Gabriele P Stiller

List of Publications by Year
in descending order

191 papers	7,157 citations	66343 42 h-index	98798 67 g-index
285 all docs	285 docs citations	285 times ranked	3578 citing authors

#	Article	IF	Citations
1	MIPAS: an instrument for atmospheric and climate research. Atmospheric Chemistry and Physics, 2008, 8, 2151-2188.	4.9	596
2	The Atmospheric Trace Molecule Spectroscopy (ATMOS) Experiment: Deployment on the ATLAS space shuttle missions. Geophysical Research Letters, 1996, 23, 2333-2336.	4.0	192
3	Optimized forward model and retrieval scheme for MIPAS near-real-time data processing. Applied Optics, 2000, 39, 1323.	2.1	188
4	Observed temporal evolution of global mean age of stratospheric air for the 2002 to 2010 period. Atmospheric Chemistry and Physics, 2012, 12, 3311-3331.	4.9	181
5	Short- and medium-term atmospheric constituent effects of very large solar proton events. Atmospheric Chemistry and Physics, 2008, 8, 765-785.	4.9	156
6	Sensitivity of trace gas abundances retrievals from infrared limb emission spectra to simplifying approximations in radiative transfer modelling. Journal of Quantitative Spectroscopy and Radiative Transfer, 2002, 72, 249-280.	2.3	148
7	Composition changes after the "Halloween" solar proton event: the High Energy Particle Precipitation in the Atmosphere (HEPPA) model versus MIPAS data intercomparison study. Atmospheric Chemistry and Physics, 2011, 11, 9089-9139.	4.9	145
8	Observation of NOxenhancement and ozone depletion in the Northern and Southern Hemispheres after the October-November 2003 solar proton events. Journal of Geophysical Research, 2005, 110, .	3.3	132
9	Downward transport of upper atmospheric NOxinto the polar stratosphere and lower mesosphere during the Antarctic 2003 and Arctic 2002/2003 winters. Journal of Geophysical Research, 2005, 110, .	3.3	131
10	Processâ€evaluation of tropospheric humidity simulated by general circulation models using water vapor isotopologues: 1. Comparison between models and observations. Journal of Geophysical Research, 2012, 117, .	3.3	114
11	CO measurements from the ACE-FTS satellite instrument: data analysis and validation using ground-based, airborne and spaceborne observations. Atmospheric Chemistry and Physics, 2008, 8, 2569-2594.	4.9	107
12	Global distribution of mean age of stratospheric air from MIPAS SF₆ measurements. Atmospheric Chemistry and Physics, 2008, 8, 677-695.	4.9	105
13	Ammonium nitrate particles formed in upper troposphere from ground ammonia sources during Asian monsoons. Nature Geoscience, 2019, 12, 608-612.	12.9	95
14	An update on ozone profile trends for the period 2000 to 2016. Atmospheric Chemistry and Physics, 2017, 17, 10675-10690.	4.9	93
15	Arctic winter 2010/2011 at the brink of an ozone hole. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	88
16	Spectroscopic evidence for NAT, STS, and ice in MIPAS infrared limb emission measurements of polar stratospheric clouds. Atmospheric Chemistry and Physics, 2006, 6, 1201-1219.	4.9	82
17	Drift-corrected trends and periodic variations in MIPAS IMK/IAA ozone measurements. Atmospheric Chemistry and Physics, 2014, 14, 2571-2589.	4.9	81
18	Evidence for dynamical coupling from the lower atmosphere to the thermosphere during a major stratospheric warming. Geophysical Research Letters, 2010, 37, .	4.0	80

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19	Global peroxyacetyl nitrate (PAN) retrieval in the upper troposphere from limb emission spectra of the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). Atmospheric Chemistry and Physics, 2007, 7, 2775-2787.	4.9	77
20	Carbon monoxide distributions from the upper troposphere to the mesosphere inferred from 4.7 Î¼m non-local thermal equilibrium emissions measured by MIPAS on Envisat. Atmospheric Chemistry and Physics, 2009, 9, 2387-2411.	4.9	77
21	Processâ€evaluation of tropospheric humidity simulated by general circulation models using water vapor isotopic observations: 2. Using isotopic diagnostics to understand the mid and upper tropospheric moist bias in the tropics and subtropics. Journal of Geophysical Research, 2012, 117, .	3.3	77
