

Thomas Peter

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320
papers

15,914
citations

70
h-index

112
g-index

335
ext. papers

17,890
ext. citations

7.1
avg, IF

6.39
L-index

#	Paper	IF	Citations
320	Water activity as the determinant for homogeneous ice nucleation in aqueous solutions. <i>Nature</i> , 2000 , 406, 611-4	50.4	978
319	Calculation of Relative Permeability from Displacement Experiments. <i>Transactions of the AIME</i> , 1959 , 216, 370-372		313
318	Stratospheric aerosol growth and HNO ₃ gas phase depletion from coupled HNO ₃ and water uptake by liquid particles. <i>Geophysical Research Letters</i> , 1994 , 21, 2479-2482	4.9	289
317	Mixing of the Organic Aerosol Fractions: Liquids as the Thermodynamically Stable Phases. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 2216-2224	2.8	266
316	The detection of large HNO ₃ -containing particles in the winter Arctic stratosphere. <i>Science</i> , 2001 , 291, 1026-31	33.3	251
315	Microphysics and heterogeneous chemistry of polar stratospheric clouds. <i>Annual Review of Physical Chemistry</i> , 1997 , 48, 785-822	15.7	245
314	New and extended parameterization of the thermodynamic model AIOMFAC: calculation of activity coefficients for organic-inorganic mixtures containing carboxyl, hydroxyl, carbonyl, ether, ester, alkenyl, alkyl, and aromatic functional groups. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 9155-9206	6.8	240
313	A thermodynamic model of mixed organic-inorganic aerosols to predict activity coefficients. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 4559-4593	6.8	238
312	Efficiency of immersion mode ice nucleation on surrogates of mineral dust. <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 5081-5091	6.8	237
311	An analytic expression for the composition of aqueous HNO ₃ -H ₂ SO ₄ stratospheric aerosols including gas phase removal of HNO ₃ . <i>Geophysical Research Letters</i> , 1995 , 22, 1877-1880	4.9	231
310	Ultra-slow water diffusion in aqueous sucrose glasses. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 3514-26	3.6	206
309	Stratospheric water vapor predicted from the Lagrangian temperature history of air entering the stratosphere in the tropics. <i>Journal of Geophysical Research</i> , 2005 , 110,		192
308	Arctic ozone loss due to denitrification. <i>Science</i> , 1999 , 283, 2064-9	33.3	178
307	Energy loss of heavy ions in dense plasma. I. Linear and nonlinear Vlasov theory for the stopping power. <i>Physical Review A</i> , 1991 , 43, 1998-2014	2.6	177
306	Hygroscopic growth and water uptake kinetics of two-phase aerosol particles consisting of ammonium sulfate, adipic and humic acid mixtures. <i>Journal of Aerosol Science</i> , 2007 , 38, 157-171	4.3	172
305	Increased stratospheric ozone depletion due to mountain-induced atmospheric waves. <i>Nature</i> , 1998 , 391, 675-678	50.4	170
304	The impact of geoengineering aerosols on stratospheric temperature and ozone. <i>Environmental Research Letters</i> , 2009 , 4, 045108	6.2	169

