

Gerald Wetzel

List of Publications by Year in descending order

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60
papers

1,765
citations

304368

22
h-index

329751

37
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69
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69
docs citations

69
times ranked

1204
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Biomass burning pollution in the South Atlantic upper troposphere: GLORIA trace gas observations and evaluation of the CAMS model. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 3675-3691. | 1.9 | 3 |
| 2 | Pollution trace gases C ₂ H ₆ , C ₂ H ₂ , HCOOH, and PAN in the North Atlantic UTLS: observations and simulations. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 8213-8232. | 1.9 | 6 |
| 3 | Retrieval of Water Vapour Profiles from GLORIA Nadir Observations. <i>Remote Sensing</i> , 2021, 13, 3675. | 1.8 | 1 |
| 4 | The Michelson Interferometer for Passive Atmospheric Sounding global climatology of BrONO ₂ ; 2012: a test for stratospheric bromine chemistry. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 18433-18464. | 1.9 | 1 |
| 5 | Phosgene distribution derived from MIPAS ESA v8 data: intercomparisons and trends. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 7959-7974. | 1.2 | 2 |
| 6 | Pollution trace gas distributions and their transport in the Asian monsoon upper troposphere and lowermost stratosphere during the StratoClim campaign 2017. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 14695-14715. | 1.9 | 8 |
| 7 | Differences in ozone retrieval in MIPAS channels A and AB: a spectroscopic issue. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 4707-4723. | 1.2 | 10 |
| 8 | Performance Assessment of Balloon-Borne Trace Gas Sounding with the Terahertz Channel of TELIS. <i>Remote Sensing</i> , 2018, 10, 315. | 1.8 | 2 |
| 9 | Diurnal variations of BrONO ₂ ; observed by MIPAS-B at midlatitudes and in the Arctic. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 14631-14643. | 1.9 | 3 |
| 10 | CCl ₄ distribution derived from MIPAS ESA v7 data: intercomparisons, trend, and lifetime estimation. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 10143-10162. | 1.9 | 8 |
| 11 | MIPAS IMK/IAA carbon tetrachloride (CCl ₄) retrieval and first comparison with other instruments. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 2727-2743. | 1.2 | 2 |
| 12 | 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. | 1.2 | 15 |
| 13 | First detection of ammonia (NH ₃) in the Asian summer monsoon upper troposphere. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 14357-14369. | 1.9 | 51 |
| 14 | Partitioning and budget of inorganic and organic chlorine species observed by MIPAS-B and TELIS in the Arctic in March 2011. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 8065-8076. | 1.9 | 13 |
| 15 | Constraining the N ₂ O ₅ UV absorption cross section from spectroscopic trace gas measurements in the tropical mid-stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 9555-9566. | 1.9 | 4 |
| 16 | Long-term intercomparison of MIPAS additional species ClONO ₂ , N ₂ O ₅ , CFC-11, and CFC-12 with MIPAS-B measurements. <i>Annals of Geophysics</i> , 2014, , . | 0.5 | 6 |
| 17 | Comparison of SMILES ClO profiles with satellite, balloon-borne and ground-based measurements. <i>Atmospheric Measurement Techniques</i> , 2013, 6, 3325-3347. | 1.2 | 11 |
| 18 | Validation of MIPAS-ENVISAT H ₂ O operational data collected between July 2002 and March 2004. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 5791-5811. | 1.9 | 17 |

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|----|--|-----|-----------|
| 19 | 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. | 1.9 | 88 |
| 20 | Diurnal variations of reactive chlorine and nitrogen oxides observed by MIPAS-B inside the January 2010 Arctic vortex. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 6581-6592. | 1.9 | 32 |
| 21 | First remote sensing measurements of ClOOCl along with ClO and ClONO ₂ in activated and deactivated Arctic vortex conditions using new ClOOCl IR absorption cross sections. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 931-945. | 1.9 | 33 |
| 22 | Validation of atmospheric chemistry measurements from MIPAS, SCIAMACHY, GOMOS onboard ENVISAT by observations of balloon-borne MIPAS-B. <i>Science China Earth Sciences</i> , 2010, 53, 1533-1541. | 2.3 | 3 |
| 23 | Validation of temperature measurements from MIPAS-ENVISAT with balloon observations obtained by MIPAS-B. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2010, 72, 837-847. | 0.6 | 2 |
| 24 | 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. | 1.2 | 28 |
| 25 | Spatio-temporal variations of NO _y species in the northern latitudes stratosphere measured with the balloon-borne MIPAS instrument. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 1151-1163. | 1.9 | 10 |
| 26 | Validation of version-4.61 methane and nitrous oxide observed by MIPAS. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 413-442. | 1.9 | 50 |
| 27 | Validation of GOMOS-Envisat vertical profiles of O ₃ , NO ₂ , NO ₃ , and aerosol extinction using balloon-borne instruments and analysis of the retrievals. <i>Journal of Geophysical Research</i> , 2008, 113, . | 3.3 | 32 |
| 28 | Technical Note: Intercomparison of ILAS-II version 2 and 1.4 trace species with MIPAS-B measurements. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 1119-1126. | 1.9 | 12 |
| 29 | Geophysical validation of temperature retrieved by the ESA processor from MIPAS/ENVISAT atmospheric limb-emission measurements. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 4459-4487. | 1.9 | 46 |
| 30 | Validation of MIPAS-ENVISAT NO ₂ operational data. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 3261-3284. | 1.9 | 57 |
| 31 | 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. | 1.9 | 49 |
| 32 | Geophysical validation of MIPAS-ENVISAT operational ozone data. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 4807-4867. | 1.9 | 130 |
| 33 | Validation of nitric acid retrieved by the IMK-IAA processor from MIPAS/ENVISAT measurements. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 721-738. | 1.9 | 31 |
| 34 | Validation of MIPAS ClONO ₂ measurements. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 257-281. | 1.9 | 65 |
| 35 | Validation of MIPAS HNO ₃ operational data. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 4905-4934. | 1.9 | 48 |
| 36 | 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, . | 1.5 | 22 |

