Steven Pawson

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7276666/publications.pdf

Version: 2024-02-01

177 papers	20,389 citations	26567 56 h-index	11581 135 g-index
201 all docs	201 docs citations	201 times ranked	15236 citing authors

#	Article	IF	Citations
1	The Modern-Era Retrospective Analysis for Research and Applications, Version 2 (MERRA-2). Journal of Climate, 2017, 30, 5419-5454.	1.2	4,520
2	MERRA: NASAâ€™s Modern-Era Retrospective Analysis for Research and Applications. Journal of Climate, 2011, 24, 3624-3648.	1.2	4,118
3	The Orbiting Carbon Observatory (OCO) mission. Advances in Space Research, 2004, 34, 700-709.	1.2	596
4	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
5	Validation of the Aura Microwave Limb Sounder temperature and geopotential height measurements. Journal of Geophysical Research, 2008, 113, .	3.3	370
6	Aura Microwave Limb Sounder observations of dynamics and transport during the recordâ€breaking 2009 Arctic stratospheric major warming. Geophysical Research Letters, 2009, 36, .	1.5	351
7	Precision requirements for space-based data. Journal of Geophysical Research, 2007, 112, .	3.3	322
8	Multimodel projections of stratospheric ozone in the 21st century. Journal of Geophysical Research, 2007, 112, .	3.3	308
9	The Impact of Stratospheric Ozone Recovery on the Southern Hemisphere Westerly Jet. Science, 2008, 320, 1486-1489.	6.0	307
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	Introduction to the SPARC Reanalysis Intercomparison ProjectÂ(S-RIP) and overview of the reanalysis systems. Atmospheric Chemistry and Physics, 2017, 17, 1417-1452.	1.9	276
12	Uncertainties and assessments of chemistry-climate models of the stratosphere. Atmospheric Chemistry and Physics, 2003, 3, 1-27.	1.9	272
13	The remarkable 2003â€“2004 winter and other recent warm winters in the Arctic stratosphere since the late 1990s. Journal of Geophysical Research, 2005, 110, .	3.3	228
14	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
15	The evolution of the stratopause during the 2006 major warming: Satellite data and assimilated meteorological analyses. Journal of Geophysical Research, 2008, 113, .	3.3	199
16	Persistence of the lower stratospheric polar vortices. Journal of Geophysical Research, 1999, 104, 27191-27201.	3.3	197
17	Impact of stratospheric ozone hole recovery on Antarctic climate. Geophysical Research Letters, 2008, 35, .	1.5	191
18	Satellite data of atmospheric pollution for U.S. air quality applications: Examples of applications, summary of data end-user resources, answers to FAQs, and common mistakes to avoid. Atmospheric Environment, 2014, 94, 647-662.	1.9	186

#	Article	IF	Citations
19	HEMCO v1.0: a versatile, ESMF-compliant component for calculating emissions in atmospheric models. Geoscientific Model Development, 2014, 7, 1409-1417.	1.3	173
20	Multimodel assessment of the upper troposphere and lower stratosphere: Tropics and global trends. Journal of Geophysical Research, 2010, 115, .	3.3	171
21	What would have happened to the ozone layer if chlorofluorocarbons (CFCs) had not been regulated?. Atmospheric Chemistry and Physics, 2009, 9, 2113-2128.	1.9	165
22	A comparison of the lower stratospheric age spectra derived from a general circulation model and two data assimilation systems. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	149
23	Solar occultation satellite data and derived meteorological products: Sampling issues and comparisons with Aura Microwave Limb Sounder. Journal of Geophysical Research, 2007, 112, .	3.3	149
24	The GCMâ€“Reality Intercomparison Project for SPARC (GRIPS): Scientific Issues and Initial Results. Bulletin of the American Meteorological Society, 2000, 81, 781-796.	1.7	146
25	Goddard Earth Observing System chemistryâ€climate model simulations of stratospheric ozoneâ€temperature coupling between 1950 and 2005. Journal of Geophysical Research, 2008, 113, .	3.3	144
26	A Strategy for Process-Oriented Validation of Coupled Chemistryâ€“Climate Models. Bulletin of the American Meteorological Society, 2005, 86, 1117-1134.	1.7	139
27	Multimodel climate and variability of the stratosphere. Journal of Geophysical Research, 2011, 116, .	3.3	139
28	The anomalous change in the QBO in 2015â€“2016. Geophysical Research Letters, 2016, 43, 8791-8797.	1.5	139
29	Alaskan and Canadian forest fires exacerbate ozone pollution over Houston, Texas, on 19 and 20 July 2004. Journal of Geophysical Research, 2006, 111, .	3.3	138
30	The cold winters of the middle 1990s in the northern lower stratosphere. Journal of Geophysical Research, 1999, 104, 14209-14222.	3.3	131
31	A New Look at Stratospheric Sudden Warmings. Part II: Evaluation of Numerical Model Simulations. Journal of Climate, 2007, 20, 470-488.	1.2	129
32	A new interpretation of total column BrO during Arctic spring. Geophysical Research Letters, 2010, 37, .	1.5	116
33	Evaluation of the Ozone Fields in NASAâ€™s MERRA-2 Reanalysis. Journal of Climate, 2017, 30, 2961-2988.	1.2	114
34	Stratosphereâ€troposphere coupling and annular mode variability in chemistryâ€climate models. Journal of Geophysical Research, 2010, 115, .	3.3	107
35	Global CO2transport simulations using meteorological data from the NASA data assimilation system. Journal of Geophysical Research, 2004, 109, .	3.3	99
36	Impacts of climate change on stratospheric ozone recovery. Geophysical Research Letters, 2009, 36, .	1.5	97

