

Susan Solomon

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/9576970/susan-solomon-publications-by-year.pdf>

Version: 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

103
papers

14,044
citations

47
h-index

108
g-index

108
ext. papers

15,769
ext. citations

8.9
avg, IF

6.64
L-index

#	Paper	IF	Citations
103	On the stratospheric chemistry of midlatitude wildfire smoke.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022 , 119, e2117325119	11.5	7
102	On the Southern Hemisphere Stratospheric Response to ENSO and Its Impacts on Tropospheric Circulation. <i>Journal of Climate</i> , 2022 , 35, 1963-1981	4.4	
101	Climate Impacts and Potential Drivers of the Unprecedented Antarctic Ozone Holes of 2020 and 2021. <i>Geophysical Research Letters</i> , 2022 , 49,	4.9	1
100	An Arctic ozone hole in 2020 if not for the Montreal Protocol. <i>Atmospheric Chemistry and Physics</i> , 2021 , 21, 15771-15781	6.8	5
99	Stratospheric Temperature and Ozone Anomalies Associated With the 2020 Australian New Year Fires. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL095898	4.9	5
98	On Recent Large Antarctic Ozone Holes and Ozone Recovery Metrics. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL095232	4.9	3
97	Interannual SAM Modulation of Antarctic Sea Ice Extent Does Not Account for Its Long-Term Trends, Pointing to a Limited Role for Ozone Depletion. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL094871	4.9	1
96	On the effects of the ocean on atmospheric CFC-11 lifetimes and emissions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	3
95	Joint inference of CFC lifetimes and banks suggests previously unidentified emissions. <i>Nature Communications</i> , 2021 , 12, 2920	17.4	3
94	Quantifying the Imprints of Stratospheric Contributions to Interhemispheric Differences in Tropospheric CFC-11, CFC-12, and N2O Abundances. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL093700	4.9	0
93	Risks to the stratospheric ozone shield in the Anthropocene : This article belongs to Ambio® 50th Anniversary Collection. Theme: Ozone Layer. <i>Ambio</i> , 2021 , 50, 44-48	6.5	1
92	Atmospheric Chemistry Signatures of an Equatorially Symmetric Matsuno-Gill Circulation Pattern. <i>Journals of the Atmospheric Sciences</i> , 2021 , 78, 107-116	2.1	
91	Paul J. Crutzen (1933-2021). <i>Science</i> , 2021 , 371, 892	33.3	0
90	Emergence of Southern Hemisphere stratospheric circulation changes in response to ozone recovery. <i>Nature Geoscience</i> , 2021 , 14, 638-644	18.3	8
89	Subpolar Activation of Halogen Heterogeneous Chemistry in Austral Spring. <i>Geophysical Research Letters</i> , 2021 , 48, e2020GL090036	4.9	
88	Stratospheric Ozone in the Last Glacial Maximum. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125, e2020JD032929	4.4	6
87	Quantifying contributions of chlorofluorocarbon banks to emissions and impacts on the ozone layer and climate. <i>Nature Communications</i> , 2020 , 11, 1380	17.4	35