303	The uptake of acidic gases on ice. <i>Chemical Reviews</i> , 2006 , 106, 1375-444	68.1	168
302	Tropical troposphere-to-stratosphere transport inferred from trajectory calculations. <i>Journal of Geophysical Research</i> , 2004 , 109, n/a-n/a		162
301	Heterogeneous Ice Nucleation Rate Coefficient of Water Droplets Coated by a Nonadecanol Monolayer. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 2149-2155	3.8	160
300	Unprecedented evidence for deep convection hydrating the tropical stratosphere. <i>Geophysical Research Letters</i> , 2008 , 35,	4.9	154
299	Computation of liquid-liquid equilibria and phase stabilities: implications for RH-dependent gas/particle partitioning of organic-inorganic aerosols. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 7795-7820	6.8	152
298	The Initial Composition of Jet Condensation Trails. <i>Journals of the Atmospheric Sciences</i> , 1996 , 53, 3066-3083		145
297	Evidence for a continuous decline in lower stratospheric ozone offsetting ozone layer recovery. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 1379-1394	6.8	143
296	Freezing of HNO ₃ /H ₂ SO ₄ /H ₂ O Solutions at Stratospheric Temperatures: Nucleation Statistics and Experiments. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 1117-1133	2.8	139
295	Small-scale cloud processes and climate. <i>Nature</i> , 2008 , 451, 299-300	50.4	137
294	Liquid-liquid phase separation in mixed organic/inorganic aerosol particles. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 10966-78	2.8	136
293	Nitric Acid Trihydrate (NAT) formation at low NAT supersaturation in Polar Stratospheric Clouds (PSCs). <i>Atmospheric Chemistry and Physics</i> , 2005 , 5, 1371-1380	6.8	134
292	Atmosphere. When dry air is too humid. <i>Science</i> , 2006 , 314, 1399-402	33.3	132
291	Particle microphysics and chemistry in remotely observed mountain polar stratospheric clouds. <i>Journal of Geophysical Research</i> , 1998 , 103, 5785-5796		132
290	Size-dependent stratospheric droplet composition in Lee wave temperature fluctuations and their potential role in PSC freezing. <i>Geophysical Research Letters</i> , 1995 , 22, 3031-3034	4.9	132
289	Liquid-liquid phase separation and morphology of internally mixed dicarboxylic acids/ammonium sulfate/water particles. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 2691-2712	6.8	131
288	Do stratospheric aerosol droplets freeze above the ice frost point?. <i>Geophysical Research Letters</i> , 1995 , 22, 917-920	4.9	131
287	A combined particle trap/HTDMA hygroscopicity study of mixed inorganic/organic aerosol particles. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 5589-5601	6.8	126
286	Estimating the frequency of extremely energetic solar events, based on solar, stellar, lunar, and terrestrial records. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		124

285	Modeling the composition of liquid stratospheric aerosols. <i>Reviews of Geophysics</i> , 1997 , 35, 125-154	23.1	123
284	Heterogeneous ice nucleation in aqueous solutions: the role of water activity. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 3965-75	2.8	122
283	Oxalic acid as a heterogeneous ice nucleus in the upper troposphere and its indirect aerosol effect. <i>Atmospheric Chemistry and Physics</i> , 2006 , 6, 3115-3129	6.8	121
282	The impact of cirrus clouds on tropical troposphere-to-stratosphere transport. <i>Atmospheric Chemistry and Physics</i> , 2006 , 6, 2539-2547	6.8	114
281	On the potential importance of the gas phase reaction $\text{CH}_3\text{O}_2 + \text{ClO} \rightarrow \text{ClOO} + \text{CH}_3\text{O}$ and the heterogeneous reaction $\text{HOCl} + \text{HCl} \rightarrow \text{H}_2\text{O} + \text{Cl}_2$ in ozone hole chemistry. <i>Geophysical Research Letters</i> , 1992 , 19, 1113-1116	4.9	112
280	Influence of the Precipitating Energetic Particles on Atmospheric Chemistry and Climate. <i>Surveys in Geophysics</i> , 2012 , 33, 483-501	7.6	110
279	The 1997 Arctic Ozone depletion quantified from three-dimensional model simulations. <i>Geophysical Research Letters</i> , 1998 , 25, 2425-2428	4.9	107
278	The Origin of High Ice Crystal Number Densities in Cirrus Clouds. <i>Journals of the Atmospheric Sciences</i> , 2005 , 62, 2568-2579	2.1	104
277	vapour pressures of $\text{H}_2\text{SO}_4/\text{HNO}_3/\text{HCl}/\text{HBr}/\text{H}_2\text{O}$ solutions to low stratospheric temperatures. <i>Geophysical Research Letters</i> , 1995 , 22, 247-250	4.9	102
276	Energy loss of heavy ions in dense plasma. II. Nonequilibrium charge states and stopping powers. <i>Physical Review A</i> , 1991 , 43, 2015-2030	2.6	98
275	A global space-based stratospheric aerosol climatology: 1979-2016. <i>Earth System Science Data</i> , 2018 , 10, 469-492	10.5	98
274	Evidence that nitric acid increases relative humidity in low-temperature cirrus clouds. <i>Science</i> , 2004 , 303, 516-20	33.3	97
273	Stratosphere-troposphere coupling and annular mode variability in chemistry-climate models. <i>Journal of Geophysical Research</i> , 2010 , 115,		96
272	The SOCOL version 3.0 chemistry-climate model: description, evaluation, and implications from an advanced transport algorithm. <i>Geoscientific Model Development</i> , 2013 , 6, 1407-1427	6.3	95
271	Efficient formation of stratospheric aerosol for climate engineering by emission of condensable vapor from aircraft. <i>Geophysical Research Letters</i> , 2010 , 37, n/a-n/a	4.9	93
270	Absorption Spectra and Optical Constants of Binary and Ternary Solutions of H_2SO_4 , HNO_3 , and H_2O in the Mid Infrared at Atmospheric Temperatures. <i>Journal of Physical Chemistry A</i> , 2000 , 104, 783-793	2.8	93
269	Technical Note: Chemistry-climate model SOCOL: version 2.0 with improved transport and chemistry/microphysics schemes. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 5957-5974	6.8	92
268	Chemical and dynamical response to the 11-year variability of the solar irradiance simulated with a chemistry-climate model. <i>Geophysical Research Letters</i> , 2004 , 31, n/a-n/a	4.9	89