#	Article	IF	Citations
37	Tropical Cumulus Convection and Upward-Propagating Waves in Middle-Atmospheric GCMs. Journals of the Atmospheric Sciences, 2003, 60, 2765-2782.	0.6	96
38	Trends in Stratospheric Ozone: Lessons Learned from a 3D Chemical Transport Model. Journals of the Atmospheric Sciences, 2006, 63, 1028-1041.	0.6	93
39	Global impact of COVID-19 restrictions on the surface concentrations of nitrogen dioxide and ozone. Atmospheric Chemistry and Physics, 2021, 21, 3555-3592.	1.9	91
40	Carbon monitoring system flux estimation and attribution: impact of ACOS-GOSAT XCO₂ sampling on the inference of terrestrial biospheric sources and sinks. Tellus, Series B: Chemical and Physical Meteorology, 2022, 66, 22486.	0.8	90
41	Jet characterization in the upper troposphere/lower stratosphere (UTLS): applications to climatology and transport studies. Atmospheric Chemistry and Physics, 2011, 11, 6115-6137.	1.9	86
42	Comparison of lower stratospheric tropical mean vertical velocities. Journal of Geophysical Research, 2008, 113, .	3.3	81
43	Structure and Dynamics of the Quasi-Biennial Oscillation in MERRA-2. Journal of Climate, 2016, 29, 5339-5354.	1.2	78
44	Assimilated ozone from EOSâ€Aura: Evaluation of the tropopause region and tropospheric columns. Journal of Geophysical Research, 2008, 113, .	3.3	75
45	Effect of zonal asymmetries in stratospheric ozone on simulated Southern Hemisphere climate trends. Geophysical Research Letters, 2009, 36, .	1.5	75
46	On the influence of anthropogenic forcings on changes in the stratospheric mean age. Journal of Geophysical Research, 2009, 114, .	3.3	75
47	Decline and recovery of total column ozone using a multimodel time series analysis. Journal of Geophysical Research, 2010, 115, .	3.3	74
48	Simulations of Dynamics and Transport during the September 2002 Antarctic Major Warming. Journals of the Atmospheric Sciences, 2005, 62, 690-707.	0.6	71
49	Recent Decline in Extratropical Lower Stratospheric Ozone Attributed to Circulation Changes. Geophysical Research Letters, 2018, 45, 5166-5176.	1.5	71
50	Improved predictability of the troposphere using stratospheric final warmings. Journal of Geophysical Research, 2011, 116, .	3.3	70
51	Using transport diagnostics to understand chemistry climate model ozone simulations. Journal of Geophysical Research, 2011, 116, .	3.3	68
52	Multimodel assessment of the upper troposphere and lower stratosphere: Extratropics. Journal of Geophysical Research, 2010, 115, .	3.3	67
53	Evaluation of transport in the lower tropical stratosphere in a global chemistry and transport model. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	64
54	Largeâ€Scale Atmospheric Transport in <scp>GEOS</scp> Replay Simulations. Journal of Advances in Modeling Earth Systems, 2017, 9, 2545-2560.	1.3	64

