

David Fahey

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268
papers

21,262
citations

70
h-index

138
g-index

286
ext. papers

23,268
ext. citations

7.9
avg, IF

5.78
L-index

#	Paper	IF	Citations
268	Bounding the role of black carbon in the climate system: A scientific assessment. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 5380-5552	4.4	3330
267	Ozone production in the rural troposphere and the implications for regional and global ozone distributions. <i>Journal of Geophysical Research</i> , 1987 , 92, 4191		739
266	Aviation and global climate change in the 21st century. <i>Atmospheric Environment</i> , 2009 , 43, 3520-3537	5.3	654
265	Evaluation of black carbon estimations in global aerosol models. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 9001-9026	6.8	510
264	Single-particle measurements of midlatitude black carbon and light-scattering aerosols from the boundary layer to the lower stratosphere. <i>Journal of Geophysical Research</i> , 2006 , 111,		507
263	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
262	Measurement of the mixing state, mass, and optical size of individual black carbon particles in urban and biomass burning emissions. <i>Geophysical Research Letters</i> , 2008 , 35,	4.9	334
261	The importance of the Montreal Protocol in protecting climate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 4814-9	11.5	309
260	Hydrogen radicals, nitrogen radicals, and the production of O ₃ in the upper troposphere. <i>Science</i> , 1998 , 279, 49-53	33.3	300
259	An Inter-Comparison of Instruments Measuring Black Carbon Content of Soot Particles. <i>Aerosol Science and Technology</i> , 2007 , 41, 295-314	3.4	252
258	The detection of large HNO ₃ -containing particles in the winter Arctic stratosphere. <i>Science</i> , 2001 , 291, 1026-31	33.3	251
257	Biomass burning in Siberia and Kazakhstan as an important source for haze over the Alaskan Arctic in April 2008. <i>Geophysical Research Letters</i> , 2009 , 36, n/a-n/a	4.9	249
256	The large contribution of projected HFC emissions to future climate forcing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 10949-54	11.5	246
255	In situ measurements constraining the role of sulphate aerosols in mid-latitude ozone depletion. <i>Nature</i> , 1993 , 363, 509-514	50.4	245
254	Reactive nitrogen species in the troposphere: Measurements of NO, NO ₂ , HNO ₃ , particulate nitrate, peroxyacetyl nitrate (PAN), O ₃ , and total reactive odd nitrogen (NO _y) at Niwot Ridge, Colorado. <i>Journal of Geophysical Research</i> , 1986 , 91, 9781		239
253	In situ measurements of total reactive nitrogen, total water, and aerosol in a polar stratospheric cloud in the Antarctic. <i>Journal of Geophysical Research</i> , 1989 , 94, 11299		234
252	Coatings and their enhancement of black carbon light absorption in the tropical atmosphere. <i>Journal of Geophysical Research</i> , 2008 , 113,		233

251	Characteristics, sources, and transport of aerosols measured in spring 2008 during the aerosol, radiation, and cloud processes affecting Arctic Climate (ARCPAC) Project. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 2423-2453	6.8	217
250	A Novel Method for Estimating Light-Scattering Properties of Soot Aerosols Using a Modified Single-Particle Soot Photometer. <i>Aerosol Science and Technology</i> , 2007 , 41, 125-135	3.4	216
249	Soot Particle Studies Instrument Inter-Comparison Project Overview. <i>Aerosol Science and Technology</i> , 2010 , 44, 592-611	3.4	211
248	Reactive nitrogen and its correlation with ozone in the lower stratosphere and upper troposphere. <i>Journal of Geophysical Research</i> , 1993 , 98, 8751-8773		206
247	Observations of denitrification and dehydration in the winter polar stratospheres. <i>Nature</i> , 1990 , 344, 321-324	50.4	203
246	Evaluation of a catalytic reduction technique for the measurement of total reactive odd-nitrogen NO _y in the atmosphere. <i>Journal of Atmospheric Chemistry</i> , 1985 , 3, 435-468	3.2	200
245	Evaluation of source gas lifetimes from stratospheric observations. <i>Journal of Geophysical Research</i> , 1997 , 102, 25543-25564		190
244	Dehydration in the lower Antarctic stratosphere during late winter and early spring, 1987. <i>Journal of Geophysical Research</i> , 1989 , 94, 11317		179
243	The photochemistry of acetone in the upper troposphere: A source of odd-hydrogen radicals. <i>Geophysical Research Letters</i> , 1997 , 24, 3177-3180	4.9	174
242	A ground-based intercomparison of NO, NO _x , and NO _y measurement techniques. <i>Journal of Geophysical Research</i> , 1987 , 92, 14710		165
241	Modelled radiative forcing of the direct aerosol effect with multi-observation evaluation. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 1365-1392	6.8	161
240	The contribution of global aviation to anthropogenic climate forcing for 2000 to 2018. <i>Atmospheric Environment</i> , 2021 , 244, 117834	5.3	160
239	Global-scale black carbon profiles observed in the remote atmosphere and compared to models. <i>Geophysical Research Letters</i> , 2010 , 37, n/a-n/a	4.9	159
238	An important contribution to springtime Arctic aerosol from biomass burning in Russia. <i>Geophysical Research Letters</i> , 2010 , 37, n/a-n/a	4.9	155
237	Emission Measurements of the Concorde Supersonic Aircraft in the Lower Stratosphere. <i>Science</i> , 1995 , 270, 70-74	33.3	151
236	Quantifying Transport Between the Tropical and Mid-Latitude Lower Stratosphere. <i>Science</i> , 1996 , 272, 1763-8	33.3	148
235	Study of Inlet Materials for Sampling Atmospheric Nitric Acid. <i>Environmental Science & Technology</i> , 1999 , 33, 1133-1136	10.3	147
234	Observed OH and HO ₂ in the upper troposphere suggest a major source from convective injection of peroxides. <i>Geophysical Research Letters</i> , 1997 , 24, 3181-3184	4.9	143

