

Bernd Funke

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241
papers

6,816
citations

46
h-index

70
g-index

301
ext. papers

7,810
ext. citations

5.3
avg, IF

5.11
L-index

#	Paper	IF	Citations
241	Retrieval of temperature and tangent altitude pointing from limb emission spectra recorded from space by the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). <i>Journal of Geophysical Research</i> , 2003 , 108,		208
240	Solar forcing for CMIP6 (v3.2). <i>Geoscientific Model Development</i> , 2017 , 10, 2247-2302	6.3	199
239	Retrieval of temperature, H ₂ O, O ₃ , HNO ₃ , CH ₄ , N ₂ O, ClONO ₂ and ClO from MIPAS reduced resolution nominal mode limb emission measurements. <i>Atmospheric Measurement Techniques</i> , 2009 , 2, 159-175	4	181
238	MIPAS level 2 operational analysis. <i>Atmospheric Chemistry and Physics</i> , 2006 , 6, 5605-5630	6.8	158
237	Observed temporal evolution of global mean age of stratospheric air for the 2002 to 2010 period. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 3311-3331	6.8	151
236	Short- and medium-term atmospheric constituent effects of very large solar proton events. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 765-785	6.8	133
235	Sensitivity of trace gas abundances retrievals from infrared limb emission spectra to simplifying approximations in radiative transfer modelling. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2002 , 72, 249-280	2.1	124
234	The Detection and Attribution Model Intercomparison Project (DAMIP v1.0) contribution to CMIP6. <i>Geoscientific Model Development</i> , 2016 , 9, 3685-3697	6.3	124
233	Vertical structure of stratospheric water vapour trends derived from merged satellite data. <i>Nature Geoscience</i> , 2014 , 7, 768-776	18.3	123
232	Observation of NO _x enhancement and ozone depletion in the Northern and Southern Hemispheres after the October/November 2003 solar proton events. <i>Journal of Geophysical Research</i> , 2005 , 110,		118
231	Downward transport of upper atmospheric NO _x into the polar stratosphere and lower mesosphere during the Antarctic 2003 and Arctic 2002/2003 winters. <i>Journal of Geophysical Research</i> , 2005 , 110,		117
230	Composition changes after the "Halloween" solar proton event: the High Energy Particle Precipitation in the Atmosphere (HEPPA) model versus MIPAS data intercomparison study. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 9089-9139	6.8	113
229	The natural thermostat of nitric oxide emission at 5.3 h in the thermosphere observed during the solar storms of April 2002. <i>Geophysical Research Letters</i> , 2003 , 30,	4.9	102
228	CO measurements from the ACE-FTS satellite instrument: data analysis and validation using ground-based, airborne and spaceborne observations. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 2569-2594	6.8	91
227	Measuring and modeling the lifetime of nitrous oxide including its variability. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015 , 120, 5693-5705	4.4	90
226	Energy transport in the thermosphere during the solar storms of April 2002. <i>Journal of Geophysical Research</i> , 2005 , 110,		89
225	Global distribution of mean age of stratospheric air from MIPAS SF ₆ measurements. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 677-695	6.8	87