#	Article	IF	Citations
55	Seasonal and interannual variability of the stratosphere diagnosed from UKMO TOVS analyses. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 2585-2604.	1.0	63
56	Stratospheric sudden warmings and slowly propagating zonal-mean zonal wind anomalies. Journal of Geophysical Research, 2000, 105, 12351-12359.	3.3	62
57	Sensitivity of 21st century stratospheric ozone to greenhouse gas scenarios. Geophysical Research Letters, 2010, 37, .	1.5	62
58	Development of a grid-independent GEOS-Chem chemical transport model (v9-02) as an atmospheric chemistry module for Earth system models. Geoscientific Model Development, 2015, 8, 595-602.	1.3	62
59	Dynamics of the Disrupted 2015/16 Quasi-Biennial Oscillation. Journal of Climate, 2017, 30, 5661-5674.	1.2	61
60	Global simulation of tropospheric chemistry at 12.5â€‰km resolution: performance and evaluation of the GEOS-Chem chemical module (v10-1) within the NASA GEOS Earth system model (GEOS-5 ESM). Geoscientific Model Development, 2018, 11, 4603-4620.	1.3	60
61	A comparison of reanalyses in the tropical stratosphere. Part 1: thermal structure and the annual cycle. Climate Dynamics, 1998, 14, 631-644.	1.7	59
62	Climatology of Upper Troposphericâ€“Lower Stratospheric (UTLS) Jets and Tropopauses in MERRA. Journal of Climate, 2014, 27, 3248-3271.	1.2	59
63	A comparison of reanalyses in the tropical stratosphere. Part 3: inclusion of the pre-satellite data era. Climate Dynamics, 1999, 15, 241-250.	1.7	56
64	The Descent Rates of the Shear Zones of the Equatorial QBO. Journals of the Atmospheric Sciences, 1996, 53, 1937-1949.	0.6	52
65	A comparison of reanalyses in the tropical stratosphere. Part 2: the quasi-biennial oscillation. Climate Dynamics, 1998, 14, 645-658.	1.7	52
66	Relative Contribution of Greenhouse Gases and Ozone-Depleting Substances to Temperature Trends in the Stratosphere: A Chemistryâ€“Climate Model Study. Journal of Climate, 2010, 23, 28-42.	1.2	52
67	Quantifying the impact of BOReal forest fires on Tropospheric oxidants over the Atlantic using Aircraft and Satellites (BORTAS) experiment: design, execution and science overview. Atmospheric Chemistry and Physics, 2013, 13, 6239-6261.	1.9	52
68	GEOSâ€S2S Version 2: The GMAO Highâ€Resolution Coupled Model and Assimilation System for Seasonal Prediction. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031767.	1.2	52
69	Description of the NASA GEOS Composition Forecast Modeling System GEOSâ€CF v1.0. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002413.	1.3	52
70	On the polar stratospheric cloud formation potential of the northern stratosphere. Journal of Geophysical Research, 1995, 100, 23215.	3.3	51
71	Understanding the Changes of Stratospheric Water Vapor in Coupled Chemistryâ€“Climate Model Simulations. Journals of the Atmospheric Sciences, 2008, 65, 3278-3291.	0.6	51
72	Tropical Waves and the Quasi-Biennial Oscillation in a 7-km Global Climate Simulation. Journals of the Atmospheric Sciences, 2016, 73, 3771-3783.	0.6	50