22	Validation of ACE-FTS N₂O measurements. Atmospheric Chemistry and Physics, 2008, 8, 4759-4786.	4.9	76
23	Mesospheric and stratospheric NO_{<i>y</i>} produced by energetic particle precipitation during 2002â€“2012. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4429-4446.	3.3	75
24	Validation of MIPAS IMK/IAA temperature, water vapor, and ozone profiles with MOHAVE-2009 campaign measurements. Atmospheric Measurement Techniques, 2012, 5, 289-320.	3.1	74
25	Reassessment of MIPAS age of air trends and variability. Atmospheric Chemistry and Physics, 2015, 15, 13161-13176.	4.9	73
26	Northern Hemisphere atmospheric influence of the solar proton events and ground level enhancement in January 2005. Atmospheric Chemistry and Physics, 2011, 11, 6153-6166.	4.9	71
27	The 1994 northern midlatitude budget of stratospheric chlorine derived from ATMOS/ATLAS-3 observations. Geophysical Research Letters, 1996, 23, 2357-2360.	4.0	68
28	Past changes in the vertical distribution of ozone â€“ Part 1: Measurement techniques, uncertainties and availability. Atmospheric Measurement Techniques, 2014, 7, 1395-1427.	3.1	67
29	Evidence of scattering of tropospheric radiation by PSCs in mid-IR limb emission spectra: MIPAS-B observations and KOPRA simulations. Geophysical Research Letters, 2002, 29, 119-1-119-4.	4.0	62
30	Nitric acid trihydrate nucleation and denitrification in the Arctic stratosphere. Atmospheric Chemistry and Physics, 2014, 14, 1055-1073.	4.9	62
31	Retrieval of temperature profiles from CHAMP for climate monitoring: intercomparison with Envisat MIPAS and GOMOS and different atmospheric analyses. Atmospheric Chemistry and Physics, 2007, 7, 3519-3536.	4.9	60
32	GRANADA: A Generic RAdiative traNsfer AnD non-LTE population algorithm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1771-1817.	2.3	60
33	Validation of MIPAS-ENVISAT NO₂ operational data. Atmospheric Chemistry and Physics, 2007, 7, 3261-3284.	4.9	57
34	Long-range transport pathways of tropospheric source gases originating in Asia into the northern lower stratosphere during the Asian monsoon season 2012. Atmospheric Chemistry and Physics, 2016, 16, 15301-15325.	4.9	57
35	Lagrangian simulations of the transport of young air masses to the top of the Asian monsoon anticyclone and into the tropical pipe. Atmospheric Chemistry and Physics, 2019, 19, 6007-6034.	4.9	57
36	Stratospheric chlorine partitioning: Constraints from shuttle-borne measurements of [HCl], [ClNO3], and [ClO]. Geophysical Research Letters, 1996, 23, 2361-2364.	4.0	56

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37	HDO measurements with MIPAS. Atmospheric Chemistry and Physics, 2007, 7, 2601-2615.	4.9	56
38	Experimental evidence of perturbed odd hydrogen and chlorine chemistry after the October 2003 solar proton events. Journal of Geophysical Research, 2005, 110, .	3.3	55
39	First airborne water vapor lidar measurements in the tropical upper troposphere and mid-latitudes lower stratosphere: accuracy evaluation and intercomparisons with other instruments. Atmospheric Chemistry and Physics, 2008, 8, 5245-5261.	4.9	55
40	HEPPA-II modelâ€“measurement intercomparison project: EPP indirect effects during the dynamically perturbed NH winter 2008â€“2009. Atmospheric Chemistry and Physics, 2017, 17, 3573-3604.	4.9	55
41	Harmonized dataset of ozone profiles from satellite limb and occultation measurements. Earth System Science Data, 2013, 5, 349-363.	9.9	52
42	First detection of ammonia (NH₃) in the Asian summer monsoon upper troposphere. Atmospheric Chemistry and Physics, 2016, 16, 14357-14369.	4.9	51
43	Tropical dehydration processes constrained by the seasonality of stratospheric deuterated water. Nature Geoscience, 2010, 3, 262-266.	12.9	50
44	A new non-LTE retrieval method for atmospheric parameters from mipas-envisat emission spectra. Advances in Space Research, 2001, 27, 1099-1104.	2.6	49
