Richard S Stolarski

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1783546/publications.pdf

Version: 2024-02-01

81 papers	4,643 citations	109321 35 h-index	102487 66 g-index
82 all docs	82 docs citations	82 times ranked	2653 citing authors

#	Article	IF	Citations
1	Using satellite measurements of N₂O to remove dynamical variability from HCl measurements. Atmospheric Chemistry and Physics, 2018, 18, 5691-5697.	4.9	9
2	Multi-decadal records of stratospheric composition and their relationship to stratospheric circulation change. Atmospheric Chemistry and Physics, 2017, 17, 12081-12096.	4.9	9
3	Estimating uncertainties in the SBUV Version 8.6 merged profile ozone data set. Atmospheric Chemistry and Physics, 2017, 17, 14695-14707.	4.9	23
4	Impact of future nitrous oxide and carbon dioxide emissions on the stratospheric ozone layer. Environmental Research Letters, 2015, 10, 034011.	5.2	28
5	Seasonal variation of ozone in the tropical lower stratosphere: Southern tropics are different from northern tropics. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6196-6206.	3.3	30
6	The Response of Ozone and Nitrogen Dioxide to the Eruption of Mt. Pinatubo at Southern and Northern Midlatitudes. Journals of the Atmospheric Sciences, 2013, 70, 894-900.	1.7	81
7	State of the Climate in 2011. Bulletin of the American Meteorological Society, 2012, 93, S1-S282.	3.3	121
8	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
9	Dispersion of the volcanic sulfate cloud from a Mount Pinatuboâ€“like eruption. Journal of Geophysical Research, 2012, 117, .	3.3	77
10	Ozone temperature correlations in the upper stratosphere as a measure of chlorine content. Journal of Geophysical Research, 2012, 117, .	3.3	23
11	State of the Climate in 2010. Bulletin of the American Meteorological Society, 2011, 92, S1-S236.	3.3	135
12	Relationships between the Brewerâ€Dobson circulation and the southern annular mode during austral summer in coupled chemistryâ€climate model simulations. Journal of Geophysical Research, 2010, 115, .	3.3	13
13	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, .	4.0	15
14	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.	3.2	52
15	On the influence of anthropogenic forcings on changes in the stratospheric mean age. Journal of Geophysical Research, 2009, 114, .	3.3	75
16	What would have happened to the ozone layer if chlorofluorocarbons (CFCs) had not been regulated?. Atmospheric Chemistry and Physics, 2009, 9, 2113-2128.	4.9	165
17	Stratospheric ozone in the post-CFC era. Atmospheric Chemistry and Physics, 2009, 9, 2207-2213.	4.9	108
18	Sensitivity of polar stratospheric ozone loss to uncertainties in chemical reaction kinetics. Atmospheric Chemistry and Physics, 2009, 9, 8651-8660.	4.9	25

