

R J Salawitch

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193
papers

11,152
citations

56
h-index

98
g-index

202
ext. papers

12,206
ext. citations

8.6
avg, IF

5.38
L-index

#	Paper	IF	Citations
193	Reductions of Antarctic ozone due to synergistic interactions of chlorine and bromine. <i>Nature</i> , 1986 , 321, 759-762	50.4	627
192	The Orbiting Carbon Observatory (OCO) mission. <i>Advances in Space Research</i> , 2004 , 34, 700-709	2.4	480
191	Removal of Stratospheric O ₃ by Radicals: In Situ Measurements of OH, HO ₂ , NO, NO ₂ , ClO, and BrO. <i>Science</i> , 1994 , 266, 398-404	33.3	336
190	Hydrogen radicals, nitrogen radicals, and the production of O ₃ in the upper troposphere. <i>Science</i> , 1998 , 279, 49-53	33.3	300
189	Emissions estimation from satellite retrievals: A review of current capability. <i>Atmospheric Environment</i> , 2013 , 77, 1011-1042	5.3	270
188	Precision requirements for space-based data. <i>Journal of Geophysical Research</i> , 2007 , 112,		269
187	The detection of large HNO ₃ -containing particles in the winter Arctic stratosphere. <i>Science</i> , 2001 , 291, 1026-31	33.3	251
186	In situ measurements constraining the role of sulphate aerosols in mid-latitude ozone depletion. <i>Nature</i> , 1993 , 363, 509-514	50.4	245
185	The ACOS CO ₂ retrieval algorithm [Part II: Global X _{CO₂} data characterization. <i>Atmospheric Measurement Techniques</i> , 2012 , 5, 687-707	4	239
184	Arctic ozone loss and climate change. <i>Geophysical Research Letters</i> , 2004 , 31,	4.9	228
183	A method for evaluating bias in global measurements of CO ₂ total columns from space. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 12317-12337	6.8	225
182	The sensitivity of polar ozone depletion to proposed geoengineering schemes. <i>Science</i> , 2008 , 320, 1201-4	33.3	203
181	Glacial-to-interglacial variations in the carbon isotopic composition of atmospheric CO ₂ . <i>Nature</i> , 1992 , 357, 461-466	50.4	189
180	Observed relationships of ozone air pollution with temperature and emissions. <i>Geophysical Research Letters</i> , 2009 , 36,	4.9	188
179	Sensitivity of ozone to bromine in the lower stratosphere. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	188
178	The Atmospheric Trace Molecule Spectroscopy (ATMOS) Experiment: Deployment on the ATLAS space shuttle missions. <i>Geophysical Research Letters</i> , 1996 , 23, 2333-2336	4.9	163
177	Absorption of solar radiation by O ₂ : Implications for O ₃ and lifetimes of N ₂ O, CFCl ₃ , and CF ₂ Cl ₂ . <i>Journal of Geophysical Research</i> , 1993 , 98, 10543		159