267	SAGE II measurements of stratospheric aerosol properties at non-volcanic levels. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 983-995	6.8	85
266	SCOUT-O3/ACTIVE: High-altitude Aircraft Measurements around Deep Tropical Convection. <i>Bulletin of the American Meteorological Society</i> , 2008 , 89, 647-662	6.1	84
265	Mean radiative energy balance and vertical mass fluxes in the equatorial upper troposphere and lower stratosphere. <i>Geophysical Research Letters</i> , 2005 , 32,	4.9	83
264	Viscous organic aerosol particles in the upper troposphere: diffusivity-controlled water uptake and ice nucleation?. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 13599-13613	6.8	81
263	Chlorine chemistry and the potential for ozone depletion in the Arctic stratosphere in the winter of 1991/92. <i>Geophysical Research Letters</i> , 1994 , 21, 1427-1430	4.9	80
262	Ozone uptake on glassy, semi-solid and liquid organic matter and the role of reactive oxygen intermediates in atmospheric aerosol chemistry. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 12662-74 ^{3.6}	7.8	78
261	Chemistry-climate model SOCOL: a validation of the present-day climatology. <i>Atmospheric Chemistry and Physics</i> , 2005 , 5, 1557-1576	6.8	78
260	Cirrus cloud formation and ice supersaturated regions in a global climate model. <i>Environmental Research Letters</i> , 2008 , 3, 045022	6.2	77
259	Ice nucleation efficiency of clay minerals in the immersion mode. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 5859-5878	6.8	76
258	Measurements of NO, NO ₂ , N ₂ O, and O ₃ during SPURT: implications for transport and chemistry in the lowermost stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2006 , 6, 1331-1350	6.8	76
257	Ground-based and airborne in-situ measurements of the Eyjafjallajökull volcanic aerosol plume in Switzerland in spring 2010. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 10011-10030	6.8	75
256	Morphological Investigations of Single Levitated H ₂ SO ₄ /NH ₃ /H ₂ O Aerosol Particles during Deliquescence/Efflorescence Experiments. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 2700-2709	2.8	75
255	Liquid-liquid phase separation in aerosol particles: Dependence on O:C, organic functionalities, and compositional complexity. <i>Geophysical Research Letters</i> , 2012 , 39, n/a-n/a	4.9	74
254	Evidence for the effectiveness of the Montreal Protocol to protect the ozone layer. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 12161-12171	6.8	73
253	Highly resolved observations of trace gases in the lowermost stratosphere and upper troposphere from the Spurt project: an overview. <i>Atmospheric Chemistry and Physics</i> , 2006 , 6, 283-301	6.8	73
252	Water activity in polyol/water systems: new UNIFAC parameterization. <i>Atmospheric Chemistry and Physics</i> , 2005 , 5, 1545-1555	6.8	72
251	The potential influence of Asian and African mineral dust on ice, mixed-phase and liquid water clouds. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 8649-8667	6.8	71
250	Morphologies of mixed organic/inorganic/aqueous aerosol droplets. <i>Faraday Discussions</i> , 2013 , 165, 289-316	3.6	69