45	Bias determination and precision validation of ozone profiles from MIPAS-Envisat retrieved with the IMK-IAA processor. Atmospheric Chemistry and Physics, 2007, 7, 3639-3662.	4.9	49
46	Technical Note: Trend estimation from irregularly sampled, correlated data. Atmospheric Chemistry and Physics, 2010, 10, 6737-6747.	4.9	49
47	Global CFC-11 (CCl₃F) and CFC-12 (CCl₂F₂) measurements with the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS): retrieval, climatologies and trends. Atmospheric Chemistry and Physics, 2012, 12, 11857-11875.	4.9	49
48	Determination of the atmospheric lifetime and global warming potential of sulfur hexafluoride using a three-dimensional model. Atmospheric Chemistry and Physics, 2017, 17, 883-898.	4.9	49
49	On the assessment and uncertainty of atmospheric trace gas burden measurements with high resolution infrared solar occultation spectra from space by the ATMOS Experiment. Geophysical Research Letters, 1996, 23, 2337-2340.	4.0	46
50	Global observations of thermospheric temperature and nitric oxide from MIPAS spectra at 5.3<i>Î¼</i>m. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	46
51	Optimized spectral microwindows for data analysis of the Michelson Interferometer for Passive Atmospheric Sounding on the Environmental Satellite. Applied Optics, 2000, 39, 5531.	2.1	45
52	Global distributions of C₂H₆, C₂H₂, HCN, and PAN retrieved from MIPAS reduced spectral resolution measurements. Atmospheric Measurement Techniques, 2012, 5, 723-734.	3.1	44
53	Merged SAGEÂII, Ozone_cci and OMPS ozone profile dataset and evaluation of ozone trends in the stratosphere. Atmospheric Chemistry and Physics, 2017, 17, 12533-12552.	4.9	44
54	ATMOS/ATLAS-3 observations of long-lived tracers and descent in the Antarctic Vortex in November 1994. Geophysical Research Letters, 1996, 23, 2341-2344.	4.0	42

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55	Global distribution and variability of formic acid as observed by MIPASâ€ENVISAT. Journal of Geophysical Research, 2010, 115, .	3.3	41
56	Measurements of Humidity in the Atmosphere and Validation Experiments (MOHAVE)-2009: overview of campaign operations and results. Atmospheric Measurement Techniques, 2011, 4, 2579-2605.	3.1	41
57	The solar proton events in 2012 as observed by MIPAS. Geophysical Research Letters, 2013, 40, 2339-2343.	4.0	41
58	Validation of ozone data from the Superconducting Submillimeterâ€Wave Limbâ€Emission Sounder (SMILES). Journal of Geophysical Research D: Atmospheres, 2013, 118, 5750-5769.	3.3	41
59	A comparison of measurements from ATMOS and instruments aboard the ER-2 aircraft: Tracers of atmospheric transport. Geophysical Research Letters, 1996, 23, 2389-2392.	4.0	39
60	Three-Dimensional Model Study of the Antarctic Ozone Hole in 2002 and Comparison with 2000. Journals of the Atmospheric Sciences, 2005, 62, 822-837.	1.7	39
61	About the increase of HNO₃ in the stratopause region during the Halloween 2003 solar proton event. Geophysical Research Letters, 2008, 35, .	4.0	39
62	Ozone loss driven by nitrogen oxides and triggered by stratospheric warmings can outweigh the effect of halogens. Journal of Geophysical Research, 2007, 112, .	3.3	38
63	Sulfur dioxide (SO₂) from MIPAS in the upper troposphere and lower stratosphere 2002â€“2012. Atmospheric Chemistry and Physics, 2015, 15, 7017-7037.	4.9	38
64	Seasonal variations of water vapor in the lower stratosphere inferred from ATMOS/ATLAS-3 measurements of H2O and CH4. Geophysical Research Letters, 1996, 23, 2401-2404.	4.0	37
65	Trace gas transport in the Arctic Vortex inferred from ATMOS ATLAS-2 observations during April 1993. Geophysical Research Letters, 1996, 23, 2345-2348.	4.0	36
66	Remote sensing of the middle atmosphere with MIPAS. , 2003, , .		35
67	NO_{<i>y</i>} production, ozone loss and changes in net radiative heating due to energetic particle precipitation in 2002â€“2010. Atmospheric Chemistry and Physics, 2018, 18, 1115-1147.	4.9	35