233	Airborne gas chromatograph for in situ measurements of long-lived species in the upper troposphere and lower stratosphere. <i>Geophysical Research Letters</i> , 1996 , 23, 347-350	4.9	142
232	Organic aerosol formation downwind from the Deepwater Horizon oil spill. <i>Science</i> , 2011 , 331, 1295-9	33.3	138
231	The Detection Efficiency of the Single Particle Soot Photometer. <i>Aerosol Science and Technology</i> , 2010 , 44, 612-628	3.4	136
230	Mixing of polar vortex air into middle latitudes as revealed by tracer-tracer scatterplots. <i>Journal of Geophysical Research</i> , 1997 , 102, 13119-13134		125
229	Mathematical treatment of the wall loss of a trace species in denuder and catalytic converter tubes. <i>Analytical Chemistry</i> , 1987 , 59, 2753-2759	7.8	125
228	Conversion of nitrogen dioxide, nitric acid, and n-propyl nitrate to nitric oxide by a gold-catalyzed reduction with carbon monoxide. <i>Analytical Chemistry</i> , 1983 , 55, 1980-1986	7.8	125
227	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
226	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
225	An estimate of the flux of stratospheric reactive nitrogen and ozone into the troposphere. <i>Journal of Geophysical Research</i> , 1994 , 99, 5325		115
224	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
223	Collisional relaxation of vibrationally excited O ₂ ⁺ ions. <i>Journal of Chemical Physics</i> , 1983 , 79, 4201-4213	3.9	114
222	A diagnostic for denitrification in the winter polar stratospheres. <i>Nature</i> , 1990 , 345, 698-702	50.4	113
221	Global-scale seasonally resolved black carbon vertical profiles over the Pacific. <i>Geophysical Research Letters</i> , 2013 , 40, 5542-5547	4.9	108
220	Transport into the northern hemisphere lowermost stratosphere revealed by in situ tracer measurements. <i>Journal of Geophysical Research</i> , 1999 , 104, 26565-26580		106
219	Measurements of nitric oxide and total reactive nitrogen in the Antarctic stratosphere: Observations and chemical implications. <i>Journal of Geophysical Research</i> , 1989 , 94, 16665		105
218	Systematic variations in the concentration of NO _x (NO Plus NO ₂) at Niwot Ridge, Colorado. <i>Journal of Geophysical Research</i> , 1990 , 95, 1817		102
217	Intercomparison of NO ₂ measurement techniques. <i>Journal of Geophysical Research</i> , 1990 , 95, 3579		102
216	Climate change. Preserving Montreal Protocol climate benefits by limiting HFCs. <i>Science</i> , 2012 , 335, 922-3	33.3	98