86	The Brewer-Dobson Circulation During the Last Glacial Maximum. <i>Geophysical Research Letters</i> , 2020 , 47, e2019GL086271	4.9	6
85	The Key Role of Coupled Chemistry-Climate Interactions in Tropical Stratospheric Temperature Variability. <i>Journal of Climate</i> , 2020 , 33, 7619-7629	4.4	2
84	Decadal Attribution of Historic Temperature and Ocean Heat Content Change to Anthropogenic Emissions. <i>Geophysical Research Letters</i> , 2020 , 47, e2019GL085905	4.9	3
83	Evaluating Stratospheric Tropical Width Using Tracer Concentrations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125, e2020JD033081	4.4	2
82	Prediction of Northern Hemisphere Regional Sea Ice Extent and Snow Depth Using Stratospheric Ozone Information. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020 , 125, e2019JD031770	4.4	2
81	Unfinished business after five decades of ozone-layer science and policy. <i>Nature Communications</i> , 2020 , 11, 4272	17.4	12
80	Time of Steady Climate Change. <i>Geophysical Research Letters</i> , 2019 , 46, 5445-5451	4.9	1
79	New Insights on the Impact of Ozone-Depleting Substances on the Brewer-Dobson Circulation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 2435-2451	4.4	18
78	Prediction of Northern Hemisphere Regional Surface Temperatures Using Stratospheric Ozone Information. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 5922-5933	4.4	11
77	Observed changes in Brewer-Dobson circulation for 1980-2018. <i>Environmental Research Letters</i> , 2019 , 14, 114026	6.2	12
76	Modeled and Observed Volcanic Aerosol Control on Stratospheric NO _y and Cly. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 10283-10303	4.4	4
75	Quantifying stochastic uncertainty in detection time of human-caused climate signals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 19821-19827	11.5	20
74	Detectability of the impacts of ozone-depleting substances and greenhouse gases upon stratospheric ozone accounting for nonlinearities in historical forcings. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 143-166	6.8	8
73	On the Role of Heterogeneous Chemistry in Ozone Depletion and Recovery. <i>Geophysical Research Letters</i> , 2018 , 45, 7835-7842	4.9	7
72	Human influence on the seasonal cycle of tropospheric temperature. <i>Science</i> , 2018 , 361,	33.3	66
71	Volcanic Radiative Forcing From 1979 to 2015. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 12491-12508	4.4	50
70	On the Identification of Ozone Recovery. <i>Geophysical Research Letters</i> , 2018 , 45, 5158-5165	4.9	27
69	Centuries of thermal sea-level rise due to anthropogenic emissions of short-lived greenhouse gases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 657-662	11.5	54

68	The influence of the Calbuco eruption on the 2015 Antarctic ozone hole in a fully coupled chemistry-climate model. <i>Geophysical Research Letters</i> , 2017 , 44, 2556-2561	4.9	39
67	Climate model uncertainty in impact assessments for agriculture: A multi-ensemble case study on maize in sub-Saharan Africa. <i>Earth's Future</i> , 2017 , 5, 337-353	7.9	31
66	An Exceptional Summer during the South Pole Race of 1911/12. <i>Bulletin of the American Meteorological Society</i> , 2017 , 98, 2189-2200	6.1	8
65	Mirrored changes in Antarctic ozone and stratospheric temperature in the late 20th versus early 21st centuries. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 8940-8950	4.4	26
64	Quantifying the Lead Time Required for a Linear Trend to Emerge from Natural Climate Variability. <i>Journal of Climate</i> , 2017 , 30, 10179-10191	4.4	4
63	Observing the Impact of Calbuco Volcanic Aerosols on South Polar Ozone Depletion in 2015. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 11,862	4.4	22
62	Observed connections of Arctic stratospheric ozone extremes to Northern Hemisphere surface climate. <i>Environmental Research Letters</i> , 2017 , 12, 024004	6.2	39
61	Comparing Tropospheric Warming in Climate Models and Satellite Data. <i>Journal of Climate</i> , 2017 , 30, 373-392	4.4	51
60	Sensitivity of inorganic aerosol radiative effects to U.S. emissions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 6379-6390	4.4	1
59	Emergence of healing in the Antarctic ozone layer. <i>Science</i> , 2016 , 353, 269-74	33.3	337
58	Global volcanic aerosol properties derived from emissions, 1990-2014, using CESM1(WACCM). <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 2332-2348	4.4	135
57	Radiative and Dynamical Influences on Polar Stratospheric Temperature Trends. <i>Journal of Climate</i> , 2016 , 29, 4927-4938	4.4	22
56	Monsoon circulations and tropical heterogeneous chlorine chemistry in the stratosphere. <i>Geophysical Research Letters</i> , 2016 , 43, 12,624	4.9	17
55	Changes in inorganic fine particulate matter sensitivities to precursors due to large-scale US emissions reductions. <i>Environmental Science & Technology</i> , 2015 , 49, 4834-41	10.3	41
54	Water under a Changing and Uncertain Climate: Lessons from Climate Model Ensembles*. <i>Journal of Climate</i> , 2015 , 28, 9561-9582	4.4	10
53	Simulation of polar ozone depletion: An update. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 7958-7974	4.4	110
52	Observational evidence of strengthening of the Brewer-Dobson circulation since 1980. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 10,214	4.4	40
51	On the surface impact of Arctic stratospheric ozone extremes. <i>Environmental Research Letters</i> , 2015 , 10, 094003	6.2	59