68	The hydrogen budget of the stratosphere inferred from ATMOS measurements of H2O and CH4. Geophysical Research Letters, 1996, 23, 2405-2408.	4.0	34
69	Shift of subtropical transport barriers explains observed hemispheric asymmetry of decadal trends of age of air. Atmospheric Chemistry and Physics, 2017, 17, 11177-11192.	4.9	34
70	Model simulations of stratospheric ozone loss caused by enhanced mesospheric NO_x during Arctic Winter 2003/2004. Atmospheric Chemistry and Physics, 2008, 8, 5279-5293.	4.9	33
71	Energetic particle induced intra-seasonal variability of ozone inside the Antarctic polar vortex observed in satellite data. Atmospheric Chemistry and Physics, 2015, 15, 3327-3338.	4.9	33
72	Overview: Estimating and reporting uncertainties in remotely sensed atmospheric composition and temperature. Atmospheric Measurement Techniques, 2020, 13, 4393-4436.	3.1	31

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73	On the quality of MIPAS kinetic temperature in the middle atmosphere. Atmospheric Chemistry and Physics, 2012, 12, 6009-6039.	4.9	30
74	MIPAS temperature from the stratosphere to the lower thermosphere: Comparison of vM21 with ACE-FTS, MLS, OSIRIS, SABER, SOFIE and lidar measurements. Atmospheric Measurement Techniques, 2014, 7, 3633-3651.	3.1	30
75	Increase of stratospheric carbon tetrafluoride (CF4) based on ATMOS observations from space. Geophysical Research Letters, 1996, 23, 2353-2356.	4.0	29
76	Circulation anomalies in the Southern Hemisphere and ozone changes. Atmospheric Chemistry and Physics, 2013, 13, 10677-10688.	4.9	29
77	Sulfur dioxide (SO₂) as observed by MIPAS/Envisat: temporal development and spatial distribution at 15â€“45 km altitude. Atmospheric Chemistry and Physics, 2013, 13, 10405-10423.	4.9	29
78	Modelling of non-LTE limb spectra of i.r. ozone bands for the MIPAS space experiment. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 59, 405-422.	2.3	28
79	Validation of water vapour profiles (version 13) retrieved by the IMK/IAA scientific retrieval processor based on full resolution spectra measured by MIPAS on board Envisat. Atmospheric Measurement Techniques, 2009, 2, 379-399.	3.1	28
80	Impact of temperature field inhomogeneities on the retrieval of atmospheric species from MIPAS IR limb emission spectra. Atmospheric Measurement Techniques, 2010, 3, 1487-1507.	3.1	28
81	Validation of stratospheric and mesospheric ozone observed by SMILES from International Space Station. Atmospheric Measurement Techniques, 2013, 6, 2311-2338.	3.1	28
82	Stratospheric and mesospheric pressure-temperature profiles from rotational analysis of CO2lines in atmospheric trace molecule spectroscopy/ATLAS 1 infrared solar occultation spectra. Journal of Geophysical Research, 1995, 100, 3107.	3.3	27
83	Karlsruhe optimized and precise radiative transfer algorithm. Part I: requirements, justification, and model error estimation. Proceedings of SPIE, 1998, , .	0.8	27
84	Cross-validation of MIPAS/ENVISAT and GPS-RO/CHAMP temperature profiles. Journal of Geophysical Research, 2004, 109, .	3.3	27
85	The millennium water vapour drop in chemistryâ€“climate model simulations. Atmospheric Chemistry and Physics, 2016, 16, 8125-8140.	4.9	27
86	Global HCFC-22 measurements with MIPAS: retrieval, validation, global distribution and its evolution over 2005â€“2012. Atmospheric Chemistry and Physics, 2016, 16, 3345-3368.	4.9	27
87	The strength of the meridional overturning circulation of the stratosphere. Nature Geoscience, 2017, 10, 663-667.	12.9	27
88	Vibrationally excited ozone in the middle atmosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 202-212.	1.6	26
89	Retrieval of global upper tropospheric and stratospheric formaldehyde (H₂CO) distributions from high-resolution MIPAS-Envisat spectra. Atmospheric Chemistry and Physics, 2008, 8, 463-470.	4.9	26
90	Mesospheric N₂O enhancements as observed by MIPAS on Envisat during the polar winters in 2002â€“2004. Atmospheric Chemistry and Physics, 2008, 8, 5787-5800.	4.9	26

