Thomas Blumenstock

List of Publications by Year
in descending order

137 papers	6,030 citations	81743 39 h-index	114278 63 g-index

212 all docs	212 docs citations	212 times ranked	3122 citing authors

#	Article	IF	Citations
1	Comparisons of the Orbiting Carbon Observatory-2 (OCO-2) <i>X</i>_{CO₂} measurements with TCCON. Atmospheric Measurement Techniques, 2017, 10, 2209-2238.		205
2	Analysis of the instrumental line shape of high-resolution Fourier transform IR spectrometers with gas cell measurements and new retrieval software. Applied Optics, 1999, 38, 3417.	2.1	233
3	The Network for the Detection of Atmospheric Composition Change (NDACC): history, status and perspectives. Atmospheric Chemistry and Physics, 2018, 18, 4935-4964.	1.9	162
4	Validation of ozone measurements from the Atmospheric Chemistry Experiment (ACE). Atmospheric Chemistry and Physics, 2009, 9, 287-343.	1.9	134
5	Geophysical validation of MIPAS-ENVISAT operational ozone data. Atmospheric Chemistry and Physics, 2007, 7, 4807-4867.	1.9	130
6	Calibration of TCCON column-averaged CO₂: the first aircraft campaign over European TCCON sites. Atmospheric Chemistry and Physics, 2011, 11, 10765-10777.	1.9	120
7	Inferring regional sources and sinks of atmospheric CO₂ from GOSAT XCO₂ data. Atmospheric Chemistry and Physics, 2014, 14, 3703-3727.	1.9	120
8	The Greenhouse Gas Climate Change Initiative (GHG-CCI): Comparison and quality assessment of near-surface-sensitive satellite-derived CO2 and CH4 global data sets. Remote Sensing of Environment, 2015, 162, 344-362.	4.6	112
9	Recent Northern Hemisphere stratospheric HCl increase due to atmospheric circulation changes. Nature, 2014, 515, 104-107.	13.7	110
10	Trend analysis of greenhouse gases over Europe measured by a network of ground-based remote FTIR instruments. Atmospheric Chemistry and Physics, 2008, 8, 6719-6727.	1.9	109
11	XCO₂-measurements with a tabletop FTS using solar absorption spectroscopy. Atmospheric Measurement Techniques, 2012, 5, 2969-2980.	1.2	108
12	Continuous quality assessment of atmospheric water vapour measurement techniques: FTIR, Cimel, MFRSR, GPS, and Vaisala RS92. Atmospheric Measurement Techniques, 2010, 3, 323-338.	1.2	107
13	Comparisons between SCIAMACHY and ground-based FTIR data for total columns of CO, CH₄, CO₂ and N₂O. Atmospheric Chemistry and Physics, 2006, 6, 1953-1976.	1.9	103
14	Application of portable FTIR spectrometers for detecting greenhouse gas emissions of the major city Berlin. Atmospheric Measurement Techniques, 2015, 8, 3059-3068.	1.2	96
15	Evaluation of tropospheric and stratospheric ozone trends over Western Europe from ground-based FTIR network observations. Atmospheric Chemistry and Physics, 2008, 8, 6865-6886.	1.9	95
16	An update on ozone profile trends for the period 2000 to 2016. Atmospheric Chemistry and Physics, 2017, 17, 10675-10690.	1.9	93
17	Validation of ACE-FTS v2.2 measurements of HCl, HF, CCl₃F and CCl₂F₂ using space-, balloon- and ground-based instrument observations. Atmospheric Chemistry and Physics, 2008, 8, 6199-6221.	1.9	91
18	Long-term trends of inorganic chlorine from ground-based infrared solar spectra: Past increases and evidence for stabilization. Journal of Geophysical Research, 2003, 108, .	3.3	86

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19	Validation of ACE-FTS v2.2 methane profiles from the upper troposphere to the lower mesosphere. Atmospheric Chemistry and Physics, 2008, 8, 2421-2435.	1.9	85