176	Emission Measurements of the Concorde Supersonic Aircraft in the Lower Stratosphere. <i>Science</i> , 1995 , 270, 70-74	33.3	151
175	Quantifying Transport Between the Tropical and Mid-Latitude Lower Stratosphere. <i>Science</i> , 1996 , 272, 1763-8	33.3	148
174	Changing composition of the global stratosphere. <i>Science</i> , 1989 , 243, 763-70	33.3	135
173	Arctic winter 2005: Implications for stratospheric ozone loss and climate change. <i>Geophysical Research Letters</i> , 2006 , 33,	4.9	130
172	Distribution of halon-1211 in the upper troposphere and lower stratosphere and the 1994 total bromine budget. <i>Journal of Geophysical Research</i> , 1998 , 103, 1513-1526		122
171	Agricultural Green Revolution as a driver of increasing atmospheric CO2 seasonal amplitude. <i>Nature</i> , 2014 , 515, 394-7	50.4	121
170	A Strategy for Process-Oriented Validation of Coupled Chemistry-Climate Models. <i>Bulletin of the American Meteorological Society</i> , 2005 , 86, 1117-1134	6.1	118
169	Chemical loss of ozone in the arctic polar vortex in the winter of 1991-1992. <i>Science</i> , 1993 , 261, 1146-9	33.3	114
168	Antarctic O3: Chemical mechanisms for the spring decrease. <i>Geophysical Research Letters</i> , 1986 , 13, 1296-1299	4.9	112
167	Interactions between HCl, NO _x and H ₂ O ice in the Antarctic stratosphere: Implications for ozone. <i>Journal of Geophysical Research</i> , 1988 , 93, 2442		106
166	Atmospheric Trace Molecule Spectroscopy (ATMOS) Experiment Version 3 data retrievals. <i>Applied Optics</i> , 2002 , 41, 6968-79	1.7	105
165	A new interpretation of total column BrO during Arctic spring. <i>Geophysical Research Letters</i> , 2010 , 37, n/a-n/a	4.9	102
164	Estimates of total organic and inorganic chlorine in the lower stratosphere from in situ and flask measurements during AASE II. <i>Journal of Geophysical Research</i> , 1995 , 100, 3057		94
163	Measured and modeled CO and NO _y in DISCOVER-AQ: An evaluation of emissions and chemistry over the eastern US. <i>Atmospheric Environment</i> , 2014 , 96, 78-87	5.3	92
162	Measurements of reactive nitrogen in the stratosphere. <i>Journal of Geophysical Research</i> , 1998 , 103, 3571-3585		87
161	Production of O(¹ D) from photolysis of O ₃ . <i>Geophysical Research Letters</i> , 1994 , 21, 2227-2230	4.9	87
160	Estimates of ozone return dates from Chemistry-Climate Model Initiative simulations. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 8409-8438	6.8	81
159	The changing stratosphere. <i>Planetary and Space Science</i> , 1992 , 40, 373-401	2	81

158	Twilight observations suggest unknown sources of HOx. <i>Geophysical Research Letters</i> , 1999 , 26, 1373-1376	4.9	76
157	Denitrification in the Antarctic stratosphere. <i>Nature</i> , 1989 , 339, 525-527	50.4	75
156	Chemical depletion of Arctic ozone in winter 1999/2000. <i>Journal of Geophysical Research</i> , 2002 , 107, SOL 18-1		74
155	Observations of OH, HO ₂ , H ₂ O, and O ₃ in the upper stratosphere: Implications for HOx photochemistry. <i>Geophysical Research Letters</i> , 1998 , 25, 3935-3938	4.9	71
154	The diurnal variation of hydrogen, nitrogen, and chlorine radicals: Implications for the heterogeneous production of HNO ₂ . <i>Geophysical Research Letters</i> , 1994 , 21, 2551-2554	4.9	69
153	Bromine partitioning in the tropical tropopause layer: implications for stratospheric injection. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 13391-13410	6.8	68
152	First measurements of ClOOCl in the stratosphere: The coupling of ClOOCl and ClO in the Arctic polar vortex. <i>Journal of Geophysical Research</i> , 2004 , 109, n/a-n/a		68
151	Ozone and NO _x chemistry in the eastern US: evaluation of CMAQ/CB05 with satellite (OMI) data. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 10965-10982	6.8	67
150	Chemistry of OClO in the Antarctic stratosphere: Implications for bromine. <i>Planetary and Space Science</i> , 1988 , 36, 213-224	2	64
149	Latitudinal and vertical distribution of bromine monoxide in the lower stratosphere from Scanning Imaging Absorption Spectrometer for Atmospheric Chartography limb scattering measurements. <i>Journal of Geophysical Research</i> , 2006 , 111,		62
148	Severe and extensive denitrification in the 1999-2000 Arctic winter stratosphere. <i>Geophysical Research Letters</i> , 2001 , 28, 2875-2878	4.9	62
147	The distribution of hydrogen, nitrogen, and chlorine radicals in the lower stratosphere: Implications for changes in O ₃ due to emission of NO _y from supersonic aircraft. <i>Geophysical Research Letters</i> , 1994 , 21, 2547-2550	4.9	62
146	Balloon-borne measurements of stratospheric radicals and their precursors: Implications for the production and loss of ozone. <i>Geophysical Research Letters</i> , 1997 , 24, 1107-1110	4.9	60
145	The 1994 northern midlatitude budget of stratospheric chlorine derived from ATMOS/ATLAS-3 observations. <i>Geophysical Research Letters</i> , 1996 , 23, 2357-2360	4.9	60
144	Loss of ozone in the Arctic vortex for the winter of 1989. <i>Geophysical Research Letters</i> , 1990 , 17, 561-564	4.9	60
143	Attribution of recovery in lower-stratospheric ozone. <i>Journal of Geophysical Research</i> , 2006 , 111,		59
142	Carbonaceous aerosol (soot) measured in the lower stratosphere during POLARIS and its role in stratospheric photochemistry. <i>Journal of Geophysical Research</i> , 1999 , 104, 26753-26766		58
141	Stratospheric observations of CH ₃ D and HDO from ATMOS infrared solar spectra: Enrichments of deuterium in methane and implications for HD. <i>Geophysical Research Letters</i> , 1996 , 23, 2381-2384	4.9	58