215	Evidence that nitric acid increases relative humidity in low-temperature cirrus clouds. <i>Science</i> , 2004 , 303, 516-20	33.3	97
214	Relationship between peroxyacetyl nitrate and nitrogen oxides in the clean troposphere. <i>Nature</i> , 1985 , 318, 347-349	50.4	97
213	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
212	Black carbon aerosol size in snow. <i>Scientific Reports</i> , 2013 , 3, 1356	4.9	91
211	Atmospheric emissions from the Deepwater Horizon spill constrain air-water partitioning, hydrocarbon fate, and leak rate. <i>Geophysical Research Letters</i> , 2011 , 38, n/a-n/a	4.9	91
210	Comparison of MkIV balloon and ER-2 aircraft measurements of atmospheric trace gases. <i>Journal of Geophysical Research</i> , 1999 , 104, 26779-26790		91
209	Polar stratospheric cloud processed air and potential vorticity in the northern hemisphere lower stratosphere at mid-latitudes during winter. <i>Journal of Geophysical Research</i> , 1992 , 97, 7883		91
208	Global distribution of contrail radiative forcing. <i>Geophysical Research Letters</i> , 1999 , 26, 1853-1856	4.9	90
207	The potential for ozone depletion in the arctic polar stratosphere. <i>Science</i> , 1991 , 252, 1260-6	33.3	90
206	Measurements of the NO _x -O ₃ photostationary state at Niwot Ridge, Colorado. <i>Journal of Geophysical Research</i> , 1986 , 91, 5361		89
205	Photochemical partitioning of the reactive nitrogen and chlorine reservoirs in the high-latitude stratosphere. <i>Journal of Geophysical Research</i> , 1992 , 97, 7905		84
204	Assessing Single Particle Soot Photometer and Integrating Sphere/Integrating Sandwich Spectrophotometer measurement techniques for quantifying black carbon concentration in snow. <i>Atmospheric Measurement Techniques</i> , 2012 , 5, 2581-2592	4	80
203	Validation of the Aura Microwave Limb Sounder HNO ₃ measurements. <i>Journal of Geophysical Research</i> , 2007 , 112,		79
202	Rate constants for the reactions of metastable O ⁺ ions with N ₂ and O ₂ at collision energies 0.04 to 0.2 eV and the mobilities of these ions at 300 K. <i>Journal of Chemical Physics</i> , 1980 , 73, 194-205	3.9	79
201	Future atmospheric abundances and climate forcings from scenarios of global and regional hydrofluorocarbon (HFC) emissions. <i>Atmospheric Environment</i> , 2015 , 123, 200-209	5.3	75
200	Lagrangian photochemical modeling studies of the 1987 Antarctic spring vortex: 1. Comparison with AAOE observations. <i>Journal of Geophysical Research</i> , 1989 , 94, 11529		73
199	Atmosphere. Challenges of a lowered U.S. ozone standard. <i>Science</i> , 2015 , 348, 1096-7	33.3	71
198	High-latitude ozone loss outside the Antarctic ozone hole. <i>Nature</i> , 1989 , 342, 233-237	50.4	70

197	High flux beam source of thermal rare-gas metastable atoms. <i>Journal of Physics E: Scientific Instruments</i> , 1980 , 13, 381-383		70
196	Reaction rate constants for $O^+(H_2O)_n$ ions $n = 0$ to 4, with O_3 , NO , SO_2 , and CO_2 . <i>Journal of Chemical Physics</i> , 1982 , 76, 1799-1805	3.9	70
195	Bulk properties of isentropic mixing into the tropics in the lower stratosphere. <i>Journal of Geophysical Research</i> , 1996 , 101, 9433-9439		69
194	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
193	Airborne observations of regional variation in fluorescent aerosol across the United States. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 1153-1170	4.4	68
192	The AquaVIT-1 intercomparison of atmospheric water vapor measurement techniques. <i>Atmospheric Measurement Techniques</i> , 2014 , 7, 3177-3213	4	68
191	In situ observations in aircraft exhaust plumes in the lower stratosphere at midlatitudes. <i>Journal of Geophysical Research</i> , 1995 , 100, 3065		66
190	The seasonal evolution of reactive chlorine in the northern hemisphere stratosphere. <i>Science</i> , 1993 , 261, 1134-6	33.3	66
189	A vortex-scale simulation of the growth and sedimentation of large nitric acid hydrate particles. <i>Journal of Geophysical Research</i> , 2002 , 107, SOL 43-1		64
188	Reactions of Si^+ with H_2O and O_2 and SiO^+ with H_2 and D_2 . <i>Journal of Chemical Physics</i> , 1981 , 75, 669-674	3.9	64
187	Recent trends in global emissions of hydrochlorofluorocarbons and hydrofluorocarbons: reflecting on the 2007 adjustments to the Montreal Protocol. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 4439-49	2.8	62
186	Severe and extensive denitrification in the 1999-2000 Arctic winter stratosphere. <i>Geophysical Research Letters</i> , 2001 , 28, 2875-2878	4.9	62
185	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
184	The Arctic polar stratospheric cloud aerosol: Aircraft measurements of reactive nitrogen, total water, and particles. <i>Journal of Geophysical Research</i> , 1992 , 97, 7925		62
183	Aircraft observations of enhancement and depletion of black carbon mass in the springtime Arctic. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 9667-9680	6.8	60
182	THE NASA AIRBORNE TROPICAL TROPOPAUSE EXPERIMENT: High-Altitude Aircraft Measurements in the Tropical Western Pacific. <i>Bulletin of the American Meteorological Society</i> , 2017 , 98, 129-143	6.1	59
181	Three-dimensional simulations of long-lived tracers using winds from MACCM2. <i>Journal of Geophysical Research</i> , 1997 , 102, 21493-21513		59
180	Performance of an aircraft instrument for the measurement of NO_y . <i>Journal of Geophysical Research</i> , 1997 , 102, 28663-28671		59