224	Process-evaluation of tropospheric humidity simulated by general circulation models using water vapor isotopologues: 1. Comparison between models and observations. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		81
223	LARGE ABUNDANCES OF POLYCYCLIC AROMATIC HYDROCARBONS IN TITAN'S UPPER ATMOSPHERE. <i>Astrophysical Journal</i> , 2013 , 770, 132	4.7	81
222	Errors in Sounding of the Atmosphere using Broadband Emission Radiometry (SABER) kinetic temperature caused by non-local-thermodynamic-equilibrium model parameters. <i>Journal of Geophysical Research</i> , 2008 , 113,		79
221	On the distribution of CO ₂ and CO in the mesosphere and lower thermosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 5700-5718	4.4	74
220	Martian dust storm impact on atmospheric HO and D/H observed by ExoMars Trace Gas Orbiter. <i>Nature</i> , 2019 , 568, 521-525	50.4	72
219	Carbon monoxide distributions from the upper troposphere to the mesosphere inferred from 4.7 h non-local thermal equilibrium emissions measured by MIPAS on Envisat. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 2387-2411	6.8	71
218	Evidence for dynamical coupling from the lower atmosphere to the thermosphere during a major stratospheric warming. <i>Geophysical Research Letters</i> , 2010 , 37, n/a-n/a	4.9	70
217	Retrieval of stratospheric NO _x from 5.3 and 6.2 h nonlocal thermodynamic equilibrium emissions measured by Michelson Interferometer for Passive Atmospheric Sounding (MIPAS) on Envisat. <i>Journal of Geophysical Research</i> , 2005 , 110,		70
216	No detection of methane on Mars from early ExoMars Trace Gas Orbiter observations. <i>Nature</i> , 2019 , 568, 517-520	50.4	68
215	SPARC Data Initiative: Comparison of water vapor climatologies from international satellite limb sounders. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 11,824-11,846	4.4	67
214	Process-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. <i>Journal of Geophysical Research</i> , 2012 , 117, n/a-n/a		66
213	Mixing Processes during the Antarctic Vortex Split in September/October 2002 as Inferred from Source Gas and Ozone Distributions from ENVISAT/MIPAS. <i>Journals of the Atmospheric Sciences</i> , 2005 , 62, 787-800	2.1	65
212	Science objectives and performances of NOMAD, a spectrometer suite for the ExoMars TGO mission. <i>Planetary and Space Science</i> , 2015 , 119, 233-249	2	63
211	Reassessment of MIPAS age of air trends and variability. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 13161-13176	6.8	63
210	Validation of MIPAS IMK/IAA temperature, water vapor, and ozone profiles with MOHAVE-2009 campaign measurements. <i>Atmospheric Measurement Techniques</i> , 2012 , 5, 289-320	4	63
209	HNO ₃ , N ₂ O ₅ , and ClONO ₂ enhancements after the October/November 2003 solar proton events. <i>Journal of Geophysical Research</i> , 2005 , 110,		63
208	Global peroxyacetyl nitrate (PAN) retrieval in the upper troposphere from limb emission spectra of the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 2775-2787	6.8	62
207	Mesospheric and stratospheric NO _y produced by energetic particle precipitation during 2002-2012. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 4429-4446	4.4	61

206	Northern Hemisphere atmospheric influence of the solar proton events and ground level enhancement in January 2005. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 6153-6166	6.8	60
205	NOMAD, an Integrated Suite of Three Spectrometers for the ExoMars Trace Gas Mission: Technical Description, Science Objectives and Expected Performance. <i>Space Science Reviews</i> , 2018 , 214, 1	7.5	57
204	SPARC Data Initiative: A comparison of ozone climatologies from international satellite limb sounders. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 12,229-12,247	4.4	56
203	Satellite observations of ozone in the upper mesosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 5803-5821	4.4	55
202	Validation of NO ₂ and NO from the Atmospheric Chemistry Experiment (ACE). <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 5801-5841	6.8	54
201	Water vapor distributions measured with the Michelson Interferometer for Passive Atmospheric Sounding on board Envisat (MIPAS/Envisat). <i>Journal of Geophysical Research</i> , 2005 , 110,		53
200	GRANADA: A Generic RAdiative traNsfEr AnD non-LTE population algorithm. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2012 , 113, 1771-1817	2.1	50
199	An enhanced HNO ₃ second maximum in the Antarctic midwinter upper stratosphere 2003. <i>Journal of Geophysical Research</i> , 2005 , 110,		50
198	A blind test retrieval experiment for infrared limb emission spectrometry. <i>Journal of Geophysical Research</i> , 2003 , 108,		50
197	Experimental evidence of perturbed odd hydrogen and chlorine chemistry after the October 2003 solar proton events. <i>Journal of Geophysical Research</i> , 2005 , 110,		49
196	Validation of MIPAS CLONO ₂ measurements. <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 257-281	6.8	47
195	Simulation of energetic particle precipitation effects during the 2003-2004 Arctic winter. <i>Journal of Geophysical Research: Space Physics</i> , 2015 , 120, 5035-5048	2.6	45
194	Validation of MIPAS-ENVISAT NO ₂ operational data. <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 3261-3284	6.8	45
193	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
192	Global CFC-11 (CCl ₃ F) and CFC-12 (CCl ₂ F ₂) measurements with the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS): retrieval, climatologies and trends. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 11857-11875	6.8	42
191	Bias determination and precision validation of ozone profiles from MIPAS-Envisat retrieved with the IMK-IAA processor. <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 3639-3662	6.8	42
190	HEPPA-II model-measurement intercomparison project: EPP indirect effects during the dynamically perturbed NH winter 2008-2009. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 3573-3604	6.8	41
189	Retrieval of stratospheric ozone profiles from MIPAS/ENVISAT limb emission spectra: a sensitivity study. <i>Atmospheric Chemistry and Physics</i> , 2006 , 6, 2767-2781	6.8	41