20	A quantitative assessment of the 1998 carbon monoxide emission anomaly in the Northern Hemisphere based on total column and surface concentration measurements. Journal of Geophysical Research, 2004, 109, .	3.3	82
21	Building the COllaborative Carbon Column Observing Network (COCCON): long-term stability and ensemble performance of the EM27/SUN Fourier transform spectrometer. Atmospheric Measurement Techniques, 2019, 12, 1513-1530.	1.2	82
22	Water vapour profiles by ground-based FTIR spectroscopy: study for an optimised retrieval and its validation. Atmospheric Chemistry and Physics, 2006, 6, 811-830.	1.9	81
23	Ground-based remote sensing of HDO/H₂O ratio profiles: introduction and validation of an innovative retrieval approach. Atmospheric Chemistry and Physics, 2006, 6, 4705-4722.	1.9	76
24	Validation of ACE-FTS N₂O measurements. Atmospheric Chemistry and Physics, 2008, 8, 4759-4786.	1.9	76
25	Trends of ozone total columns and vertical distribution from FTIR observations at eight NDACC stations around the globe. Atmospheric Chemistry and Physics, 2015, 15, 2915-2933.	1.9	76
26	Camtracker: a new camera controlled high precision solar tracker system for FTIR-spectrometers. Atmospheric Measurement Techniques, 2011, 4, 47-54.	1.2	74
27	Ubiquitous atmospheric production of organic acids mediated by cloud droplets. Nature, 2021, 593, 233-237.	13.7	71
28	The Greenhouse Gas Climate Change Initiative (GHG-CCI): comparative validation of GHG-CCI SCIAMACHY/ENVISAT and TANSO-FTS/GOSAT CO₂ and CH₄ retrieval algorithm products with measurements from the TCCON. Atmospheric Measurement Techniques, 2014, 7, 1723-1744.	1.2	70
29	Calibration and instrumental line shape characterization of a set of portable FTIR spectrometers for detecting greenhouse gas emissions. Atmospheric Measurement Techniques, 2015, 8, 3047-3057.	1.2	70
30	Ground-based remote sensing of tropospheric water vapour isotopologues within the project MUSICA. Atmospheric Measurement Techniques, 2012, 5, 3007-3027.	1.2	69
31	TROPOMIâ€“Sentinel-5 Precursor formaldehyde validation using an extensive network of ground-based Fourier-transform infrared stations. Atmospheric Measurement Techniques, 2020, 13, 3751-3767.	1.2	66
32	Validation of NO₂ and NO from the Atmospheric Chemistry Experiment (ACE). Atmospheric Chemistry and Physics, 2008, 8, 5801-5841.	1.9	64
33	Subtropical trace gas profiles determined by ground-based FTIR spectroscopy at IzaÃ±a (28Â° N, 16Â° W): Five-year record, error analysis, and comparison with 3-D CTMs. Atmospheric Chemistry and Physics, 2005, 5, 153-167.	1.9	59
34	Comparisons between ground-based FTIR and MIPAS N₂O and HNO₃ profiles before and after assimilation in BASCOE. Atmospheric Chemistry and Physics, 2007, 7, 377-396.	1.9	59
35	Validation of MIPAS-ENVISAT NO₂ operational data. Atmospheric Chemistry and Physics, 2007, 7, 3261-3284.	1.9	57
36	Validation of methane and carbon monoxide from Sentinel-5 Precursor using TCCON and NDACC-IRWG stations. Atmospheric Measurement Techniques, 2021, 14, 6249-6304.	1.2	57

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37	A multi-instrument comparison of integrated water vapour measurements at a high latitude site. Atmospheric Chemistry and Physics, 2012, 12, 10925-10943.	1.9	55
38	Calibration of column-averaged CH₄ over European TCCON FTS sites with airborne in-situ measurements. Atmospheric Chemistry and Physics, 2012, 12, 8763-8775.	1.9	55