140	Understanding the kinetics of the ClO dimer cycle. <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 3055-3068	6.8	57
139	Condensation of HNO ₃ on falling ice particles: Mechanism for denitrification of the polar stratosphere. <i>Geophysical Research Letters</i> , 1990 , 17, 449-452	4.9	57
138	Multimodel assessment of the factors driving stratospheric ozone evolution over the 21st century. <i>Journal of Geophysical Research</i> , 2010 , 115,		56
137	An examination of chemistry and transport processes in the tropical lower stratosphere using observations of long-lived and short-lived compounds obtained during STRAT and POLARIS. <i>Journal of Geophysical Research</i> , 1999 , 104, 26625-26642		56
136	Analysis of satellite-derived Arctic tropospheric BrO columns in conjunction with aircraft measurements during ARCTAS and ARCPAC. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 1255-1285	6.8	55
135	Quantifying stratospheric ozone in the upper troposphere with in situ measurements of HCl. <i>Science</i> , 2004 , 304, 261-5	33.3	55
134	A comparison of observations and model simulations of NO _x /NO _y in the lower stratosphere. <i>Geophysical Research Letters</i> , 1999 , 26, 1153-1156	4.9	55
133	Kinetics of the ClO Self-Reaction and 210 nm Absorption Cross Section of the ClO Dimer. <i>Journal of Physical Chemistry A</i> , 2001 , 105, 11226-11239	2.8	54
132	Temporal decrease in upper atmospheric chlorine. <i>Geophysical Research Letters</i> , 2006 , 33,	4.9	52
131	An empirical model of global climate [Part 1: A critical evaluation of volcanic cooling. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 3997-4031	6.8	50
130	Partitioning of the reactive nitrogen reservoir in the lower stratosphere of the southern hemisphere: Observations and modeling. <i>Journal of Geophysical Research</i> , 1997 , 102, 3935-3949		50
129	Toward a better quantitative understanding of polar stratospheric ozone loss. <i>Geophysical Research Letters</i> , 2006 , 33, n/a-n/a	4.9	50
128	Stratospheric chlorine partitioning: Constraints from shuttle-borne measurements of [HCl], [ClNO ₃], and [ClO]. <i>Geophysical Research Letters</i> , 1996 , 23, 2361-2364	4.9	49
127	Trends in emissions and concentrations of air pollutants in the lower troposphere in the Baltimore/Washington airshed from 1997 to 2011. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 7859-7874	6.8	48
126	Impact of very short-lived halogens on stratospheric ozone abundance and UV radiation in a geo-engineered atmosphere. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 10945-10955	6.8	48
125	Kinetics of HO ₂ + HO ₂ → H ₂ O ₂ + O ₂ : Implications for Stratospheric H ₂ O ₂ . <i>Geophysical Research Letters</i> , 2002 , 29, 13-1-13-4	4.9	48
124	Subsidence, mixing, and denitrification of Arctic polar vortex air measured during POLARIS. <i>Journal of Geophysical Research</i> , 1999 , 104, 26611-26623		48
123	Tropical entrainment time scales inferred from stratospheric N ₂ O and CH ₄ observations. <i>Geophysical Research Letters</i> , 1998 , 25, 2781-2784	4.9	47