#	Article	IF	Citations
73	The cold stratospheric winters 1994/1995 and 1995/1996. Geophysical Research Letters, 1996, 23, 3703-3706.	1.5	49
74	Diagnostic Comparison of Meteorological Analyses during the 2002 Antarctic Winter. Monthly Weather Review, 2005, 133, 1261-1278.	0.5	49
75	Construction and application of covariance functions with variable length-fields. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 1815-1838.	1.0	47
76	The 2015/16 El NiÃ±o Event in Context of the MERRA-2 Reanalysis: A Comparison of the Tropical Pacific with 1982/83 and 1997/98. Journal of Climate, 2017, 30, 4819-4842.	1.2	47
77	Chemical Mechanisms and Their Applications in the Goddard Earth Observing System (GEOS) Earth System Model. Journal of Advances in Modeling Earth Systems, 2017, 9, 3019-3044.	1.3	47
78	Climatology of planetary waves in the northern stratosphere. Journal of Geophysical Research, 1996, 101, 16987-16996.	3.3	46
79	The global structure of upper troposphereâ€lower stratosphere ozone in GEOSâ€5: A multiyear assimilation of EOS Aura data. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2013-2036.	1.2	46
80	A Composite Analysis of the Stratospheric Sudden Warmings Simulated in a Perpetual January Integration of the Berlin TSM GCM. Journal of the Meteorological Society of Japan, 1999, 77, 431-445.	0.7	44
81	Lower stratospheric temperature differences between meteorological analyses in two cold Arctic winters and their impact on polar processing studies. Journal of Geophysical Research, 2003, 108, .	3.3	44
82	Stepwise changes in stratospheric temperature. Geophysical Research Letters, 1998, 25, 2157-2160.	1.5	42
83	A case study of excessive subtropical transport in the stratosphere of a data assimilation system. Journal of Geophysical Research, 2004, 109, .	3.3	42
84	An ozone increase in the Antarctic summer stratosphere: A dynamical response to the ozone hole. Geophysical Research Letters, 2006, 33, .	1.5	42
85	Influence of the 2006 Indonesian biomass burning aerosols on tropical dynamics studied with the GEOSâ€5 AGCM. Journal of Geophysical Research, 2010, 115, .	3.3	42
86	Assessing the magnitude of CO₂ flux uncertainty in atmospheric CO₂ records using products from NASA's Carbon Monitoring Flux Pilot Project. Journal of Geophysical Research D: Atmospheres, 2015, 120, 734-765.	1.2	41
87	Assessment and applications of NASA ozone data products derived from Aura OMI/MLS satellite measurements in context of the GMI chemical transport model. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5671-5699.	1.2	40
88	Five year (2004â€“2009) observations of upper tropospheric water vapor and cloud ice from MLS and comparisons with GEOSâ€5 analyses. Journal of Geophysical Research, 2010, 115, .	3.3	39
89	The Major Stratospheric Sudden Warming of January 2013: Analyses and Forecasts in the GEOS-5 Data Assimilation System. Monthly Weather Review, 2015, 143, 491-510.	0.5	38
90	Isolating the roles of different forcing agents in global stratospheric temperature changes using model integrations with incrementally added single forcings. Journal of Geophysical Research D: Atmospheres, 2016, 121, 8067-8082.	1.2	38

#	Article	IF	Citations
91	Trends in daily wintertime temperatures in the northern stratosphere. Geophysical Research Letters, 1997, 24, 575-578.	1.5	36
92	Stratospheric transport using 6â€hâ€averaged winds from a data assimilation system. Journal of Geophysical Research, 2007, 112, .	3.3	36
93	Impacts of Interactive Stratospheric Chemistry on Antarctic and Southern Ocean Climate Change in the Goddard Earth Observing System, Version 5 (GEOS-5). Journal of Climate, 2016, 29, 3199-3218.	1.2	36
94	Nonlinear response of tropical lower-stratospheric temperature and water vapor to ENSO. Atmospheric Chemistry and Physics, 2018, 18, 4597-4615.	1.9	36
95	Reactive nitrogen, ozone and ozone production in the Arctic troposphere and the impact of stratosphere-troposphere exchange. Atmospheric Chemistry and Physics, 2011, 11, 13181-13199.	1.9	35
96	An evaluation of gravity waves and gravity wave sources in the Southern Hemisphere in a 7 km global climate simulation. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 2481-2495.	1.0	35
97	An EOF Analysis of the Vertical-Time Delay Structure of the Quasi-Biennial Oscillation. Journals of the Atmospheric Sciences, 1993, 50, 3357-3365.	0.6	34
98	Regional impacts of COVID-19 on carbon dioxide detected worldwide from space. Science Advances, 2021, 7, eabf9415.	4.7	33
99	Error correlation between CO₂ and CO as constraint for CO₂ flux inversions using satellite data. Atmospheric Chemistry and Physics, 2009, 9, 7313-7323.	1.9	32
100	EOS Microwave Limb Sounder observations of the Antarctic polar vortex breakup in 2004. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	31
101	The Roles of Climate Change and Climate Variability in the 2017 Atlantic Hurricane Season. Scientific Reports, 2018, 8, 16172.	1.6	31
102	Assimilation of ozone data from the Michelson Interferometer for Passive Atmospheric Sounding. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 2713-2734.	1.0	30
103	Analysis of Convective Transport and Parameter Sensitivity in a Single Column Version of the Goddard Earth Observation System, Version 5, General Circulation Model. Journals of the Atmospheric Sciences, 2009, 66, 627-646.	0.6	30
104	Seasonal variations of stratospheric age spectra in the Goddard Earth Observing System Chemistry Climate Model (GEOSCCM). Journal of Geophysical Research, 2012, 117, .	3.3	29
105	CO₂ flux estimation errors associated with moist atmospheric processes. Atmospheric Chemistry and Physics, 2012, 12, 6405-6416.	1.9	28
106	Reanalysis comparisons of upper tropospherică€“lower stratospheric jets and multiple tropopauses. Atmospheric Chemistry and Physics, 2017, 17, 11541-11566.	1.9	28
107	Monitoring of observation errors in the assimilation of satellite ozone data. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	27
108	Assimilation of SCIAMACHY total column CO observations: Global and regional analysis of data impact. Journal of Geophysical Research, 2009, 114, .	3.3	27