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91	Comparison of HDO measurements from Envisat/MIPAS with observations by Odin/SMR and SCISAT/ACE-FTS. Atmospheric Measurement Techniques, 2011, 4, 1855-1874.	3.1	25
92	Global carbonyl sulfide (OCS) measured by MIPAS/Envisat during 2002â€“2012. Atmospheric Chemistry and Physics, 2017, 17, 2631-2652.	4.9	25
93	The Australian bushfires of February 2009: MIPAS observations and GEM-AQ model results. Atmospheric Chemistry and Physics, 2013, 13, 1637-1658.	4.9	24
94	The SPARC water vapour assessment II: comparison of annual, semi-annual and quasi-biennial variations in stratospheric and lower mesospheric water vapour observed from satellites. Atmospheric Measurement Techniques, 2017, 10, 1111-1137.	3.1	24
95	MIPAS observations of volcanic sulfate aerosol and sulfur dioxide in the stratosphere. Atmospheric Chemistry and Physics, 2018, 18, 1217-1239.	4.9	24
96	Karlsruhe optimized and precise radiative transfer algorithm: II. Interface to retrieval applications. , 1998, , .		24
97	Validation of MIPAS IMK/IAA V5R_O3_224 ozone profiles. Atmospheric Measurement Techniques, 2014, 7, 3971-3987.	3.1	24
98	CO2 line mixing in MIPAS limb emission spectra and its influence on retrieval of atmospheric parameters. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 59, 215-230.	2.3	23
99	Analysis of nonlocal thermodynamic equilibrium CO 4.7Î¼m fundamental, isotopic, and hot band emissions measured by the Michelson Interferometer for Passive Atmospheric Sounding on Envisat. Journal of Geophysical Research, 2007, 112, .	3.3	23
100	Energetic particle precipitation in ECHAM5/MESSy â€“ Part 2: Solar proton events. Atmospheric Chemistry and Physics, 2010, 10, 7285-7302.	4.9	23
101	Total hydrogen budget of the equatorial upper stratosphere. Journal of Geophysical Research, 2010, 115, .	3.3	23
102	Evaluation of column-averaged methane in models and TCCON with a focus on the stratosphere. Atmospheric Measurement Techniques, 2016, 9, 4843-4859.	3.1	23
103	A comparison of night-time GOMOS and MIPAS ozone profiles in the stratosphere and mesosphere. Advances in Space Research, 2005, 36, 958-966.	2.6	22
104	Comment on â€œOrigin of the Januaryâ€“April 2004 increase in stratospheric NO2observed in northern polar latitudesâ€•by Jean-Baptiste Renard et al.. Geophysical Research Letters, 2007, 34, .	4.0	22
105	Retrieval of stratospheric and mesospheric O3 from high resolution MIPAS spectra at 15 and 10 Î¼m. Advances in Space Research, 2005, 36, 943-951.	2.6	21
106	Seasonal and interannual variations in HCN amounts in the upper troposphere and lower stratosphere observed by MIPAS. Atmospheric Chemistry and Physics, 2015, 15, 563-582.	4.9	21
107	Atmospheric non-local thermodynamic equilibrium emissions as observed by the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). Comptes Rendus Physique, 2005, 6, 848-863.	0.9	20
108	A semi-empirical model for mesospheric and stratospheric NO_{<i>y</i>} produced by energetic particle precipitation. Atmospheric Chemistry and Physics, 2016, 16, 8667-8693.	4.9	20

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109	Methane and nitrous oxide retrievals from MIPAS-ENVISAT. Atmospheric Measurement Techniques, 2015, 8, 4657-4670.	3.1	20
110	The MIPAS HOCl climatology. Atmospheric Chemistry and Physics, 2012, 12, 1965-1977.	4.9	19
111	Validation of middle-atmospheric campaign-based water vapour measured by the ground-based microwave radiometer MIAWARA-C. Atmospheric Measurement Techniques, 2013, 6, 1725-1745.	3.1	18
112	Variability of NO_x in the polar middle atmosphere from October 2003 to March 2004: vertical transport vs. local production by energetic particles. Atmospheric Chemistry and Physics, 2014, 14, 7681-7692.	4.9	18
113	Validation of MIPAS IMK/IAA methane profiles. Atmospheric Measurement Techniques, 2015, 8, 5251-5261.	3.1	18
114	Validation of revised methane and nitrous oxide profiles from MIPASâ€“ENVISAT. Atmospheric Measurement Techniques, 2016, 9, 765-779.	3.1	18