122	UARS Microwave Limb Sounder HNO ₃ observations: Implications for Antarctic polar stratospheric clouds. <i>Journal of Geophysical Research</i> , 1998 , 103, 13285-13313		47
121	Simultaneous measurements of stratospheric HO _x , NO _x , and Cl _x : Comparison with a photochemical model. <i>Journal of Geophysical Research</i> , 1996 , 101, 9031-9043		47
120	The atmospheric column abundance of IO: Implications for stratospheric ozone. <i>Journal of Geophysical Research</i> , 1997 , 102, 8887-8898		45
119	Carbon isotopic evidence for biomass burning at the K-T boundary. <i>Geology</i> , 1993 , 21, 487	5	44
118	First stage of Antarctic ozone recovery. <i>Journal of Geophysical Research</i> , 2008 , 113,		43
117	ATMOS/ATLAS-3 observations of long-lived tracers and descent in the Antarctic Vortex in November 1994. <i>Geophysical Research Letters</i> , 1996 , 23, 2341-2344	4.9	42
116	Partitioning of NO _y species in the summer Arctic stratosphere. <i>Geophysical Research Letters</i> , 1999 , 26, 1157-1160	4.9	41
115	The Convective Transport of Active Species in the Tropics (CONTRAST) Experiment. <i>Bulletin of the American Meteorological Society</i> , 2017 , 98, 106-128	6.1	40
114	On the unexplained stratospheric ozone losses during cold Arctic Januaries. <i>Geophysical Research Letters</i> , 2003 , 30, 8-1-8-4	4.9	40
113	ATMOS measurements of H ₂ O+2CH ₄ and total reactive nitrogen in the November 1994 Antarctic stratosphere: Dehydration and denitrification in the vortex. <i>Geophysical Research Letters</i> , 1996 , 23, 2397-2400	4.9	40
112	Hydrochloric acid and the chlorine budget of the lower stratosphere. <i>Geophysical Research Letters</i> , 1994 , 21, 2575-2578	4.9	40
111	Validation of Aura Microwave Limb Sounder OH and HO ₂ measurements. <i>Journal of Geophysical Research</i> , 2008 , 113,		39
110	Observations of large reductions in the NO/NO _y ratio near the mid-latitude tropopause and the role of heterogeneous chemistry. <i>Geophysical Research Letters</i> , 1996 , 23, 3223-3226	4.9	39
109	OH, HO ₂ , and NO in two biomass burning plumes: Sources of HO _x and implications for ozone production. <i>Geophysical Research Letters</i> , 1997 , 24, 3185-3188	4.9	37
108	Polar stratospheric descent of NO _y and CO and Arctic denitrification during winter 1992-1993. <i>Journal of Geophysical Research</i> , 1999 , 104, 1847-1861		37
107	Near IR photolysis of HO ₂ NO ₂ : Implications for HO _x . <i>Geophysical Research Letters</i> , 2002 , 29, 9-1-9-4	4.9	36
106	Ground-based observations of Arctic O ₃ loss during spring and summer 1997. <i>Journal of Geophysical Research</i> , 1999 , 104, 26497-26510		36
105	High ozone concentrations on hot days: The role of electric power demand and NO _x emissions. <i>Geophysical Research Letters</i> , 2013 , 40, 5291-5294	4.9	35