39	Carbon monoxide (CO) and ethane (C₂H₆) trends from ground-based solar FTIR measurements at six European stations, comparison and sensitivity analysis with the EMEP model. Atmospheric Chemistry and Physics, 2011, 11, 9253-9269.	1.9	53
40	Comparison of ground-based Brewer and FTIR total column O₃ monitoring techniques. Atmospheric Chemistry and Physics, 2008, 8, 5535-5550.	1.9	51
41	COVIDâ€19 Crisis Reduces Free Tropospheric Ozone Across the Northern Hemisphere. Geophysical Research Letters, 2021, 48, e2020GL091987.	1.5	51
42	Validation of version-4.61 methane and nitrous oxide observed by MIPAS. Atmospheric Chemistry and Physics, 2009, 9, 413-442.	1.9	50
43	The ground-based FTIR network's potential for investigating the atmospheric water cycle. Atmospheric Chemistry and Physics, 2010, 10, 3427-3442.	1.9	50
44	Comparison of ground-based FTIR and Brewer O₃ total column with data from two different IASI algorithms and from OMI and GOME-2 satellite instruments. Atmospheric Measurement Techniques, 2011, 4, 535-546.	1.2	49
45	Validation of MIPAS HNO₃ operational data. Atmospheric Chemistry and Physics, 2007, 7, 4905-4934.	1.9	48
46	Quality assessment of O₃ profiles measured by a state-of-the-art ground-based FTIR observing system. Atmospheric Chemistry and Physics, 2008, 8, 5579-5588.	1.9	48
47	Long-term validation of tropospheric column-averaged CH₄ mole fractions obtained by mid-infrared ground-based FTIR spectrometry. Atmospheric Measurement Techniques, 2012, 5, 1425-1441.	1.2	48
48	A new method to detect long term trends of methane (CH₄) and nitrous oxide (N₂O) total columns measured within the NDACC ground-based high resolution solar FTIR network. Atmospheric Chemistry and Physics, 2011, 11, 6167-6183.	1.9	46
49	Investigating the long-term evolution of subtropical ozone profiles applying ground-based FTIR spectrometry. Atmospheric Measurement Techniques, 2012, 5, 2917-2931.	1.2	46
50	Validation of IASI FORLI carbon monoxide retrievals using FTIR data from NDACC. Atmospheric Measurement Techniques, 2012, 5, 2751-2761.	1.2	45
51	Validation of MOPITT carbon monoxide using ground-based Fourier transform infrared spectrometer data from NDACC. Atmospheric Measurement Techniques, 2017, 10, 1927-1956.	1.2	44
52	Accomplishments of the MUSICA project to provide accurate, long-term, global and high-resolution observations of tropospheric {H₂O,<i>Î´</i>D} pairs â€“ a review. Atmospheric Measurement Techniques, 2016, 9, 2845-2875.	1.2	42
53	Accurate mobile remote sensing of XCO₂ and XCH₄ latitudinal transects from aboard a research vessel. Atmospheric Measurement Techniques, 2015, 8, 5023-5038.	1.2	41
54	Bias corrections of GOSAT SWIR XCO₂ and XCH₄ with TCCON data and their evaluation using aircraft measurement data. Atmospheric Measurement Techniques, 2016, 9, 3491-3512.	1.2	40

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55	Using XCO₂ retrievals for assessing the long-term consistency of NDACC/FTIR data sets. Atmospheric Measurement Techniques, 2015, 8, 1555-1573.	1.2	39
56	Addition of a channel for XCO observations to a portable FTIR spectrometer for greenhouse gas measurements. Atmospheric Measurement Techniques, 2016, 9, 2303-2313.	1.2	39
57	Tropospheric CH₄ signals as observed by NDACC FTIR at globally distributed sites and comparison to GAW surface in situ measurements. Atmospheric Measurement Techniques, 2014, 7, 2337-2360.	1.2	38
58	Observation of unusual chlorine activation by ground-based infrared and microwave spectroscopy in the late Arctic winter 2000/01. Atmospheric Chemistry and Physics, 2006, 6, 897-905.	1.9	37