188	Modelling of atmospheric mid-infrared radiative transfer: the AMIL2DA algorithm intercomparison experiment. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2003 , 78, 381-407	2.1	41
187	A new non-LTE retrieval method for atmospheric parameters from mipas-envisat emission spectra. <i>Advances in Space Research</i> , 2001 , 27, 1099-1104	2.4	41
186	Optimized spectral microwindows for data analysis of the Michelson Interferometer for Passive Atmospheric Sounding on the Environmental Satellite. <i>Applied Optics</i> , 2000 , 39, 5531-40	1.7	41
185	Characterizing sampling biases in the trace gas climatologies of the SPARC Data Initiative. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013 , 118, 11,847	4.4	39
184	The solar proton events in 2012 as observed by MIPAS. <i>Geophysical Research Letters</i> , 2013 , 40, 2339-2343	3.9	37
183	Spaceborne ClO observations by the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS) before and during the Antarctic major warming in September/October 2002. <i>Journal of Geophysical Research</i> , 2004 , 109,		37
182	About the increase of HNO ₃ in the stratopause region during the Halloween 2003 solar proton event. <i>Geophysical Research Letters</i> , 2008 , 35,	4.9	36
181	First spaceborne observations of Antarctic stratospheric ClONO ₂ recovery: Austral spring 2002. <i>Journal of Geophysical Research</i> , 2004 , 109,		36
180	Middle atmospheric changes caused by the January and March 2012 solar proton events. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 1025-1038	6.8	35
179	Hemispheric distributions and interannual variability of NO _y produced by energetic particle precipitation in 2002-2012. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 13,565-13,582	4.4	34
178	An unidentified emission in Titan's upper atmosphere. <i>Geophysical Research Letters</i> , 2013 , 40, 1489-1493	4.9	34
177	ACE-FTS ozone, water vapour, nitrous oxide, nitric acid, and carbon monoxide profile comparisons with MIPAS and MLS. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017 , 186, 63-80	2.1	33
176	Global observations of thermospheric temperature and nitric oxide from MIPAS spectra at 5.3 μ m. <i>Journal of Geophysical Research</i> , 2011 , 116, n/a-n/a		33
175	Sulfur dioxide (SO ₂) from MIPAS in the upper troposphere and lower stratosphere 2002-2012. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 7017-7037	6.8	32
174	Water vapor detection in the transmission spectra of HD 209458 b with the CARMENES NIR channel. <i>Astronomy and Astrophysics</i> , 2019 , 630, A53	5.1	31
173	Remote sensing of the middle atmosphere with MIPAS 2003 ,		30
172	Cross comparisons of O ₃ and NO ₂ measured by the atmospheric ENVISAT instruments GOMOS, MIPAS, and SCIAMACHY. <i>Advances in Space Research</i> , 2005 , 36, 855-867	2.4	30
171	Energetic particle precipitation: A major driver of the ozone budget in the Antarctic upper stratosphere. <i>Geophysical Research Letters</i> , 2016 , 43, 3554-3562	4.9	30