104	Sources, Sinks, and the Distribution of OH in the Lower Stratosphere— <i>Journal of Physical Chemistry A</i> , 2001 , 105, 1543-1553	2.8	35
103	Chemistry of the antarctic stratosphere. <i>Planetary and Space Science</i> , 1988 , 36, 73-87	2	35
102	Chemical loss of ozone during the Arctic winter of 1999/2000: An analysis based on balloon-borne observations. <i>Journal of Geophysical Research</i> , 2002 , 107, SOL 11-1		34
101	The coupling of ClONO ₂ , ClO, and NO ₂ in the lower stratosphere from in situ observations using the NASA ER-2 aircraft. <i>Journal of Geophysical Research</i> , 1999 , 104, 26705-26714		34
100	Trace gas transport in the Arctic Vortex inferred from ATMOS ATLAS-2 observations during April 1993. <i>Geophysical Research Letters</i> , 1996 , 23, 2345-2348	4.9	34
99	A comparison of measurements from ATMOS and instruments aboard the ER-2 aircraft: Tracers of atmospheric transport. <i>Geophysical Research Letters</i> , 1996 , 23, 2389-2392	4.9	34
98	Balloon-borne in situ measurements of ClO and ozone: Implications for heterogeneous chemistry and mid-latitude ozone loss. <i>Geophysical Research Letters</i> , 1993 , 20, 1795-1798	4.9	34
97	Stratospheric NO and NO ₂ abundances from ATMOS Solar-Occultation Measurements. <i>Geophysical Research Letters</i> , 1996 , 23, 2373-2376	4.9	33
96	Influence of polar stratospheric clouds on the depletion of Antarctic ozone. <i>Geophysical Research Letters</i> , 1988 , 15, 871-874	4.9	33
95	CAMx Ozone Source Attribution in the Eastern United States using Guidance from Observations during DISCOVER-AQ Maryland. <i>Geophysical Research Letters</i> , 2016 , 43, 2249-2258	4.9	32
94	Ozone production and loss rate measurements in the middle stratosphere. <i>Journal of Geophysical Research</i> , 1996 , 101, 28785-28792		32
93	The response of ClO radical concentrations to variations in NO ₂ radical concentrations in the lower stratosphere. <i>Geophysical Research Letters</i> , 1994 , 21, 2543-2546	4.9	32
92	Comparison of modeled and observed values of NO ₂ and JNO ₂ during the Photochemistry of Ozone Loss in the Arctic Region in Summer (POLARIS) mission. <i>Journal of Geophysical Research</i> , 1999 , 104, 26687-26703		31
91	Seasonal variations of water vapor in the lower stratosphere inferred from ATMOS/ATLAS-3 measurements of H ₂ O and CH ₄ . <i>Geophysical Research Letters</i> , 1996 , 23, 2401-2404	4.9	30
90	Stratospheric Injection of Brominated Very Short-Lived Substances: Aircraft Observations in the Western Pacific and Representation in Global Models. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 5690-5719	4.4	30
89	ATMOS/ATLAS-3 measurements of stratospheric chlorine and reactive nitrogen partitioning inside and outside the November 1994 Antarctic Vortex. <i>Geophysical Research Letters</i> , 1996 , 23, 2365-2368	4.9	29
88	Impact of evolving isoprene mechanisms on simulated formaldehyde: An inter-comparison supported by in situ observations from SENEX. <i>Atmospheric Environment</i> , 2017 , 164, 325-336	5.3	28
87	Stratospheric and mesospheric HOx: Results from Aura MLS and FIRS-2. <i>Geophysical Research Letters</i> , 2006 , 33,	4.9	28