59	NDACC harmonized formaldehyde time series from 21 FTIR stations covering a wide range of column abundances. Atmospheric Measurement Techniques, 2018, 11, 5049-5073.	1.2	37
60	Calibration of sealed HCl cells used for TCCON instrumental line shape monitoring. Atmospheric Measurement Techniques, 2013, 6, 3527-3537.	1.2	36
61	On the use of HF as a reference for the comparison of stratospheric observations and models. Journal of Geophysical Research, 1997, 102, 12901-12919.	3.3	35
62	XCO₂ in an emission hot-spot region: the COCCON Paris campaign 2015. Atmospheric Chemistry and Physics, 2019, 19, 3271-3285.	1.9	35
63	Annual variation of strato-mesospheric carbon monoxide measured by ground-based Fourier transform infrared spectrometry. Atmospheric Chemistry and Physics, 2007, 7, 1305-1312.	1.9	34
64	Observations of precipitable water vapour over complex topography of Ethiopia from ground-based GPS, FTIR, radiosonde and ERA-Interim reanalysis. Atmospheric Measurement Techniques, 2015, 8, 3277-3295.	1.2	34
65	Separation of Methane Emissions From Agricultural and Natural Gas Sources in the Colorado Front Range. Geophysical Research Letters, 2019, 46, 3990-3998.	1.5	34
66	Ozone profiles and total column amounts derived at IzaÃ±a, Tenerife Island, from FTIR solar absorption spectra, and its validation by an intercomparison to ECC-sonde and Brewer spectrometer measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 91, 245-274.	1.1	33
67	The recent increase of atmospheric methane from 10 years of ground-based NDACC FTIR observations since 2005. Atmospheric Chemistry and Physics, 2017, 17, 2255-2277.	1.9	33
68	Validation of nitric acid retrieved by the IMK-IAA processor from MIPAS/ENVISAT measurements. Atmospheric Chemistry and Physics, 2007, 7, 721-738.	1.9	31
69	Validation of five years (2003â€“2007) of SCIAMACHY CO total column measurements using ground-based spectrometer observations. Atmospheric Measurement Techniques, 2010, 3, 1457-1471.	1.2	31
70	Ground-based FTIR observation of hydrogen chloride (HCl) over Hefei, China, and comparisons with GEOS-Chem model data and other ground-based FTIR stations data. Optics Express, 2020, 28, 8041.	1.7	29
71	Comparisons between ACE-FTS and ground-based measurements of stratospheric HCl and ClONO2loadings at northern latitudes. Geophysical Research Letters, 2005, 32, .	1.5	28
72	Intercomparison of low- and high-resolution infrared spectrometers for ground-based solar remote sensing measurements of total column concentrations of CO₂, CH₄, and CO. Atmospheric Measurement Techniques, 2020, 13, 4791-4839.	1.2	28

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73	Column amounts of trace gases derived from groundâ€based measurements with MIPAS during CHEOPS III. Geophysical Research Letters, 1991, 18, 783-786.	1.5	27
74	The MUSICA MetOp/IASI H₂O and ÎD products: characterisation and long-term comparison to NDACC/FTIR data. Atmospheric Measurement Techniques, 2014, 7, 2719-2732.	1.2	27
75	Detection and attribution of wildfire pollution in the Arctic and northern midlatitudes using a network of Fourier-transform infrared spectrometers and GEOS-Chem. Atmospheric Chemistry and Physics, 2020, 20, 12813-12851.	1.9	26
76	Tropospheric water vapour isotopologue data (H₂¹⁶O,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	3.7	26
	Earth System Science Data, 2017, 9, 15-29.		