179	UV absorption spectrum of the ClO dimer (Cl ₂ O ₂) between 200 and 420 nm. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 13711-26	2.8	55
178	Experimental and theoretical study of the atmospheric chemistry and global warming potential of SO ₂ F ₂ . <i>Journal of Physical Chemistry A</i> , 2008 , 112, 12657-66	2.8	55
177	Quantifying stratospheric ozone in the upper troposphere with in situ measurements of HCl. <i>Science</i> , 2004 , 304, 261-5	33.3	55
176	Descent and mixing in the 1999-2000 northern polar vortex inferred from in situ tracer measurements. <i>Journal of Geophysical Research</i> , 2002 , 107, SOL 28-1		55
175	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
174	Measurements of total reactive nitrogen during the Airborne Arctic Stratospheric Expedition. <i>Geophysical Research Letters</i> , 1990 , 17, 485-488	4.9	55
173	Extinction and optical depth of contrails. <i>Geophysical Research Letters</i> , 2011 , 38, n/a-n/a	4.9	54
172	Empirical correlations between black carbon aerosol and carbon monoxide in the lower and middle troposphere. <i>Geophysical Research Letters</i> , 2008 , 35,	4.9	54
171	Enhancement of charge-transfer reaction rate constants by vibrational excitation at kinetic energies below 1 eV. <i>Journal of Chemical Physics</i> , 1983 , 79, 265-272	3.9	54
170	Redistribution of reactive odd nitrogen in the lower Arctic stratosphere. <i>Geophysical Research Letters</i> , 1990 , 17, 453-456	4.9	53
169	A chemical definition of the boundary of the Antarctic ozone hole. <i>Journal of Geophysical Research</i> , 1989 , 94, 11437		51
168	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
167	Instrumentation and Measurement Strategy for the NOAA SENEX Aircraft Campaign as Part of the Southeast Atmosphere Study 2013. <i>Atmospheric Measurement Techniques</i> , 2016 , 9, 3063-3093	4	50
166	Evaluating the role of NAT, NAD, and liquid H ₂ SO ₄ /H ₂ O/HNO ₃ solutions in Antarctic polar stratospheric cloud aerosol: Observations and implications. <i>Journal of Geophysical Research</i> , 1997 , 102, 13255-13282		49
165	Black carbon aerosol characterization in a remote area of Qinghai-Tibetan Plateau, western China. <i>Science of the Total Environment</i> , 2014 , 479-480, 151-8	10.2	48
164	Subsidence, mixing, and denitrification of Arctic polar vortex air measured during POLARIS. <i>Journal of Geophysical Research</i> , 1999 , 104, 26611-26623		48
163	Calculations of ozone destruction during the 1988/89 Arctic winter. <i>Geophysical Research Letters</i> , 1990 , 17, 553-556	4.9	48
162	Measurement of nitrogen oxide fluxes from soils: Intercomparison of enclosure and gradient measurement techniques. <i>Journal of Geophysical Research</i> , 1987 , 92, 2165		48