170	Rotational temperatures of Venus upper atmosphere as measured by SOIR on board Venus Express. <i>Planetary and Space Science</i> , 2015 , 113-114, 347-358	2	29
169	Ozone loss driven by nitrogen oxides and triggered by stratospheric warmings can outweigh the effect of halogens. <i>Journal of Geophysical Research</i> , 2007 , 112,		29
168	NO _y from Michelson Interferometer for Passive Atmospheric Sounding on Environmental Satellite during the Southern Hemisphere polar vortex split in September/October 2002. <i>Journal of Geophysical Research</i> , 2005 , 110,		29
167	Model simulations of stratospheric ozone loss caused by enhanced mesospheric NO _x during Arctic Winter 2003/2004. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 5279-5293	6.8	28
166	Nitrogen compounds and ozone in the stratosphere: comparison of MIPAS satellite data with the chemistry climate model ECHAM5/MESSy1. <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 5585-5598	6.8	28
165	Evidence for an OH(Δ) excitation mechanism of CO ₂ 4.3 μ m nighttime emission from SABER/TIMED measurements. <i>Journal of Geophysical Research</i> , 2004 , 109,		28
164	NRLMSIS 2.0: A Whole-Atmosphere Empirical Model of Temperature and Neutral Species Densities. <i>Earth and Space Science</i> , 2021 , 8, e2020EA001321	3.1	28
163	Observation of strato-mesospheric CO above Kiruna with ground-based microwave radiometry \square retrieval and satellite comparison. <i>Atmospheric Measurement Techniques</i> , 2011 , 4, 2389-2408	4	27
162	Validation of nitric acid retrieved by the IMK-IAA processor from MIPAS/ENVISAT measurements. <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 721-738	6.8	27
161	MIPAS temperature from the stratosphere to the lower thermosphere: Comparison of vM21 with ACE-FTS, MLS, OSIRIS, SABER, SOFIE and lidar measurements. <i>Atmospheric Measurement Techniques</i> , 2014 , 7, 3633-3651	4	26
160	Large-scale upper tropospheric pollution observed by MIPAS HCN and C ₂ H ₆ ; global distributions. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 9619-9634	6.8	26
159	The Stratospheric and Mesospheric NO _y in the 2002-2004 Polar Winters as measured by MIPAS/ENVISAT. <i>Space Science Reviews</i> , 2007 , 125, 403-416	7.5	26
158	MIPAS measurements of upper tropospheric C ₂ H ₆ and O ₃ during the southern hemispheric biomass burning season in 2003. <i>Atmospheric Chemistry and Physics</i> , 2007 , 7, 5861-5872	6.8	26
157	Shift of subtropical transport barriers explains observed hemispheric asymmetry of decadal trends of age of air. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 11177-11192	6.8	25
156	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. <i>Atmospheric Measurement Techniques</i> , 2009 , 2, 379-399	4	25
155	Retrieval of global upper tropospheric and stratospheric formaldehyde (H ₂ CO) distributions from high-resolution MIPAS-Envisat spectra. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 463-470	6.8	25
154	Mesospheric N ₂ O enhancements as observed by MIPAS on Envisat during the polar winters in 2002-2004. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 5787-5800	6.8	25
153	Global stratospheric HOCl distributions retrieved from infrared limb emission spectra recorded by the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). <i>Journal of Geophysical Research</i> , 2006 , 111,		25

152	Sulfur dioxide (SO ₂) as observed by MIPAS/Envisat: temporal development and spatial distribution at 15–5 km altitude. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 10405-10423	6.8	24
151	Distribution of HCN in Titan's upper atmosphere from Cassini/VIMS observations at 3 h. <i>Icarus</i> , 2011 , 214, 584-595	3.8	24
150	Cross-validation of MIPAS/ENVISAT and GPS-RO/CHAMP temperature profiles. <i>Journal of Geophysical Research</i> , 2004 , 109,		24
149	NO _x production, ozone loss and changes in net radiative heating due to energetic particle precipitation in 2002–2010. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 1115-1147	6.8	23
148	Stratospheric N ₂ O ₅ in the austral spring 2002 as retrieved from limb emission spectra recorded by the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). <i>Journal of Geophysical Research</i> , 2004 , 109,		23
147	Nonlocal thermodynamic equilibrium vibrational, rotational, and spin state distribution of NO(Γ 0, 1, 2) under quiescent atmospheric conditions. <i>Journal of Geophysical Research</i> , 2000 , 105, 4409-4426		23
146	On the quality of MIPAS kinetic temperature in the middle atmosphere. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 6009-6039	6.8	22
145	Enhancement of N ₂ O during the October–November 2003 solar proton events. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 3805-3815	6.8	22
144	Analysis of nonlocal thermodynamic equilibrium CO 4.7 h fundamental, isotopic, and hot band emissions measured by the Michelson Interferometer for Passive Atmospheric Sounding on Envisat. <i>Journal of Geophysical Research</i> , 2007 , 112,		22
143	Vibrationally excited ozone in the middle atmosphere. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2006 , 68, 202-212	2	22
142	An observational and theoretical study of the longitudinal variation in neutral temperature induced by aurora heating in the lower thermosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2013 , 118, 7410-7425	2.6	21
141	The Australian bushfires of February 2009: MIPAS observations and GEM-AQ model results. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 1637-1658	6.8	21
140	Energetic particle precipitation in ECHAM5/MESy (Part 2: Solar proton events). <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 7285-7302	6.8	21
139	CO ₂ line mixing in MIPAS limb emission spectra and its influence on retrieval of atmospheric parameters. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1998 , 59, 215-230	2.1	21
138	Fast forward radiative transfer modeling of 4.3 h nonlocal thermodynamic equilibrium effects for infrared temperature sounders. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	21
137	Analysis of Titan CH ₄ 3.3 h upper atmospheric emission as measured by Cassini/VIMS. <i>Icarus</i> , 2011 , 214, 571-583	3.8	20
136	Retrieval of stratospheric and mesospheric O ₃ from high resolution MIPAS spectra at 15 and 10 h. <i>Advances in Space Research</i> , 2005 , 36, 943-951	2.4	20
135	Intercomparison of radiative transfer codes under non-local thermodynamic equilibrium conditions. <i>Journal of Geophysical Research</i> , 2002 , 107, ACH 12-1		20