115	Non-local thermodynamic equilibrium limb radiances for the mipas instrument on Envisat-1. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 59, 377-403.	2.3	17
116	Influences of the Indian Summer Monsoon on Water Vapor and Ozone Concentrations in the UTLS as Simulated by Chemistryâ€“Climate Models. Journal of Climate, 2010, 23, 3525-3544.	3.2	17
117	Validation of MIPAS-ENVISAT H₂O operational data collected between July 2002 and March 2004. Atmospheric Chemistry and Physics, 2013, 13, 5791-5811.	4.9	17
118	Is there a solar signal in lower stratospheric water vapour?. Atmospheric Chemistry and Physics, 2015, 15, 9851-9863.	4.9	17
119	Comparison of nitric oxide measurements in the mesosphere and lower thermosphere from ACE-FTS, MIPAS, SCIAMACHY, and SMR. Atmospheric Measurement Techniques, 2015, 8, 4171-4195.	3.1	17
120	Karlsruhe optimized and precise radiative transfer algorithm: Part III: ADDLIN and TRANSF algorithms for modeling spectral transmittance and radiance. , 1998, 3501, 247.		16
121	Measurements of polar mesospheric clouds in infrared emission by MIPAS/ENVISAT. Journal of Geophysical Research, 2009, 114, .	3.3	15
122	MIPAS IMK/IAA CFC-11 (CCl₃F) and CFC-12 (CCl₂F₂) measurements: accuracy, precision and long-term stability. Atmospheric Measurement Techniques, 2016, 9, 3355-3389.	3.1	15
123	Comparison of ECHAM5/MESSy Atmospheric Chemistry (EMAC) simulations of the Arctic winter 2009/2010 and 2010/2011 with Envisat/MIPAS and Aura/MLS observations. Atmospheric Chemistry and Physics, 2018, 18, 8873-8892.	4.9	15
124	HOCl chemistry in the Antarctic Stratospheric Vortex 2002, as observed with the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). Atmospheric Chemistry and Physics, 2009, 9, 1817-1829.	4.9	14
125	Trend differences in lower stratospheric water vapour between Boulder and the zonal mean and their role in understanding fundamental observational discrepancies. Atmospheric Chemistry and Physics, 2018, 18, 8331-8351.	4.9	14
126	Measurement report: regional trends of stratospheric ozone evaluated using the MErged GRIdded Dataset of Ozone Profiles (MEGRIDOP). Atmospheric Chemistry and Physics, 2021, 21, 6707-6720.	4.9	14

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127	Lifetime and production rate of NO_x in the upper stratosphere and lower mesosphere in the polar spring/summer after the solar proton event in Octoberâ€“November 2003. Atmospheric Chemistry and Physics, 2013, 13, 2531-2539.	4.9	13
128	Variations in middle atmospheric water vapor from 2004 to 2013. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,285.	3.3	13
129	Relative drifts and biases between six ozone limb satellite measurements from the last decade. Atmospheric Measurement Techniques, 2015, 8, 4369-4381.	3.1	13
130	The SPARC water vapor assessment II: intercomparison of satellite and ground-based microwave measurements. Atmospheric Chemistry and Physics, 2017, 17, 14543-14558.	4.9	13
131	The SPARC water vapour assessment II: profile-to-profile comparisons of stratospheric and lower mesospheric water vapour data sets obtained from satellites. Atmospheric Measurement Techniques, 2019, 12, 2693-2732.	3.1	13
132	Improved FTIR retrieval strategy for HCFC-22 (CHClF₂), comparisons with in situ and satellite datasets with the support of models, and determination of its long-term trend above Jungfraujoch. Atmospheric Chemistry and Physics, 2019, 19, 12309-12324.	4.9	13
133	IMK/IAA MIPAS temperature retrieval version 8: nominal measurements. Atmospheric Measurement Techniques, 2021, 14, 4111-4138.	3.1	13
134	Atmospheric effects of energetic particle precipitation in the Arctic winter 1978â€“1979 revisited. Journal of Geophysical Research, 2012, 117, .	3.3	12
135	UTLS water vapour from SCIAMACHY limb measurementsV3.01 (2002â€“2012). Atmospheric Measurement Techniques, 2016, 9, 133-158.	3.1	12
136	The SPARC water vapour assessment II: comparison of stratospheric and lower mesospheric water vapour time series observed from satellites. Atmospheric Measurement Techniques, 2018, 11, 4435-4463.	3.1	12
