.3	32
177	Factors controlling Arctic denitrification in cold winters of the 1990s. Atmospheric Chemistry and Physics, 2003, 3, 403-416.	1.9	32
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