#	Article	IF	Citations
109	Tropospheric column ozone response to ENSO in GEOS-5 assimilation of OMI and MLS ozone data. Atmospheric Chemistry and Physics, 2016, 16, 7091-7103.	1.9	27
110	Internal variability in a perpetual January integration of a troposphere-stratosphere-mesosphere GCM. Quarterly Journal of the Royal Meteorological Society, 1995, 121, 369-397.	1.0	25
111	The potential to narrow uncertainty in projections of stratospheric ozone over the 21st century. Atmospheric Chemistry and Physics, 2010, 10, 9473-9486.	1.9	25
112	Air Pollution Monitoring for Health Research and Patient Care. An Official American Thoracic Society Workshop Report. Annals of the American Thoracic Society, 2019, 16, 1207-1214.	1.5	25
113	Mechanisms Linked to Recent Ozone Decreases in the Northern Hemisphere Lower Stratosphere. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031631.	1.2	25
114	The Berlin troposphere-stratosphere-mesosphere GCM: Climatology and forcing mechanisms. Quarterly Journal of the Royal Meteorological Society, 1997, 123, 1075-1096.	1.0	24
115	Phaseâ€“Space Characteristics of the Tropical Stratospheric Quasi-Biennial Oscillation. Journals of the Atmospheric Sciences, 1995, 52, 4482-4500.	0.6	23
116	Simulations of stratospheric sudden warmings in the Berlin troposphere-stratosphere-mesosphere GCM. Annales Geophysicae, 1996, 14, 443-463.	0.6	21
117	The Impact of Stratospheric Ozone Changes on Downward Wave Coupling in the Southern Hemisphere*. Journal of Climate, 2011, 24, 4210-4229.	1.2	21
118	Stratospheric gravity wave simulation over Greenland during 24 January 2005. Journal of Geophysical Research, 2007, 112, .	3.3	20
119	Interannual Variability and Trends of Extratropical Ozone. Part II: Southern Hemisphere. Journals of the Atmospheric Sciences, 2008, 65, 3030-3041.	0.6	20
120	Interannual Variability and Trends of Extratropical Ozone. Part I: Northern Hemisphere. Journals of the Atmospheric Sciences, 2008, 65, 3013-3029.	0.6	20
121	Intraâ€annual relationships between polar ozone and the SAM. Geophysical Research Letters, 2009, 36, .	1.5	20
122	Use of radon for evaluation of atmospheric transport models: sensitivity to emissions. Tellus, Series B: Chemical and Physical Meteorology, 2004, 56, 404-412.	0.8	19
123	Detection of carbon monoxide trends in the presence of interannual variability. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,257.	1.2	19
124	Intercomparison of two stratospheric analyses: Temperatures relevant to polar stratospheric cloud formation. Journal of Geophysical Research, 1999, 104, 2041-2050.	3.3	18
125	An analysis of the impact of convective parameter sensitivity on simulated global atmospheric CO distributions. Journal of Geophysical Research, 2011, 116, .	3.3	18
126	Modeling the Frozen-In Anticyclone in the 2005 Arctic Summer Stratosphere. Atmospheric Chemistry and Physics, 2011, 11, 4557-4576.	1.9	18