#	Article	IF	Citations
19	Estimating When the Antarctic Ozone Hole will Recover. , 2009, , 191-200.		4
20	Athens Statement. , 2009, , 461-464.		0
21	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
22	Evaluation of emissions and transport of CFCs using surface observations and their seasonal cycles and the GEOS CCM simulation with emissionsâ€based forcing. Journal of Geophysical Research, 2008, 113, .	3.3	28
23	Contribution of stratospheric ozone to the interannual variability of tropospheric ozone in the northern extratropics. Journal of Geophysical Research, 2008, 113, .	3.3	49
24	Understanding the Changes of Stratospheric Water Vapor in Coupled Chemistryâ€“Climate Model Simulations. Journals of the Atmospheric Sciences, 2008, 65, 3278-3291.	1.7	51
25	On detecting a trend in the residual circulation from observations of column HCl. Geophysical Research Letters, 2006, 33, .	4.0	1
26	Trends in Stratospheric Ozone: Lessons Learned from a 3D Chemical Transport Model. Journals of the Atmospheric Sciences, 2006, 63, 1028-1041.	1.7	93
27	Terrestrial Ozone Depletion due to a Milky Way Gamma-Ray Burst. Astrophysical Journal, 2005, 622, L153-L156.	4.5	49
28	Fall vortex ozone as a predictor of springtime total ozone at high northern latitudes. Atmospheric Chemistry and Physics, 2005, 5, 1655-1663.	4.9	13
29	The Ozone Hole of 2002 as Measured by TOMS. Journals of the Atmospheric Sciences, 2005, 62, 716-720.	1.7	49
30	Gammaâ€Ray Bursts and the Earth: Exploration of Atmospheric, Biological, Climatic, and Biogeochemical Effects. Astrophysical Journal, 2005, 634, 509-533.	4.5	107
31	Version 8 SBUV ozone profile trends compared with trends from a zonally averaged chemical model. Journal of Geophysical Research, 2005, 110, .	3.3	25
32	Radicals and reservoirs in the GMI chemistry and transport model: Comparison to measurements. Journal of Geophysical Research, 2004, 109, .	3.3	59
33	Changes in Column Ozone Correlated with the Stratospheric EP Flux.. Journal of the Meteorological Society of Japan, 2002, 80, 849-862.	1.8	173
34	History of the Study of Atmospheric Ozone. Ozone: Science and Engineering, 2001, 23, 421-428.	2.5	12
35	Sensitivity of tracers and a stratospheric aircraft perturbation to two-dimensional model transport variations. Journal of Geophysical Research, 2001, 106, 14245-14263.	3.3	14
36	Observations of â€œHysteresisâ€• in Backscattered Ultraviolet Ozone Data. Journal of Atmospheric and Oceanic Technology, 2001, 18, 914-924.	1.3	13

#	Article	IF	Citations
37	Upper-stratospheric ozone trends 1979-1998. Journal of Geophysical Research, 2000, 105, 14625-14636.	3.3	37
38	Trends in the Vertical Distribution of Ozone. Science, 1999, 285, 1689-1692.	12.6	96
39	Simulation of stratospheric tracers using an improved empirically based two-dimensional model transport formulation. Journal of Geophysical Research, 1999, 104, 23911-23934.	3.3	74
40	Anomalously low ozone over the Arctic. Geophysical Research Letters, 1997, 24, 2689-2692.	4.0	177
41	Atmospheric chemistry A bad winter for Arctic ozone. Nature, 1997, 389, 788-789.	27.8	10
42	Development of the Antarctic ozone hole. Journal of Geophysical Research, 1996, 101, 20909-20924.	3.3	18
43	The ozone layer: the road not taken. Nature, 1996, 381, 551-554.	27.8	64
44	Interhemispheric differences in springtime production of HCl and ClONO2in the polar vortices. Journal of Geophysical Research, 1995, 100, 13967.	3.3	124
45	Ozone Trends from Satellite Data. , 1995, , 397-410.		0
46	Record Low Global Ozone in 1992. Science, 1993, 260, 523-526.	12.6	326
47	The evolution of CLO and NO along air parcel trajectories. Geophysical Research Letters, 1993, 20, 2511-2514.	4.0	32
48	Interpretation of NO_x/NO_y observations from AASEâ€II using a model of chemistry along trajectories. Geophysical Research Letters, 1993, 20, 2507-2510.	4.0	35
49	MLS CLO observations and Arctic polar vortex temperatures. Geophysical Research Letters, 1993, 20, 2861-2864.	4.0	25
50	Monitoring Stratospheric Ozone From Space. , 1993, , 319-346.		5
51	Observation of Global Stratospheric Ozone Change. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1992, 96, 257-263.	0.9	4
52	Episodic total ozone minima and associated effects on heterogeneous chemistry and lower stratospheric transport. Journal of Geophysical Research, 1992, 97, 7979-7996.	3.3	42
53	Heterogeneous conversion of N₂O₅ TO HNO₃ on background stratospheric aerosols: Comparisons of model results with data. Geophysical Research Letters, 1992, 19, 397-400.	4.0	36
54	The 1991 Antarctic Ozone Hole; TOMS observations. Geophysical Research Letters, 1992, 19, 1215-1218.	4.0	16