86	The hydrogen budget of the stratosphere inferred from ATMOS measurements of H ₂ O and CH ₄ . <i>Geophysical Research Letters</i> , 1996 , 23, 2405-2408	4.9	28
85	A pervasive role for biomass burning in tropical high ozone/low water structures. <i>Nature Communications</i> , 2016 , 7, 10267	17.4	27
84	An examination of the inorganic chlorine budget in the lower stratosphere. <i>Journal of Geophysical Research</i> , 2000 , 105, 1957-1971		27
83	A comparison of measurements from ATMOS and instruments aboard the ER-2 aircraft: Halogenated gases. <i>Geophysical Research Letters</i> , 1996 , 23, 2393-2396	4.9	27
82	Ozone depletion following future volcanic eruptions. <i>Geophysical Research Letters</i> , 2017 , 44, 7490-7499	4.9	26
81	Methane Emissions From the Baltimore-Washington Area Based on Airborne Observations: Comparison to Emissions Inventories. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 8869-8882	4.4	25
80	Reconstruction of three-dimensional ozone fields using POAM III during SOLVE. <i>Journal of Geophysical Research</i> , 2002 , 107, SOL 42-1		25
79	The budget and partitioning of stratospheric chlorine during the 1997 Arctic summer. <i>Journal of Geophysical Research</i> , 1999 , 104, 26653-26665		25
78	Increase of stratospheric carbon tetrafluoride (CF ₄) based on ATMOS observations from space. <i>Geophysical Research Letters</i> , 1996 , 23, 2353-2356	4.9	25
77	Nighttime OClO in the winter Arctic vortex. <i>Journal of Geophysical Research</i> , 2005 , 110,		23
76	Trends of OCS, HCN, SF ₆ , CHClF ₂ (HCFC-22) in the lower stratosphere from 1985 and 1994 Atmospheric Trace Molecule Spectroscopy Experiment measurements near 30°N latitude. <i>Geophysical Research Letters</i> , 1996 , 23, 2349-2352	4.9	23
75	Stratospheric ozone: Impact of human activity. <i>Planetary and Space Science</i> , 1989 , 37, 1653-1672	2	23
74	BrO and inferred Br_v profiles over the western Pacific: relevance of inorganic bromine sources and a Br_v minimum in the aged tropical tropopause layer. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 15245-15270	6.8	22
73	Characterization of soluble bromide measurements and a case study of BrO observations during ARCTAS. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 1327-1338	6.8	22
72	Validation of Aura MLS HO _x measurements with remote-sensing balloon instruments. <i>Geophysical Research Letters</i> , 2006 , 33, n/a-n/a	4.9	22
71	The NO _x /NO ₃ System in the Lower Stratosphere: Insights from In Situ Measurements and Implications of the JHNO ₃ /[OH] Relationship. <i>Journal of Physical Chemistry A</i> , 2001 , 105, 1521-1534	2.8	22
70	Formaldehyde in the Tropical Western Pacific: Chemical sources and sinks, convective transport, and representation in CAM-Chem and the CCM1 models. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 11201-11226	4.4	21
69	The changing ozone depletion potential of N ₂ O in a future climate. <i>Geophysical Research Letters</i> , 2015 , 42, 10,047-10,055	4.9	21

68	Chemical ozone loss in the Arctic winter 1991-1992. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 1897-1910	108	21
67	Evaluating commercial marine emissions and their role in air quality policy using observations and the CMAQ model. <i>Atmospheric Environment</i> , 2018 , 173, 96-107	53	21
66	Evolution and stoichiometry of heterogeneous processing in the Antarctic stratosphere. <i>Journal of Geophysical Research</i> , 1997 , 102, 13235-13253		20
65	Quantitative constraints on the atmospheric chemistry of nitrogen oxides: An analysis along chemical coordinates. <i>Journal of Geophysical Research</i> , 2000 , 105, 24283-24304		19
64	In situ measurements of the NO ₂ /NO ratio for testing atmospheric photochemical models. <i>Geophysical Research Letters</i> , 1994 , 21, 2555-2558	4.9	19
63	Quantifying the causes of differences in tropospheric OH within global models. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 1983-2007	4.4	18
62	Denitrification in the Arctic mid-winter 2004/2005 observed by airborne submillimeter radiometry. <i>Geophysical Research Letters</i> , 2005 , 32, n/a-n/a	4.9	18
61	Balloon-borne measurements of CLO, NO, and O ₃ in a volcanic cloud: An analysis of heterogeneous chemistry between 20 and 30 km. <i>Geophysical Research Letters</i> , 1993 , 20, 2527-2530	4.9	18
60	Methane Emissions from the Marcellus Shale in Southwestern Pennsylvania and Northern West Virginia Based on Airborne Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019 , 124, 1862-1878	4.4	18
59	Bimodal distribution of free tropospheric ozone over the tropical western Pacific revealed by airborne observations. <i>Geophysical Research Letters</i> , 2015 , 42, 7844-7851	4.9	17
58	Observed and modeled HOCl profiles in the midlatitude stratosphere: Implication for ozone loss. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	17
57	Change in ozone trends at southern high latitudes. <i>Geophysical Research Letters</i> , 2005 , 32, n/a-n/a	4.9	17
56	Evolution of inorganic chlorine partitioning in the Arctic polar vortex. <i>Journal of Geophysical Research</i> , 2006 , 111,		17
55	Laminae in the tropical middle stratosphere: Origin and age estimation. <i>Geophysical Research Letters</i> , 1998 , 25, 4337-4340	4.9	17
54	Nitric acid in the middle stratosphere as a function of altitude and aerosol loading. <i>Journal of Geophysical Research</i> , 1999 , 104, 26715-26723		17
53	An observationally constrained evaluation of the oxidative capacity in the tropical western Pacific troposphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 7461-7488	4.4	17
52	Link Between Arctic Tropospheric BrO Explosion Observed From Space and Sea-Salt Aerosols From Blowing Snow Investigated Using Ozone Monitoring Instrument BrO Data and GEOS-5 Data Assimilation System. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 6954-6983	4.4	17
51	Changes in Global Tropospheric OH Expected as a Result of Climate Change Over the Last Several Decades. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018 , 123, 10,774	4.4	17