#	Article	IF	Citations
127	Emission and transport of cesiumâ€137 from boreal biomass burning in the summer of 2010. Journal of Geophysical Research, 2012, 117, .	3.3	17
128	The Berlin troposphereâ€“stratosphereâ€“mesosphere GCM: Sensitivity to physical parametrizations. Quarterly Journal of the Royal Meteorological Society, 1998, 124, 1343-1371.	1.0	16
129	Use of radon for evaluation of atmospheric transport models: sensitivity to emissions. Tellus, Series B: Chemical and Physical Meteorology, 2022, 56, 404.	0.8	16
130	Impact of planetary boundary layer turbulence on model climate and tracer transport. Atmospheric Chemistry and Physics, 2015, 15, 7269-7286.	1.9	16
131	Effects of Greenhouse Gas Increase and Stratospheric Ozone Depletion on Stratospheric Mean Age of Air in 1960â€“2010. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2098-2110.	1.2	16
132	Monthly-mean diabatic circulations in the stratosphere. Quarterly Journal of the Royal Meteorological Society, 1989, 115, 807-840.	1.0	15
133	Narrowing of the upwelling branch of the Brewerâ€Dobson circulation and Hadley cell in chemistryâ€climate model simulations of the 21st century. Geophysical Research Letters, 2010, 37, .	1.5	15
134	El NiÃ±oâ€“Southern Oscillation in Tropical and Midlatitude Column Ozone. Journals of the Atmospheric Sciences, 2011, 68, 1911-1921.	0.6	14
135	Bias-correcting carbon fluxes derived from land-surface satellite data for retrospective and near-real-time assimilation systems. Atmospheric Chemistry and Physics, 2021, 21, 9609-9628.	1.9	14
136	Grid-stretching capability for the GEOS-Chem 13.0.0 atmospheric chemistry model. Geoscientific Model Development, 2021, 14, 5977-5997.	1.3	14
137	Spatial structure of assimilated ozone in the upper troposphere and lower stratosphere. Journal of Geophysical Research, 2010, 115, .	3.3	13
138	Seasonal Variation of the Quasiâ€Biennial Oscillation Descent. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033077.	1.2	13
139	A comparison of the climatology of a tropospherestratosphere-mesosphere model with observations. Climate Dynamics, 1991, 5, 161-174.	1.7	12
140	The Berlin troposphere-stratosphere-mesosphere GCM: Sensitivity to physical parametrizations. Quarterly Journal of the Royal Meteorological Society, 1998, 124, 1343-1371.	1.0	12
141	NASA GEOS Composition Forecast Modeling System GEOSâ€CF v1.0: Stratospheric Composition. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	12
142	Assimilation of ozone profiles from the Improved Limb Atmospheric Spectrometer-II: Study of Antarctic ozone. Journal of Geophysical Research, 2006, 111, .	3.3	11
143	The SAO and Kelvin waves in the EuroGRIPS GCMS and the UK Met. Office analyses. Annales Geophysicae, 2001, 19, 99-114.	0.6	11
144	The Stratopause Semiannual Oscillation in the Berlin Troposphereâ€“Stratosphereâ€“Mesosphere GCM. Journals of the Atmospheric Sciences, 1997, 54, 2749-2759.	0.6	10