50	Antarctic Ocean and Sea Ice Response to Ozone Depletion: A Two-Time-Scale Problem. <i>Journal of Climate</i> , 2015 , 28, 1206-1226	4.4	139
49	Total volcanic stratospheric aerosol optical depths and implications for global climate change. <i>Geophysical Research Letters</i> , 2014 , 41, 7763-7769	4.9	131
48	Influences of the Antarctic Ozone Hole on Southern Hemispheric Summer Climate Change. <i>Journal of Climate</i> , 2014 , 27, 6245-6264	4.4	37
47	Modeling the climate impact of Southern Hemisphere ozone depletion: The importance of the ozone data set. <i>Geophysical Research Letters</i> , 2014 , 41, 9033-9039	4.9	7
46	Volcanic contribution to decadal changes in tropospheric temperature. <i>Nature Geoscience</i> , 2014 , 7, 185-189	3.9	304
45	Identifying human influences on atmospheric temperature. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 26-33	11.5	102
44	Recent anthropogenic increases in SO ₂ from Asia have minimal impact on stratospheric aerosol. <i>Geophysical Research Letters</i> , 2013 , 40, 999-1004	4.9	82
43	Historical Antarctic mean sea ice area, sea ice trends, and winds in CMIP5 simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 5105-5110	4.4	72
42	Human and natural influences on the changing thermal structure of the atmosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 17235-40	11.5	61
41	Comparison of three vertically resolved ozone data sets: climatology, trends and radiative forcings. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 5533-5550	6.8	29
40	Simulation of polar stratospheric clouds in the specified dynamics version of the whole atmosphere community climate model. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 4991-5002	4.4	41
39	Uncertainties in the evolution of stratospheric ozone and implications for recent temperature changes in the tropical lower stratosphere. <i>Geophysical Research Letters</i> , 2012 , 39, n/a-n/a	4.9	27
38	The signature of ozone depletion on tropical temperature trends, as revealed by their seasonal cycle in model integrations with single forcings. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		24
37	Changes in Stratospheric Temperatures and Their Implications for Changes in the Brewer-Dobson Circulation, 1979-2005. <i>Journal of Climate</i> , 2012 , 25, 1759-1772	4.4	40
36	Signatures of the Antarctic ozone hole in Southern Hemisphere surface climate change. <i>Nature Geoscience</i> , 2011 , 4, 741-749	18.3	619
35	An assessment of changing ozone loss rates at South Pole: Twenty-five years of ozonesonde measurements. <i>Journal of Geophysical Research</i> , 2011 , 116, n/a-n/a		21
34	Separating signal and noise in atmospheric temperature changes: The importance of timescale. <i>Journal of Geophysical Research</i> , 2011 , 116, n/a-n/a		125
33	The persistently variable "background" stratospheric aerosol layer and global climate change. <i>Science</i> , 2011 , 333, 866-70	33.3	406