137	Probability density functions of long-lived tracer observations from satellite in the subtropical barrier region: data intercomparison. Atmospheric Chemistry and Physics, 2011, 11, 10579-10598.	4.9	11
138	The natural greenhouse effect of atmospheric oxygen (O₂) and nitrogen (N₂). Geophysical Research Letters, 2012, 39, .	4.0	11
139	Retrieval and satellite intercomparison of O₃ measurements from ground-based FTIR Spectrometer at Equatorial Station: Addis Ababa, Ethiopia. Atmospheric Measurement Techniques, 2013, 6, 495-509.	3.1	11
140	Sensitivity of polar stratospheric cloud formation to changes in water vapour and temperature. Atmospheric Chemistry and Physics, 2016, 16, 101-121.	4.9	11
141	Ground-based FTIR retrievals of SF₆ on Reunion Island. Atmospheric Measurement Techniques, 2018, 11, 651-662.	3.1	11
142	MIPAS observations of ozone in the middle atmosphere. Atmospheric Measurement Techniques, 2018, 11, 2187-2212.	3.1	11
143	Measurements of global distributions of polar mesospheric clouds during 2005â€“2012 by MIPAS/Envisat. Atmospheric Chemistry and Physics, 2016, 16, 6701-6719.	4.9	10
144	Assessing stratospheric transport in the CMAM30 simulations using ACE-FTS measurements. Atmospheric Chemistry and Physics, 2018, 18, 6801-6828.	4.9	10

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145	Differences in ozone retrieval in MIPAS channels A and AB: a spectroscopic issue. Atmospheric Measurement Techniques, 2018, 11, 4707-4723.	3.1	10
146	Simulating age of air and the distribution of SF₆ in the stratosphere with the SILAM model. Atmospheric Chemistry and Physics, 2020, 20, 5837-5859.	4.9	10
147	Do vibrationally excited OH molecules affect middle and upper atmospheric chemistry?. Atmospheric Chemistry and Physics, 2010, 10, 9953-9964.	4.9	9
148	Assessment of the interannual variability and influence of the QBO and upwelling on tracerâ€“tracer distributions of N₂O and O₃ in the tropical lower stratosphere. Atmospheric Chemistry and Physics, 2013, 13, 3619-3641.	4.9	9
149	Global distributions of CO₂ volume mixing ratio in the middle and upper atmosphere from daytime MIPAS high-resolution spectra. Atmospheric Measurement Techniques, 2016, 9, 6081-6100.	3.1	9
150	Non-LTE state distribution of nitric oxide and its impact on the retrieval of the stratospheric daytime no profile from MIPAS limb sounding instruments. Advances in Space Research, 2000, 26, 947-950.	2.6	8
151	Evidence for CH47.6 Î¼m non-local thermodynamic equilibrium emission in the mesosphere. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	8
152	Interannual variability of the boreal summer tropical UTLS in observations and CCMVal-2 simulations. Atmospheric Chemistry and Physics, 2016, 16, 8695-8714.	4.9	8
153	Retrieval of tropospheric versus stratospheric partitioning of HCl from ground-based MIPAS FTIR spectra. Journal of Quantitative Spectroscopy and Radiative Transfer, 1995, 54, 899-912.	2.3	7
154	<title>Intercomparison of the KOPRA and the RFM radiative transfer codes</title>. , 1999, 3867, 348.		7
155	Early IMK/IAA MIPAS/ENVISAT results. , 2003, 4882, 184.		7
156	Validation of longâ€term measurements of water vapor from the midstratosphere to the mesosphere at two Network for the Detection of Atmospheric Composition Change sites. Journal of Geophysical Research D: Atmospheres, 2013, 118, 934-942.	3.3	7
157	On the improved stability of the version 7 MIPAS ozone record. Atmospheric Measurement Techniques, 2018, 11, 4693-4705.	3.1	7
158	Sequestration of HNO3in polar stratospheric clouds and chlorine activation as monitored by ground-based Fourier transform infrared solar absorption measurements. Journal of Geophysical Research, 1998, 103, 22181-22200.	3.3	6
159	Global stratospheric hydrogen peroxide distribution from MIPAS-Envisat full resolution spectra compared to KASIMA model results. Atmospheric Chemistry and Physics, 2012, 12, 4923-4933.	4.9	6
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