161	The role of ion-molecule reactions in the conversion of N ₂ O ₅ to HNO ₃ in the stratosphere. <i>Planetary and Space Science</i> , 1983 , 31, 185-191	2	48
160	In situ measurements of HNO ₃ , NO _y , NO, and O ₃ in the lower stratosphere and upper troposphere. <i>Atmospheric Environment</i> , 2001 , 35, 5789-5797	5-3	46
159	An analysis of large HNO ₃ -containing particles sampled in the Arctic stratosphere during the winter of 1999/2000. <i>Journal of Geophysical Research</i> , 2002 , 107, SOL 41-1		46
158	Airborne measurements of total reactive odd nitrogen (NO _y). <i>Journal of Geophysical Research</i> , 1992 , 97, 9833-9850		45
157	On the chemistry of H ₂ O, H ₂ and meteoritic ions in the mesosphere and lower thermosphere. <i>Planetary and Space Science</i> , 1982 , 30, 1117-1126	2	45
156	Black carbon measurements in the Pearl River Delta region of China. <i>Journal of Geophysical Research</i> , 2011 , 116,		44
155	Nitric acid uptake on subtropical cirrus cloud particles. <i>Journal of Geophysical Research</i> , 2004 , 109, n/a-n/a		44
154	Aviation fuel tracer simulation: Model intercomparison and implications. <i>Geophysical Research Letters</i> , 1998 , 25, 3947-3950	4-9	44
153	New observations of the NO _y /N ₂ O correlation in the lower stratosphere. <i>Geophysical Research Letters</i> , 1993 , 20, 2531-2534	4-9	43
152	A light-weight, high-sensitivity particle spectrometer for PM _{2.5} aerosol measurements. <i>Aerosol Science and Technology</i> , 2016 , 50, 88-99	3-4	42
151	Evaluation of UT/LS hygrometer accuracy by intercomparison during the NASA MACPEX mission. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 1915-1935	4-4	42
150	Evaluation of the role of heterogeneous oxidation of alkenes in the detection of atmospheric acetaldehyde. <i>Atmospheric Environment</i> , 2004 , 38, 6017-6028	5-3	41
149	Partitioning of NO _y species in the summer Arctic stratosphere. <i>Geophysical Research Letters</i> , 1999 , 26, 1157-1160	4-9	41
148	In situ observations of NO _y , O ₃ , and the NO _y /O ₃ ratio in the lower stratosphere. <i>Geophysical Research Letters</i> , 1996 , 23, 1653-1656	4-9	40
147	Measurements of the NO _y -N ₂ O correlation in the lower stratosphere: Latitudinal and seasonal changes and model comparisons. <i>Journal of Geophysical Research</i> , 1997 , 102, 13193-13212		39
146	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
145	Bond energies of the molecules H ₂ O, SO ₂ , H ₂ O ₂ , and HCl to various atmospheric negative ions. <i>Journal of Chemical Physics</i> , 1984 , 81, 2805-2810	3-9	39
144	Competitive reaction and quenching of vibrationally excited O ⁺ ions with SO ₂ , CH ₄ , and H ₂ O. <i>Journal of Chemical Physics</i> , 1984 , 81, 2657-2666	3-9	39

143	The Measurement of NO _x in the Non-Urban Troposphere 1988 , 185-215		39
142	Observations of condensation nuclei in the Airborne Antarctic Ozone Experiment: Implications for new particle formation and polar stratospheric cloud formation. <i>Journal of Geophysical Research</i> , 1989 , 94, 16437		38
141	Nitrogen and chlorine species in the spring Antarctic stratosphere: Comparison of models With Airborne Antarctic Ozone Experiment observations. <i>Journal of Geophysical Research</i> , 1989 , 94, 16683		38
140	Flowing afterflow studies of gas phase magnesium ion chemistry. <i>Journal of Chemical Physics</i> , 1981 , 75, 3325-3328	3.9	38
139	A microphysics guide to cirrus [Part 2: Climatologies of clouds and humidity from observations. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 12569-12608	6.8	38
138	The mobilities of NO ₂ , NO ₃ , NO ⁺ , and Cl ⁻ in N ₂ : A measure of inelastic energy loss. <i>Journal of Chemical Physics</i> , 1983 , 78, 435-441	3.9	37
137	Silicon ion chemistry in the ionosphere. <i>Planetary and Space Science</i> , 1981 , 29, 307-312	2	37
136	Measurements of polar vortex air in the midlatitudes. <i>Journal of Geophysical Research</i> , 1996 , 101, 12879-12891		36
135	Stratospheric meteorological conditions in the arctic polar vortex, 1991 to 1992. <i>Science</i> , 1993 , 261, 1143-1145	3.5	36
134	Recent increases in global HFC-23 emissions. <i>Geophysical Research Letters</i> , 2010 , 37, n/a-n/a	4.9	35
133	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
132	Technique and theoretical approach for quantifying the hygroscopicity of black-carbon-containing aerosol using a single particle soot photometer. <i>Journal of Aerosol Science</i> , 2015 , 81, 110-126	4.3	34
131	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
130	Interpretation of NO _x /NO _y observations from AASE-II using a model of chemistry along trajectories. <i>Geophysical Research Letters</i> , 1993 , 20, 2507-2510	4.9	34
129	Background ozone and anthropogenic ozone enhancement at Niwot ridge, Colorado. <i>Journal of Atmospheric Chemistry</i> , 1986 , 4, 63-80	3.2	34
128	Validation of Aura Microwave Limb Sounder HCl measurements. <i>Journal of Geophysical Research</i> , 2008 , 113,		33
127	Using chemical ionization mass spectrometry for detection of HNO ₃ , HCl, and ClONO ₂ in the atmosphere. <i>International Journal of Mass Spectrometry</i> , 2005 , 243, 63-70	1.9	33
126	Stratospheric NO and NO ₂ abundances from ATMOS Solar-Occultation Measurements. <i>Geophysical Research Letters</i> , 1996 , 23, 2373-2376	4.9	33