249	Reconciliation of essential process parameters for an enhanced predictability of Arctic stratospheric ozone loss and its climate interactions (RECONCILE): activities and results. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 9233-9268	6.8	69
248	The AquaVIT-1 intercomparison of atmospheric water vapor measurement techniques. <i>Atmospheric Measurement Techniques</i> , 2014 , 7, 3177-3213	4	68
247	Ultrathin Tropical Tropopause Clouds (UTTCS): I. Cloud morphology and occurrence. <i>Atmospheric Chemistry and Physics</i> , 2003 , 3, 1083-1091	6.8	68
246	Ice nucleation properties of volcanic ash from Eyjafjallajökull. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 9911-9926	6.8	66
245	Internal mixing of the organic aerosol by gas phase diffusion of semivolatile organic compounds. <i>Atmospheric Chemistry and Physics</i> , 2004 , 4, 2593-2599	6.8	65
244	Homogeneous nucleation of NAD and NAT in liquid stratospheric aerosols: insufficient to explain denitrification. <i>Atmospheric Chemistry and Physics</i> , 2002 , 2, 207-214	6.8	64
243	Increase in the PSC-formation probability caused by high-flying aircraft. <i>Geophysical Research Letters</i> , 1991 , 18, 1465-1468	4.9	64
242	Widespread solid particle formation by mountain waves in the Arctic stratosphere. <i>Journal of Geophysical Research</i> , 1999 , 104, 1827-1836		63
241	Drivers of the tropospheric ozone budget throughout the 21st century under the medium-high climate scenario RCP 6.0. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 5887-5902	6.8	61
240	Contrail formation: Homogeneous nucleation of H ₂ SO ₄ /H ₂ O droplets. <i>Geophysical Research Letters</i> , 1995 , 22, 1501-1504	4.9	61
239	Global atmospheric sulfur budget under volcanically quiescent conditions: Aerosol-chemistry-climate model predictions and validation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 256-276	4.4	60
238	The lifetime of leewave-induced ice particles in the Arctic stratosphere: II. Stabilization due to NAT-coating. <i>Geophysical Research Letters</i> , 1994 , 21, 1331-1334	4.9	60
237	Modeling the stratospheric warming following the Mt. Pinatubo eruption: uncertainties in aerosol extinctions. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 11221-11234	6.8	59
236	Heterogeneous formation of polar stratospheric clouds [Part 1: Nucleation of nitric acid trihydrate (NAT)]. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 9577-9595	6.8	58
235	Tracing troposphere-to-stratosphere transport above a mid-latitude deep convective system. <i>Atmospheric Chemistry and Physics</i> , 2004 , 4, 741-756	6.8	58
234	Densities and refractive indices of H ₂ SO ₄ /HNO ₃ /H ₂ O solutions to stratospheric temperatures. <i>Geophysical Research Letters</i> , 1996 , 23, 3707-3710	4.9	58
233	Impact of aircraft emissions on tropospheric and stratospheric ozone. Part I. <i>Atmospheric Environment</i> , 1998 , 32, 3173-3184	5.3	57
232	Efflorescence of ammonium sulfate and coated ammonium sulfate particles: evidence for surface nucleation. <i>Journal of Physical Chemistry A</i> , 2010 , 114, 9486-95	2.8	56

231	Volcanic forcing for climate modeling: a new microphysics-based data set covering years 1600–present. <i>Climate of the Past</i> , 2014 , 10, 359-375	3.9	53
230	Statistical modeling of total ozone: Selection of appropriate explanatory variables. <i>Journal of Geophysical Research</i> , 2007 , 112,		53
229	In situ observations of new particle formation in the tropical upper troposphere: the role of clouds and the nucleation mechanism. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 9983-10010	6.8	52
228	A novel model to predict the physical state of atmospheric $\text{H}_2\text{SO}_4/\text{NH}_3/\text{H}_2\text{O}_2$ aerosol particles. <i>Atmospheric Chemistry and Physics</i> , 2003 , 3, 909-924		
227	Aircraft lidar observations of an enhanced type Ia polar stratospheric clouds during APE-POLECAT. <i>Journal of Geophysical Research</i> , 1999 , 104, 23961-23969		52
226	Freezing of polar stratospheric clouds in orographically induced strong warming events. <i>Geophysical Research Letters</i> , 1997 , 24, 2303-2306	4.9	51
225	Measurements of thermodynamic and optical properties of selected aqueous organic and organic-inorganic mixtures of atmospheric relevance. <i>Journal of Physical Chemistry A</i> , 2012 , 116, 9954-68 ^{2.8}		50
224	Influence of Galactic Cosmic Rays on atmospheric composition and dynamics. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 4547-4556	6.8	50
223	Nitric acid trihydrate nucleation and denitrification in the Arctic stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 1055-1073	6.8	48
222	Spatial variation of aerosol optical properties around the high-alpine site Jungfrauoch (3580 m a.s.l.). <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 7231-7249	6.8	48
221	NAT-rock formation by mother clouds: a microphysical model study. <i>Atmospheric Chemistry and Physics</i> , 2002 , 2, 93-98	6.8	48
220	Nonequilibrium coexistence of solid and liquid particles in Arctic stratospheric clouds. <i>Journal of Geophysical Research</i> , 2001 , 106, 22991-23007		48
219	Solubility of HOCl in water and aqueous H ₂ SO ₄ to stratospheric temperatures. <i>Journal of Atmospheric Chemistry</i> , 1995 , 21, 81-95	3.2	48
218	Particle backscatter and relative humidity measured across cirrus clouds and comparison with microphysical cirrus modelling. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 9135-9148	6.8	47
217	Ice nucleation activity of silicates and aluminosilicates in pure water and aqueous solutions (Part 1: The K-feldspar microcline. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 7057-7079	6.8	46
216	Thermodynamic stability and phase transitions of PSC particles. <i>Geophysical Research Letters</i> , 1997 , 24, 2199-2202	4.9	46
215	Detailed modeling of mountain wave PSCs. <i>Atmospheric Chemistry and Physics</i> , 2003 , 3, 697-712	6.8	46
214	Ice nucleation efficiency of natural dust samples in the immersion mode. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 11177-11206	6.8	45