50	The role of HO _x in super- and subsonic aircraft exhaust plumes. <i>Geophysical Research Letters</i> , 1997 , 24, 65-68	4.9	16
49	Ozone destruction and production rates between spring and autumn in the Arctic stratosphere. <i>Geophysical Research Letters</i> , 2000 , 27, 2605-2608	4.9	16
48	The Effect of Representing Bromine from VSLS on the Simulation and Evolution of Antarctic Ozone. <i>Geophysical Research Letters</i> , 2016 , 43, 9869-9876	4.9	15
47	Airborne measurements of BrO and the sum of HOBr and Br ₂ over the Tropical West Pacific from 1 to 15 km during the CONvective TRANsport of Active Species in the Tropics (CONTRAST) experiment. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 12,560-12,578	4.4	15
46	EOS Microwave Limb Sounder observations of upper stratospheric BrO: Implications for total bromine. <i>Geophysical Research Letters</i> , 2006 , 33,	4.9	15
45	Polar Stratospheric Clouds: Satellite Observations, Processes, and Role in Ozone Depletion. <i>Reviews of Geophysics</i> , 2021 , 59, e2020RG000702	23.1	15
44	Validation of Aura Microwave Limb Sounder BrO observations in the stratosphere. <i>Journal of Geophysical Research</i> , 2007 , 112,		14
43	Climate change favours large seasonal loss of Arctic ozone. <i>Nature Communications</i> , 2021 , 12, 3886	17.4	14
42	Effect of Pinatubo aerosols on stratospheric NO. <i>Journal of Geophysical Research</i> , 1997 , 102, 1205-1213		12
41	Measurements of chlorine partitioning in the winter Arctic stratosphere. <i>Geophysical Research Letters</i> , 1999 , 26, 3093-3096	4.9	12
40	Paris Climate Agreement: Beacon of Hope. <i>Springer Climate</i> , 2017 ,	0.3	10
39	Methane emissions from the Marcellus Shale in southwestern Pennsylvania and northern West Virginia based on airborne measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017 , 122, 4639-4653	4.4	9
38	Retrievals of chlorine chemistry kinetic parameters from Antarctic ClO microwave radiometer measurements. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 5183-5193	6.8	9
37	Effects of atmospheric transport on column abundances of nitrogen and chlorine compounds in the Arctic stratosphere. <i>Geophysical Research Letters</i> , 1990 , 17, 533-536	4.9	9
36	Using near-road observations of CO, NO _y , and CO ₂ to investigate emissions from vehicles: Evidence for an impact of ambient temperature and specific humidity. <i>Atmospheric Environment</i> , 2020 , 232, 117558	5.3	8
35	Evidence for an increase in the ozone photochemical lifetime in the eastern United States using a regional air quality model. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 12778-12793	4.4	8
34	New retrieval of BrO from SCIAMACHY limb: an estimate of the stratospheric bromine loading during April 2008. <i>Atmospheric Measurement Techniques</i> , 2013 , 6, 2549-2561	4	8
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