77	Technical Note: Latitude-time variations of atmospheric column-average dry air mole fractions of CO₂, CH₄ and N₂O. Atmospheric Chemistry and Physics, 2012, 12, 7767-7777.	1.9	25
78	First results of ground-based FTIR measurements of atmospheric trace gases in north Sweden and Greenland during EASOE. Geophysical Research Letters, 1994, 21, 1343-1346.	1.5	24
79	Empirical validation and proof of added value of MUSICA's tropospheric ÎD remote sensing products. Atmospheric Measurement Techniques, 2015, 8, 483-503.	1.2	24
80	Vortexwide denitrification of the Arctic polar stratosphere in winter 1999/2000 determined by remote observations. Journal of Geophysical Research, 2002, 107, SOL 48-1-SOL 48-11.	3.3	23
81	Ground-based FTIR observations of chlorine activation and ozone depletion inside the Arctic vortex during the winter of 1999/2000. Journal of Geophysical Research, 2002, 107, SOL 6-1.	3.3	23
82	Evaluation of column-averaged methane in models and TCCON with a focus on the stratosphere. Atmospheric Measurement Techniques, 2016, 9, 4843-4859.	1.2	23
83	Improved retrieval of gas abundances from near-infrared solar FTIR spectra measured at the Karlsruhe TCCON station. Atmospheric Measurement Techniques, 2016, 9, 669-682.	1.2	23
84	Emission Monitoring Mobile Experiment (EMME): an overview and first results of the St.ÂPetersburg megacity campaign 2019. Atmospheric Measurement Techniques, 2021, 14, 1047-1073.	1.2	23
85	Intercomparison of atmospheric CO₂ and CH₄ abundances on regional scales in boreal areas using Copernicus Atmosphere Monitoring Service (CAMS) analysis, COllaborative Carbon Column Observing Network (COCCON) spectrometers, and Sentinel-5 Precursor satellite observations. Atmospheric Measurement Techniques, 2020, 13, 4751-4771.	1.2	23
86	A method to correct sampling ghosts in historic near-infrared Fourier transform spectrometer (FTS) measurements. Atmospheric Measurement Techniques, 2013, 6, 1981-1992.	1.2	22
87	Quality controls, bias, and seasonality of CO₂ columns in the boreal forest with Orbiting Carbon Observatory-2, Total Carbon Column Observing Network, and EM27/SUN measurements. Atmospheric Measurement Techniques, 2020, 13, 5033-5063.	1.2	22
88	Evidence of reduced measurement uncertainties from an FTIR instrument intercomparison at Kiruna, Sweden. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 96, 75-84.	1.1	21
89	Trends of HCl, ClONO₂, and HF column abundances from ground-based FTIR measurements in Kiruna (Sweden) in comparison with KASIMA model calculations. Atmospheric Chemistry and Physics, 2011, 11, 4669-4677.	1.9	21
90	Quantification of CH₄ emissions from waste disposal sites near the city of Madrid using ground- and space-based observations of COCCON, TROPOMI and IASI. Atmospheric Chemistry and Physics, 2022, 22, 295-317.	1.9	21

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91	Consistency and quality assessment of the Metop-A/IASI and Metop-B/IASI operational trace gas products (O₃, CO, N₂O,) Tj ETQq1 1 0.784314 rg subtropical North Atlantic. Atmospheric Measurement Techniques, 2016, 9, 2315-2333.	1.2	20
92	Comparison of ILAS-II and ground-based FTIR measurements of O3, HNO3, N2O, and CH4over Kiruna, Sweden. Journal of Geophysical Research, 2006, 111, .	3.3	19
93	Evolution of ozone and ozone-related species over Kiruna during the SOLVE/THESEO 2000 campaign retrieved from ground-based millimeter-wave and infrared observations. Journal of Geophysical Research, 2002, 107, SOL 51-1-SOL 51-12.	3.3	18
94	The MUSICA IASI CH₄ and N₂O products and their comparison to HIPPO, GAW and NDACC FTIR references. Atmospheric Measurement Techniques, 2018, 11, 4171-4215.	1.2	18
95	Variability in the Gas Composition of the PopocatÃ©petl Volcanic Plume. Frontiers in Earth Science, 2019, 7, .	0.8	18
96	Remote sensing of water vapour profiles in the framework of the Total Carbon Column Observing Network (TCCON). Atmospheric Measurement Techniques, 2010, 3, 1785-1795.	1.2	17