213	Heterogeneous formation of polar stratospheric clouds [Part 2: Nucleation of ice on synoptic scales. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 10769-10785	6.8	45
212	The SCOUT-O3 Darwin Aircraft Campaign: rationale and meteorology. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 93-117	6.8	45
211	Balloon-borne measurements of temperature, water vapor, ozone and aerosol backscatter on the southern slopes of the Himalayas during StratoClim 2016/2017. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 15937-15957	6.8	45
210	Uncertainties in reactive uptake coefficients for solid stratospheric particles-1. Surface chemistry. <i>Geophysical Research Letters</i> , 1997 , 24, 1743-1746	4.9	44
209	Dehydration potential of ultrathin clouds at the tropical tropopause. <i>Geophysical Research Letters</i> , 2003 , 30,	4.9	44
208	Extreme NAT supersaturations in mountain wave ice PSCs: A clue to NAT formation. <i>Journal of Geophysical Research</i> , 2003 , 108,		44
207	The influence of Middle Range Energy Electrons on atmospheric chemistry and regional climate. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2016 , 149, 180-190	2	44
206	On the relationship between total ozone and atmospheric dynamics and chemistry at mid-latitudes [Part 2: The effects of the El Niño/Southern Oscillation, volcanic eruptions and contributions of atmospheric dynamics and chemistry to long-term total ozone changes. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 165-179	6.8	43
205	The unsuitability of meteoritic and other nuclei for polar stratospheric cloud freezing. <i>Geophysical Research Letters</i> , 1996 , 23, 1693-1696	4.9	43
204	Freezing of stratospheric aerosol droplets. <i>Geophysical Research Letters</i> , 1994 , 21, 1447-1450	4.9	43
203	A simple model for cloud radiative forcing. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 5751-5758	6.8	42
202	Model-guided Lagrangian observation and simulation of mountain polar stratospheric clouds. <i>Journal of Geophysical Research</i> , 1999 , 104, 23971-23981		42
201	Influence of dielectronic recombination on fast heavy-ion charge states in plasma. <i>Physical Review Letters</i> , 1986 , 57, 1859-1862	7.4	42
200	European emissions of halogenated greenhouse gases inferred from atmospheric measurements. <i>Environmental Science & Technology</i> , 2012 , 46, 217-25	10.3	40
199	The lifetime of leewave-induced ice particles in the Arctic stratosphere: I. Balloonborne observations. <i>Geophysical Research Letters</i> , 1994 , 21, 1327-1330	4.9	39
198	On the relationship between total ozone and atmospheric dynamics and chemistry at mid-latitudes [Part 1: Statistical models and spatial fingerprints of atmospheric dynamics and chemistry. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 147-164	6.8	38
197	Representation of tropical deep convection in atmospheric models [Part 2: Tracer transport. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 8103-8131	6.8	38
196	Temperature and slant path effects in Dobson and Brewer total ozone measurements. <i>Journal of Geophysical Research</i> , 2009 , 114,		38