134	On the secular trend of CO _x and CO ₂ in the lower thermosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 3634-3644	4.4	19
133	Impact of tropospheric tides on the nitric oxide 5.3 μ m infrared cooling of the low-latitude thermosphere during solar minimum conditions. <i>Journal of Geophysical Research: Space Physics</i> , 2013 , 118, 7283-7293	2.6	19
132	Comment on Origin of the January-April 2004 increase in stratospheric NO ₂ observed in northern polar latitudes by Jean-Baptiste Renard et al.. <i>Geophysical Research Letters</i> , 2007 , 34,	4.9	19
131	Rotational and spin-orbit distributions of NO observed by MIPAS/ENVISAT during the solar storm of October/November 2003. <i>Journal of Geophysical Research</i> , 2005 , 110,		19
130	A comparison of night-time GOMOS and MIPAS ozone profiles in the stratosphere and mesosphere. <i>Advances in Space Research</i> , 2005 , 36, 958-966	2.4	19
129	Karlsruhe optimized and precise radiative transfer algorithm. Part I: requirements, justification, and model error estimation 1998 ,		19
128	Karlsruhe optimized and precise radiative transfer algorithm: II. Interface to retrieval applications 1998 ,		19
127	Validation of ACE-FTS version 3.5 NO ₂ and O ₃ species profiles using correlative satellite measurements. <i>Atmospheric Measurement Techniques</i> , 2016 , 9, 5781-5810	4	19
126	Solar Forcing for CMIP6 (v3.1) 2016 ,		19
125	Modeling the atmospheric limb emission of CO ₂ at 4.3 μ m in the terrestrial planets. <i>Planetary and Space Science</i> , 2011 , 59, 988-998	2	18
124	Atmospheric non-local thermodynamic equilibrium emissions as observed by the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). <i>Comptes Rendus Physique</i> , 2005 , 6, 848-863	1.4	18
123	Transport versus energetic particle precipitation: Northern polar stratospheric NO _x and ozone in January-March 2012. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 6085-6100	4.4	18
122	MIPAS reduced spectral resolution UTLS-1 mode measurements of temperature, O ₃ , HNO ₃ , N ₂ O, H ₂ O and relative humidity over ice: retrievals and comparison to MLS. <i>Atmospheric Measurement Techniques</i> , 2009 , 2, 337-353	4	17
121	Six years of mesospheric CO estimated from ground-based frequency-switched microwave radiometry at 57°N compared with satellite instruments. <i>Atmospheric Measurement Techniques</i> , 2012 , 5, 2827-2841	4	17
120	Impact of January 2005 solar proton events on chlorine species. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 4159-4179	6.8	17
119	Chemical heating rates derived from SCIAMACHY vibrationally excited OH limb emission spectra. <i>Advances in Space Research</i> , 2008 , 41, 1914-1920	2.4	17
118	A method for merging nadir-sounding climate records, with an application to the global-mean stratospheric temperature data sets from SSU and AMSU. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 9271-9284	6.8	16
117	Insights on nitrate sources at Dome C (East Antarctic Plateau) from multi-year aerosol and snow records. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2014 , 66, 22550	3.3	16