125	Are models of catalytic removal of O ₃ by HO _x accurate? Constraints from in situ measurements of the OH to HO ₂ ratio. <i>Geophysical Research Letters</i> , 1994 , 21, 2539-2542	4.9	33
124	Studies with nitryl hypochlorite: thermal dissociation rate and catalytic conversion to nitric oxide using an NO/O ₃ chemiluminescence detector. <i>The Journal of Physical Chemistry</i> , 1990 , 94, 644-652		33
123	Collisional vibrational quenching of O ₂ ⁺ (v) and other molecular ions in planetary atmospheres. <i>Planetary and Space Science</i> , 1983 , 31, 483-487	2	33
122	Rate constants for the reactions of H ₂ O ⁺ with NO ₂ , O ₂ , NO, C ₂ H ₄ , CO, CH ₄ , and H ₂ measured at relative kinetic energies 0.04–0.1 eV. <i>Chemical Physics Letters</i> , 1980 , 72, 67-70	2.5	33
121	In Situ Measurements of Long-Lived Trace Gases in the Lower Stratosphere by Gas Chromatography. <i>Journal of Atmospheric and Oceanic Technology</i> , 2001 , 18, 1195-1204	2	32
120	Modeling the effect of denitrification on Arctic ozone depletion during winter 1999/2000. <i>Journal of Geophysical Research</i> , 2002 , 107, SOL 65-1-SOL 65-18		32
119	ATMOSPHERIC SCIENCE:Enhanced: Summer in the Stratosphere. <i>Science</i> , 1999 , 285, 208-210	33.3	32
118	Mobilities of several mass-identified positive and negative ions in air. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1987 , 81, 45-65		32
117	Chapter 2 : Our Changing Climate. Impacts, Risks, and Adaptation in the United States: The Fourth National Climate Assessment, Volume II 2018 ,		32
116	Measurements of trace gases in the tropical tropopause layer. <i>Atmospheric Environment</i> , 2007 , 41, 7253-7361	33.61	31
115	A fast-response chemical ionization mass spectrometer for in situ measurements of HNO ₃ in the upper troposphere and lower stratosphere. <i>Review of Scientific Instruments</i> , 2000 , 71, 3886	1.7	31
114	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
113	Preface [to special section on Photochemistry of Ozone Loss in the Arctic Region in Summer (POLARIS)]. <i>Journal of Geophysical Research</i> , 1999 , 104, 26481-26495		31
112	The evolution of ClO and NO along air parcel trajectories. <i>Geophysical Research Letters</i> , 1993 , 20, 2511-2514	2.14	31
111	New photolysis system for NO ₂ measurements in the lower stratosphere. <i>Journal of Geophysical Research</i> , 1994 , 99, 20673		31
110	The role of sulfur emission in volatile particle formation in jet aircraft exhaust plumes. <i>Geophysical Research Letters</i> , 1997 , 24, 389-392	4.9	30
109	In-situ observations of an Antarctic polar stratospheric cloud: Similarities with Arctic observations. <i>Geophysical Research Letters</i> , 1996 , 23, 1913-1916	4.9	30
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