32	Early onset of significant local warming in low latitude countries. <i>Environmental Research Letters</i> , 2011 , 6, 034009	6.2	171
31	Persistence of climate changes due to a range of greenhouse gases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 18354-9	11.5	112
30	Impact of Changes in Climate and Halocarbons on Recent Lower Stratosphere Ozone and Temperature Trends. <i>Journal of Climate</i> , 2010 , 23, 2599-2611	4.4	37
29	Contributions of stratospheric water vapor to decadal changes in the rate of global warming. <i>Science</i> , 2010 , 327, 1219-23	33.3	810
28	Incorporating model quality information in climate change detection and attribution studies. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 14778-83	11.5	137
27	Temperature Trend Patterns in Southern Hemisphere High Latitudes: Novel Indicators of Stratospheric Change. <i>Journal of Climate</i> , 2009 , 22, 6325-6341	4.4	54
26	Irreversible climate change due to carbon dioxide emissions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 1704-9	11.5	1701
25	Understanding Recent Stratospheric Climate Change. <i>Journal of Climate</i> , 2009 , 22, 1934-1943	4.4	63
24	Present and future sources and emissions of halocarbons: Toward new constraints. <i>Journal of Geophysical Research</i> , 2007 , 112,		25
23	Effects of ozone cooling in the tropical lower stratosphere and upper troposphere. <i>Geophysical Research Letters</i> , 2007 , 34, n/a-n/a	4.9	63
22	Four decades of ozonesonde measurements over Antarctica. <i>Journal of Geophysical Research</i> , 2005 , 110,		86
21	Stratosphere-Troposphere Coupling in the Southern Hemisphere. <i>Journals of the Atmospheric Sciences</i> , 2005 , 62, 708-715	2.1	150
20	Aeronomy of the Middle Atmosphere. <i>Atmospheric and Oceanographic Sciences Library</i> , 2005 ,		499
19	A comparison of model-simulated trends in stratospheric temperatures. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2003 , 129, 1565-1588	6.4	162
18	Interpretation of recent Southern Hemisphere climate change. <i>Science</i> , 2002 , 296, 895-9	33.3	1405
17	Stratospheric ozone depletion: A review of concepts and history. <i>Reviews of Geophysics</i> , 1999 , 37, 275-316	15.1	1259
16	Ozone depletion at mid-latitudes: Coupling of volcanic aerosols and temperature variability to anthropogenic chlorine. <i>Geophysical Research Letters</i> , 1998 , 25, 1871-1874	4.9	94
15	Heterogeneous chlorine chemistry in the tropopause region. <i>Journal of Geophysical Research</i> , 1997 , 102, 21411-21429		141

14	The role of aerosol variations in anthropogenic ozone depletion at northern midlatitudes. <i>Journal of Geophysical Research</i> , 1996 , 101, 6713-6727		277
13	The potential of cirrus clouds for heterogeneous chlorine activation. <i>Geophysical Research Letters</i> , 1996 , 23, 2133-2136	4.9	114
12	Role of aerosol variations in anthropogenic ozone depletion in the polar regions. <i>Journal of Geophysical Research</i> , 1996 , 101, 22991-23006		111
11	Heterogeneous reactions in sulfuric acid aerosols: A framework for model calculations. <i>Journal of Geophysical Research</i> , 1994 , 99, 3615		349
10	On the role of iodine in ozone depletion. <i>Journal of Geophysical Research</i> , 1994 , 99, 20491		338
9	On the relationship between stratospheric aerosols and nitrogen dioxide. <i>Geophysical Research Letters</i> , 1993 , 20, 1187-1190	4.9	48
8	Ozone destruction through heterogeneous chemistry following the eruption of El Chichón. <i>Journal of Geophysical Research</i> , 1989 , 94, 5029		424
7	The role of molecular hydrogen and methane oxidation in the water vapour budget of the stratosphere. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1988 , 114, 281-295	6.4	205
6	Visible spectroscopy at McMurdo Station, Antarctica: 2. Observations of OClO. <i>Journal of Geophysical Research</i> , 1987 , 92, 8329		159
5	On the depletion of Antarctic ozone. <i>Nature</i> , 1986 , 321, 755-758	50.4	1161
4	Transport processes and ozone perturbations. <i>Journal of Geophysical Research</i> , 1985 , 90, 12981		72
3	On the distributions of long-lived tracers and chlorine species in the middle atmosphere. <i>Journal of Geophysical Research</i> , 1984 , 89, 11633		92
2	Analysis of the August 1972 Solar Proton Event including chlorine chemistry. <i>Journal of Geophysical Research</i> , 1981 , 86, 1140		75
1	Comparison of three vertically resolved ozone data bases: climatology, trends and radiative forcings		6