195	Uncertainties in reactive uptake coefficients for solid stratospheric particles. Effect on ozone depletion. <i>Geophysical Research Letters</i> , 1997 , 24, 1747-1750	4.9	38
194	A composite study on the structure and formation of ozone miniholes and minihighs over central Europe. <i>Geophysical Research Letters</i> , 2005 , 32, n/a-n/a	4.9	38
193	Measurement of the Refractive Indices of H ₂ SO ₄ -HNO ₃ -H ₂ O Solutions to Stratospheric Temperatures. <i>Applied Optics</i> , 2000 , 39, 3691-703	1.7	38
192	Impact of solar versus volcanic activity variations on tropospheric temperatures and precipitation during the Dalton Minimum. <i>Climate of the Past</i> , 2014 , 10, 921-938	3.9	37
191	Uptake of SO ₂ by Polycrystalline Water Ice. <i>Journal of Colloid and Interface Science</i> , 2001 , 238, 147-159	9.3	36
190	Atmospheric impacts of the strongest known solar particle storm of 775 AD. <i>Scientific Reports</i> , 2017 , 7, 45257	4.9	35
189	Influence of tropospheric SO ₂ emissions on particle formation and the stratospheric humidity. <i>Geophysical Research Letters</i> , 2005 , 32, n/a-n/a	4.9	35
188	FTIR studies on lifetime prolongation of stratospheric ice particles due to NAT coating. <i>Geophysical Research Letters</i> , 1998 , 25, 3939-3942	4.9	35
187	Electrodynamic balance measurements of thermodynamic, kinetic, and optical aerosol properties inaccessible to bulk methods. <i>Atmospheric Measurement Techniques</i> , 2015 , 8, 2397-2408	4	34
186	Impact of a potential 21st century grand solar minimum on surface temperatures and stratospheric ozone. <i>Geophysical Research Letters</i> , 2013 , 40, 4420-4425	4.9	33
185	Simulation of the stratospheric ozone and temperature response to the solar irradiance variability during sun rotation cycle. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2006 , 68, 2203-2213	2	33
184	HCL solubility and liquid diffusion in aqueous sulfuric acid under stratospheric conditions. <i>Geophysical Research Letters</i> , 1994 , 21, 49-52	4.9	33
183	Arctic stratospheric dehydration [Part 1: Unprecedented observation of vertical redistribution of water. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 11503-11517	6.8	32
182	The simulation of the Antarctic ozone hole by chemistry-climate models. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 6363-6376	6.8	32
181	Activation of stratospheric chlorine by reactions in liquid sulphuric acid. <i>Geophysical Research Letters</i> , 1994 , 21, 1439-1442	4.9	32
180	Improved AIOMFAC model parameterisation of the temperature dependence of activity coefficients for aqueous organic mixtures. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 447-493	6.8	31
179	Anthropogenic forcing of the Northern Annular Mode in CCMVal-2 models. <i>Journal of Geophysical Research</i> , 2010 , 115,		31
178	Exceptional atmospheric circulation during the Dust Bowl. <i>Geophysical Research Letters</i> , 2009 , 36,	4.9	31

177	Climatological and radiative properties of midlatitude cirrus clouds derived by automatic evaluation of lidar measurements. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 7605-7621	6.8	30
176	Stratospheric ozone trends for 1985–2018: sensitivity to recent large variability. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 12731-12748	6.8	30
175	The APE-THESEO Tropical Campaign: An Overview. <i>Journal of Atmospheric Chemistry</i> , 2004 , 48, 1-33	3.2	30
174	Kinetics of HCl Uptake on Ice at 190 and 203 K: Implications for the Microphysics of the Uptake Process. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 6302-6318	2.8	30
173	HNO ₃ partitioning in cirrus clouds. <i>Geophysical Research Letters</i> , 1999 , 26, 2207-2210	4.9	30
172	Mesoscale Temperature Fluctuations Induced by a Spectrum of Gravity Waves: A Comparison of Parameterizations and Their Impact on Stratospheric Microphysics. <i>Journals of the Atmospheric Sciences</i> , 1999 , 56, 1913-1924	2.1	30
171	Revised historical solar irradiance forcing. <i>Astronomy and Astrophysics</i> , 2018 , 615, A85	5.1	29
170	Shikimic acid ozonolysis kinetics of the transition from liquid aqueous solution to highly viscous glass. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 31101-9	3.6	29
169	Vapor pressures of substituted polycarboxylic acids are much lower than previously reported. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 6647-6662	6.8	29
168	Supersaturations, microphysics and nitric acid partitioning in a cold cirrus cloud observed during CR-AVE 2006: an observation–modelling intercomparison study. <i>Environmental Research Letters</i> , 2008 , 3, 035003	6.2	29
167	Supercooling of single H ₂ SO ₄ /H ₂ O aerosols to 158 K: No evidence for the occurrence of the octahydrate. <i>Geophysical Research Letters</i> , 2000 , 27, 2097-2100	4.9	29
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