97	Validation of SCIAMACHY HDO/H₂O measurements using the TCCON and NDACC-MUSICA networks. Atmospheric Measurement Techniques, 2015, 8, 1799-1818.	1.2	17
98	Comparison of XCO abundances from the Total Carbon Column Observing Network and the Network for the Detection of Atmospheric Composition Change measured in Karlsruhe. Atmospheric Measurement Techniques, 2016, 9, 2223-2239.	1.2	17
99	Quality assessment of integrated water vapour measurements at the St. Petersburg site, Russia: FTIR vs. MW and GPS techniques. Atmospheric Measurement Techniques, 2017, 10, 4521-4536.	1.2	17
100	An intercomparison of total column-averaged nitrous oxide between ground-based FTIR TCCON and NDACC measurements at seven sites and comparisons with the GEOS-Chem model. Atmospheric Measurement Techniques, 2019, 12, 1393-1408.	1.2	17
101	Fourier transform infrared time series of tropospheric HCN in eastern China: seasonality, interannual variability, and source attribution. Atmospheric Chemistry and Physics, 2020, 20, 5437-5456.	1.9	17
102	Simultaneous retrieval of atmospheric CO‹sub›2‹/sub› and light path modification from space-based spectroscopic observations of greenhouse gases: methodology and application to GOSAT measurements over TCCON sites. Applied Optics, 2013, 52, 1339.	0.9	15
103	Mountain polar stratospheric cloud measurements by Ground Based FTIR Solar Absorption Spectroscopy. Geophysical Research Letters, 2001, 28, 2189-2192.	1.5	14
104	Observed Hemispheric Asymmetry in Stratospheric Transport Trends From 1994 to 2018. Geophysical Research Letters, 2020, 47, e2020GL088567.	1.5	13
105	Effects of the self-emission of an IR Fourier-transform spectrometer on measured absorption spectra. Applied Optics, 1996, 35, 6203.	2.1	12
106	The exploitation of ground-based Fourier transform infrared observations for the evaluation of tropospheric trends of greenhouse gases over Europe. Journal of Integrative Environmental Sciences, 2005, 2, 283-293.	0.8	12
107	Nitric acid measurements at Eureka obtained in winter 2001â€“2002 using solar and lunar Fourier transform infrared absorption spectroscopy: Comparisons with observations at Thule and Kiruna and with results from three-dimensional models. Journal of Geophysical Research, 2007, 112, .	3.3	12
108	The CO₂ integral emission by the megacity of St Petersburg as quantified from ground-based FTIR measurements combined with dispersion modelling. Atmospheric Chemistry and Physics, 2021, 21, 10939-10963.	1.9	12

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109	Long-term column-averaged greenhouse gas observations using a COCCON spectrometer at the high-surface-albedo site in Gobabeb, Namibia. Atmospheric Measurement Techniques, 2021, 14, 5887-5911.	1.2	12
110	Global Atmospheric OCS Trend Analysis From 22 NDACC Stations. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	12
111	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.	1.2	11
112	Twenty years of ground-based NDACC FTIR spectrometry at IzaÃ±a Observatory â€“ overview and long-term comparison to other techniques. Atmospheric Chemistry and Physics, 2021, 21, 15519-15554.	1.9	11
113	Atmospheric ammonia (NH₃) over the Paris megacity: 9Âyears of total column observations from ground-based infrared remote sensing. Atmospheric Measurement Techniques, 2020, 13, 3923-3937.	1.2	10
114	Spatial distributions of <i>X</i>_{CO₂} seasonal cycle amplitude and phase over northern high-latitude regions. Atmospheric Chemistry and Physics, 2021, 21, 16661-16687.	1.9	10
115	Improved calibration procedures for the EM27/SUN spectrometers of the COllaborative Carbon Column Observing Network (COCCON). Atmospheric Measurement Techniques, 2022, 15, 2433-2463.	1.2	10
116	Tropospheric and total ozone columns over Paris (France) measured using medium-resolution ground-based solar-absorption Fourier-transform infrared spectroscopy. Atmospheric Measurement Techniques, 2011, 4, 2323-2331.	1.2	9