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|----|--|-----|-----------|
| 37 | 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, . | 3.3 | 38 |
| 38 | Impact of mesospheric intrusions on ozone-tracer relations in the stratospheric polar vortex. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 18 |
| 39 | Validation of stratospheric nitric acid profiles observed by Improved Limb Atmospheric Spectrometer (ILAS)-II. <i>Journal of Geophysical Research</i> , 2006, 111, . | 3.3 | 24 |
| 40 | Intercomparison and validation of ILAS-II version 1.4 target parameters with MIPAS-B measurements. <i>Journal of Geophysical Research</i> , 2006, 111, . | 3.3 | 32 |
| 41 | Measurements of ClONO ₂ by the Improved Limb Atmospheric Spectrometer (ILAS) in high-latitude stratosphere: New products using version 6.1 data processing algorithm. <i>Journal of Geophysical Research</i> , 2006, 111, . | 3.3 | 17 |
| 42 | Validation of the Improved Limb Atmospheric Spectrometer-II (ILAS-II) Version 1.4 nitrous oxide and methane profiles. <i>Journal of Geophysical Research</i> , 2006, 111, . | 3.3 | 14 |
| 43 | Observation of mesospheric air inside the arctic stratospheric polar vortex in early 2003. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 267-282. | 1.9 | 64 |
| 44 | 3-D microphysical model studies of Arctic denitrification: comparison with observations. <i>Atmospheric Chemistry and Physics</i> , 2005, 5, 3093-3109. | 1.9 | 21 |
| 45 | Validation of CFC-12 measurements from the Improved Limb Atmospheric Spectrometer (ILAS) with the version 6.0 retrieval algorithm. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a. | 3.3 | 17 |
| 46 | Effect of near-IR photolysis of HO ₂ NO ₂ on stratospheric chemistry. <i>Geophysical Research Letters</i> , 2003, 30, n/a-n/a. | 1.5 | 12 |
| 47 | The variation of short-lived NO _y species around sunrise at mid-latitudes as measured by MIPAS-B and calculated by KASIMA. <i>Geophysical Research Letters</i> , 2003, 30, . | 1.5 | 6 |
| 48 | Validation and data characteristics of nitrous oxide and methane profiles observed by the Improved Limb Atmospheric Spectrometer (ILAS) and processed with the Version 5.20 algorithm. <i>Journal of Geophysical Research</i> , 2003, 108, . | 3.3 | 21 |
| 49 | NO _y partitioning and budget and its correlation with N ₂ O in the Arctic vortex and in summer midlatitudes in 1997. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 3-1. | 3.3 | 49 |
| 50 | A characterization of the warm 1999 Arctic winter by observations and modeling: NO _y partitioning and dynamics. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 4-1. | 3.3 | 18 |
| 51 | Validation of NO ₂ and HNO ₃ measurements from the Improved Limb Atmospheric Spectrometer (ILAS) with the version 5.20 retrieval algorithm. <i>Journal of Geophysical Research</i> , 2002, 107, ILS 3-1. | 3.3 | 29 |
| 52 | Evidence of scattering of tropospheric radiation by PSCs in mid-IR limb emission spectra: MIPAS-B observations and KOPRA simulations. <i>Geophysical Research Letters</i> , 2002, 29, 119-1-119-4. | 1.5 | 62 |
| 53 | A comparison of Arctic HNO ₃ profiles measured by the Improved Limb Atmospheric Spectrometer and balloon-borne sensors. <i>Journal of Geophysical Research</i> , 2000, 105, 6761-6771. | 3.3 | 32 |
| 54 | Simultaneous measurements of HDO, H ₂ O, and CH ₄ with MIPAS-B: Hydrogen budget and indication of dehydration inside the polar vortex. <i>Journal of Geophysical Research</i> , 1999, 104, 19213-19225. | 3.3 | 33 |

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|----|---|-----|-----------|
| 55 | Arctic Ozone Loss Due to Denitrification. <i>Science</i> , 1999, 283, 2064-2069. | 6.0 | 214 |
| 56 | Denitrification observed inside the Arctic vortex in February 1995. <i>Journal of Geophysical Research</i> , 1998, 103, 16221-16233. | 3.3 | 44 |
| 57 | Vertical profile and estimated mixing ratios of ClO and HOCl in winter Arctic stratosphere from Michelson interferometer for passive atmospheric sounding limb emission spectra. <i>Journal of Geophysical Research</i> , 1997, 102, 16157-16168. | 3.3 | 36 |
| 58 | Vertical profiles of N ₂ O ₅ , HO ₂ NO ₂ , and NO ₂ inside the Arctic vortex, retrieved from nocturnal MIPAS-B2 infrared limb emission measurements in February 1995. <i>Journal of Geophysical Research</i> , 1997, 102, 19177-19186. | 3.3 | 22 |
| 59 | Remote sensing of trace gases in the midinfrared spectral region from a nadir view. <i>Applied Optics</i> , 1995, 34, 467. | 2.1 | 15 |
| 60 | Vertical profiles of N ₂ O ₅ along with CH ₄ , N ₂ O, and H ₂ O in the late Arctic winter retrieved from MIPAS-B infrared limb emission measurements. <i>Journal of Geophysical Research</i> , 1995, 100, 23173. | 3.3 | 19 |