116	The MIPAS HOCl climatology. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 1965-1977	6.8	16
115	Comparison of nighttime nitric oxide 5.3 μ m emissions in the thermosphere measured by MIPAS and SABER. <i>Journal of Geophysical Research</i> , 2007 , 112, n/a-n/a		16
114	Global distributions of HO ₂ NO ₂ as observed by the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS). <i>Journal of Geophysical Research</i> , 2007 , 112,		16
113	Overview: Estimating and reporting uncertainties in remotely sensed atmospheric composition and temperature. <i>Atmospheric Measurement Techniques</i> , 2020 , 13, 4393-4436	4	16
112	Variability of NO _x in the polar middle atmosphere from October 2003 to March 2004: vertical transport vs. local production by energetic particles. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 7681-7692	6.8	15
111	Seasonal and interannual variations in HCN amounts in the upper troposphere and lower stratosphere observed by MIPAS. <i>Atmospheric Chemistry and Physics</i> , 2015 , 15, 563-582	6.8	15
110	Sensitivity of simulated mesospheric transport of nitrogen oxides to parameterized gravity waves. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016 , 121, 12,045-12,061	4.4	15
109	Retrieval of nitric oxide in the mesosphere and lower thermosphere from SCIAMACHY limb spectra. <i>Atmospheric Measurement Techniques</i> , 2013 , 6, 2521-2531	4	14
108	A semi-empirical model for mesospheric and stratospheric NO _y produced by energetic particle precipitation. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 8667-8693	6.8	13
107	Comparison of nitric oxide measurements in the mesosphere and lower thermosphere from ACE-FTS, MIPAS, SCIAMACHY, and SMR. <i>Atmospheric Measurement Techniques</i> , 2015 , 8, 4171-4195	4	13
106	Measurements of polar mesospheric clouds in infrared emission by MIPAS/ENVISAT. <i>Journal of Geophysical Research</i> , 2009 , 114,		13
105	Karlsruhe optimized and precise radiative transfer algorithm: Part III: ADDLIN and TRANSF algorithms for modeling spectral transmittance and radiance 1998 , 3501, 247		13
104	Nighttime ozone variability in the high latitude winter mesosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014 , 119, 13,547-13,564	4.4	12
103	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 October/November 2003. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 2531-2539	6.8	12
102	Non-LTE CO limb emission at in the upper atmosphere of Venus, Mars and Earth: Observations and modeling. <i>Planetary and Space Science</i> , 2011 , 59, 1010-1018	2	12
101	Validation of stratospheric temperatures measured by Michelson Interferometer for Passive Atmospheric Sounding (MIPAS) on Envisat. <i>Journal of Geophysical Research</i> , 2005 , 110,		12
100	MIPAS IMK/IAA CFC-11 (CCl ₃ F) and CFC-12 (CCl ₂ F ₂) measurements: accuracy, precision and long-term stability. <i>Atmospheric Measurement Techniques</i> , 2016 , 9, 3355-3389	4	12
99	Nitrous oxide in the atmosphere: First measurements of a lower thermospheric source. <i>Geophysical Research Letters</i> , 2016 , 43, 2866-2872	4.9	12

98	Atmospheric Effects of >30-keV Energetic Electron Precipitation in the Southern Hemisphere Winter During 2003. <i>Journal of Geophysical Research: Space Physics</i> , 2019 , 124, 8138-8153	2.6	12
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30	A method for merging nadir-sounding climate records, with an application to the global-mean stratospheric temperature data sets from SSU and AMSU		2
29	Mesospheric N_2O enhancements as observed by MIPAS on Envisat during the polar winters in 2002-2004		2
28	Retrieval of temperature, H_2O , O_3 , HNO_3 , CH_4 , N_2O , ClONO_2 , and ClO from MIPAS reduced resolution nominal mode limb emission measurements		2
27	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		2

26	MIPAS measurements of upper tropospheric C ₂ H ₆ and O ₃ during the Southern hemispheric biomass burning season in 2003	2
25	Sulfur dioxide (SO ₂) from MIPAS in the upper troposphere and lower stratosphere 2002-2012	2
24	MIPAS reduced spectral resolution UTLS-1 mode measurements of temperature, O ₃ , HNO ₃ , N ₂ O, H ₂ O and relative humidity over ice: retrievals and comparison to MLS	2
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13	Middle atmospheric changes caused by the January and March 2012 solar proton events	1
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