#	Article	IF	Citations
55	Spatial and temporal variability of the extent of chemically processed stratospheric air. Geophysical Research Letters, 1991, 18, 29-32.	4.0	15
56	The influlence of polar heterogeneous processes on reactive chlorine at middle latitudes: Three dimensional model implications. Geophysical Research Letters, 1991, 18, 25-28.	4.0	20
57	Impact of interannual variability (1979â€“1986) of transport and temperature on ozone as computed using a twoâ€dimensional photochemical model. Journal of Geophysical Research, 1991, 96, 5073-5079.	3.3	13
58	The 1990 Antarctic Ozone Hole as observed by TOMS. Geophysical Research Letters, 1991, 18, 661-664.	4.0	22
59	Total Ozone trends deduced from Nimbus 7 Toms data. Geophysical Research Letters, 1991, 18, 1015-1018.	4.0	470
60	Twoâ€dimensional model calculation of fluorineâ€containing reservoir species in the stratosphere. Journal of Geophysical Research, 1991, 96, 12865-12881.	3.3	45
61	Total ozone during the 88â€89 Northern Hemisphere winter. Geophysical Research Letters, 1990, 17, 317-320.	4.0	10
62	Global threeâ€dimensional constituent fields derived from profile data. Geophysical Research Letters, 1990, 17, 525-528.	4.0	28
63	Three dimensional simulation of hydrogen chloride and hydrogen fluoride during the Airborne Arctic Stratospheric Expedition. Geophysical Research Letters, 1990, 17, 529-532.	4.0	18
64	the 1989 Antarctic Ozone Hole as observed by TOMS. Geophysical Research Letters, 1990, 17, 1267-1270.	4.0	37
65	Impact of heterogeneous reactions on stratospheric chemistry of the Arctic. Geophysical Research Letters, 1989, 16, 131-134.	4.0	18
66	The 1988 Antarctic ozone depletion: Comparison with previous year depletions. Geophysical Research Letters, 1989, 16, 377-380.	4.0	48
67	Comparison of model results transporting the odd nitrogen family with results transporting separate odd nitrogen species. Journal of Geophysical Research, 1989, 94, 9862-9872.	3.3	83
68	The sensitivity of total ozone and ozone perturbation scenarios in a twoâ€dimensional model due to dynamical inputs. Journal of Geophysical Research, 1989, 94, 9873-9887.	3.3	22
69	Formation of the 1988 Antarctic ozone hole. Geophysical Research Letters, 1989, 16, 381-384.	4.0	19
70	The Antarctic Ozone Hole. Scientific American, 1988, 258, 30-36.	1.0	113
71	Reply to Elliott and Rowland. Geophysical Research Letters, 1988, 15, 198-199.	4.0	5
72	The 1987 Antarctic Ozone Hole: A new record low. Geophysical Research Letters, 1988, 15, 1365-1368.	4.0	34

#	Article	IF	Citations
73	The use of atmospheric measurements to constrain model predictions of ozone change from chlorine perturbations. Journal of Geophysical Research, 1987, 92, 6662-6674.	3.3	4
74	Diagnostic analysis of two-dimensional monthly average ozone balance with Chapman chemistry. Journal of Atmospheric and Solar-Terrestrial Physics, 1986, 48, 1145-1151.	0.9	1
75	Further interpretation of satellite measurements of Antarctic total ozone. Geophysical Research Letters, 1986, 13, 1210-1212.	4.0	28
76	Twoâ€dimensional monthly average ozone balance from limb infrared monitor of the stratosphere and stratospheric and mesospheric sounder data. Journal of Geophysical Research, 1986, 91, 1103-1116.	3.3	55
77	Nimbus 7 satellite measurements of the springtime Antarctic ozone decrease. Nature, 1986, 322, 808-811.	27.8	414
78	Interpretation of ozone temperature correlations: 2. Analysis of SBUV ozone data. Journal of Geophysical Research, 1985, 90, 10693-10708.	3.3	44
79	Possible effects of volcanic eruptions on stratospheric minor constituent chemistry. Pure and Applied Geophysics, 1979, 117, 486-497.	1.9	20
80	Photoelectrons and electron temperatures in the Venus ionosphere. Journal of Geophysical Research, 1978, 83, 2057-2065.	3.3	20
81	Comparison of stratospheric ozone destruction by fluorocarbons 11, 12, 21, and 22. Geophysical Research Letters, 1976, 3, 603-606.	4.0	14