117	Quality assessment of ozone total column amounts as monitored by ground-based solar absorption spectrometry in the near infrared (> 3000 cm^{â^'1}). Atmospheric Measurement Techniques, 2014, 7, 3071-3084.	1.2	9
118	Ground-based remote sensing of O₃ by high- and medium-resolution FTIR spectrometers over the Mexico City basin. Atmospheric Measurement Techniques, 2017, 10, 2703-2725.	1.2	9
119	Characterization and potential for reducing optical resonances in Fourier transform infrared spectrometers of the Network for the Detection of Atmospheric Composition Change (NDACC). Atmospheric Measurement Techniques, 2021, 14, 1239-1252.	1.2	9
120	Evidence for the removal of gaseous HNO3inside the arctic polar vortex in January 1992. Geophysical Research Letters, 1996, 23, 149-152.	1.5	8
121	Background CO₂ levels and error analysis from ground-based solar absorption IR measurements in central Mexico. Atmospheric Measurement Techniques, 2017, 10, 2425-2434.	1.2	8
122	Column Amounts and Some Information on the Vertical Distribution of Trace Gases in the Late North Polar Winter 1990. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1992, 96, 272-276.	0.9	7
123	Intercomparison of stratospheric nitrogen dioxide columns retrieved from ground-based DOAS and FTIR and satellite DOAS instruments over the subtropical Izana station. Atmospheric Measurement Techniques, 2016, 9, 4471-4485.	1.2	7
124	Application of a radiometric calibration method to lunar Fourier transform IR spectra by using a liquid-nitrogen-cooled high-emissivity blackbody. Applied Optics, 1997, 36, 8168.	2.1	6
125	MIPAS-Transall Observations of the Variability of CLONO2 during the Arctic Winter of 1994/95. Journal of Atmospheric Chemistry, 1998, 30, 81-101.	1.4	6
126	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

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127	Winter to winter variability of chlorine activation and ozone loss as observed by ground-based FTIR measurements at Kiruna since winter 1993/94. International Journal of Remote Sensing, 2009, 30, 4055-4064.	1.3	6
128	Intercomparison of arctic XH₂O observations from three ground-based Fourier transform infrared networks and application for satellite validation. Atmospheric Measurement Techniques, 2021, 14, 1993-2011.	1.2	6
129	Validation of the IASI operational CH4 and N2O products using ground-based Fourier Transform Spectrometer: preliminary results at the IzaÃ±a Observatory (28ÂºN, 17ÂºW). Annals of Geophysics, 2014, , .	0.5	6
130	Investigation of spaceborne trace gas products over StÂPetersburg and Yekaterinburg, Russia, by using COllaborative Column Carbon Observing Network (COCCON) observations. Atmospheric Measurement Techniques, 2022, 15, 2199-2229.	1.2	5
131	Spectral Aerosol Optical Depth Retrievals by Ground-Based Fourier Transform Infrared Spectrometry. Remote Sensing, 2020, 12, 3148.	1.8	4
132	Formaldehyde total column densities over Mexico City: comparison between multi-axis differential optical absorption spectroscopy and solar-absorption Fourier transform infrared measurements. Atmospheric Measurement Techniques, 2021, 14, 595-613.	1.2	4
133	Methane and nitrous oxide from ground-based FTIR at Addis Ababa: observations, error analysis, and comparison with satellite data. Atmospheric Measurement Techniques, 2020, 13, 4079-4096.	1.2	4
134	Improved ozone monitoring by ground-based FTIR spectrometry. Atmospheric Measurement Techniques, 2022, 15, 2557-2577.	1.2	4
135	Column amounts of trace gases measured by ground-based FTIR spectroscopy during the EASOE campaign. , 1994, 2089, 532.		3
136	Mixing layer height measurements determines influence of meteorology on air pollutant concentrations in urban area. , 2015, , .		2
137	A compact and low resolution spectrometer for the inversion of water vapor total column amounts. , 2013, , .		0