#	Article	IF	Citations
145	High-Frequency Planetary Waves in the Polar Middle Atmosphere as Seen in a Data Assimilation System. Journals of the Atmospheric Sciences, 2003, 60, 2975-2992.	0.6	10
146	Interannual variability of stratospheric trace gases: The role of extratropical wave driving. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 2459-2474.	1.0	10
147	Evaluation of a new middle-lower tropospheric CO₂ product using data assimilation. Atmospheric Chemistry and Physics, 2013, 13, 4487-4500.	1.9	10
148	Toward a Reanalysis of Stratospheric Ozone for Trend Studies: Assimilation of the Aura Microwave Limb Sounder and Ozone Mapping and Profiler Suite Limb Profiler Data. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031892.	1.2	10
149	The impact of greenhouse gases on past changes in tropospheric ozone. Journal of Geophysical Research, 2012, 117, .	3.3	9
150	The Impact of SST-Forced and Unforced Teleconnections on 2015/16 El NiÃ±o Winter Precipitation over the Western United States. Journal of Climate, 2018, 31, 5825-5844.	1.2	9
151	Global Assimilation of Loon Stratospheric Balloon Observations. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3005-3019.	1.2	9
152	A Study of the Radiative Dissipation of Planetary Waves Using Satellite Data. Journals of the Atmospheric Sciences, 1992, 49, 1304-1317.	0.6	8
153	A test of sensitivity to convective transport in a global atmospheric CO2 simulation. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 463-475.	0.8	8
154	A New Parameterization of Scale-Dependent Radiative Rates in the Stratosphere. Journals of the Atmospheric Sciences, 1995, 52, 4429-4447.	0.6	8
155	A Further Analysis of Internal Variability in a Perpetual January Integration of a Troposphere-Stratosphere-Mesosphere GCM. Journal of the Meteorological Society of Japan, 1996, 74, 175-188.	0.7	7
156	Ice polar stratospheric clouds detected from assimilation of Atmospheric Infrared Sounder data. Geophysical Research Letters, 2007, 34, .	1.5	7
157	On the inclusion of Limb Infrared Monitor of the Stratosphere version 6 ozone in a data assimilation system. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7982-8000.	1.2	7
158	Challenges and Opportunities in NASA Weather Research. Bulletin of the American Meteorological Society, 2016, 97, ES137-ES140.	1.7	7
159	The impacts of fossil fuel emission uncertainties and accounting for 3-D chemical CO2 production on inverse natural carbon flux estimates from satellite and in situ data. Environmental Research Letters, 2020, 15, 085002.	2.2	7
160	Machine learning and air quality modeling. , 2017, , .		6
161	Effects of Gravity Wave Drag in the Berlin Troposphere-Stratosphere-Mesosphere GCM. , 1997, , 327-336.		6
162	Seasonal Prediction of the Quasiâ€Biennial Oscillation. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	5

#	Article	IF	Citations
163	Impacts of the Eruption of Mount Pinatubo on Surface Temperatures and Precipitation Forecasts With the NASA GEOS Subseasonalâ€toâ€Seasonal System. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034830.	1.2	4
164	Augmenting the Standard Operating Procedures of Health and Air Quality Stakeholders With NASA Resources. GeoHealth, 2021, 5, e2021GH000451.	1.9	4
165	Seasonality in Prediction Skill of the Maddenâ€Julian Oscillation and Associated Dynamics in Version 2 of NASA's GEOSâ€S2S Forecast System. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034961.	1.2	4
166	The influence of internal model variability in GEOSâ€5 on interhemispheric CO₂ exchange. Journal of Geophysical Research, 2012, 117, .	3.3	3
167	POLECAT: Preparatory and modelling studies. Physics and Chemistry of the Earth, 1995, 20, 109-121.	0.3	2
168	Modelling the effects of solar variability on the middle atmosphere: A review. Advances in Space Research, 1994, 14, 211-220.	1.2	1
169	Uses of satellite observations to validate climate/middle atmosphere models. Advances in Space Research, 1998, 22, 1483-1492.	1.2	1
170	The tropical upper troposphere and lower stratosphere in the GEOS-2 GCM. Advances in Space Research, 2001, 27, 1457-1465.	1.2	1
171	Data Mining Geophysical Content from Satellites and Global Climate Models. , 2009, , .		1
172	The Contributions of Several Absorption Bands to Stratospheric Radiative Dissipation Rates. Journals of the Atmospheric Sciences, 1996, 53, 1339-1342.	0.6	1
173	Atmospheric science. Earth-Science Reviews, 1991, 30, 319-320.	4.0	0
174	On the review process: Editors speak. Eos, 2003, 84, 575.	0.1	0
175	Chemical Source Inversion Using Assimilated Constituent Observations in an Idealized Two-Dimensional System. Monthly Weather Review, 2009, 137, 3013-3025.	0.5	0
176	The Role of Radiation in the Stratosphere and its Representation in Models. , 1993, , 215-226.		0
177	El NiÃ±o-Southern Oscillation in Tropical and Mid-Latitude Column Ozone. Journals of the Atmospheric Sciences, 0, , 110415070133039.	0.6	0