Emmanuel Mahieu

List of Publications by Year
in descending order

157 papers	7,295 citations	61984 43 h-index	85541 71 g-index
227 all docs	227 docs citations	227 times ranked	4209 citing authors

#	Article	IF	Citations
1	Atmospheric Chemistry Experiment (ACE): Mission overview. Geophysical Research Letters, 2005, 32, .	4.0	768
2	Stratospheric aerosol-Observations, processes, and impact on climate. Reviews of Geophysics, 2016, 54, 278-335.	23.0	265
3	Tropospheric Ozone Assessment Report: Present-day distribution and trends of tropospheric ozone relevant to climate and global atmospheric chemistry model evaluation. Elementa, 2018, 6, .	3.2	240
4	Northern and southern hemisphere ground-based infrared spectroscopic measurements of tropospheric carbon monoxide and ethane. Journal of Geophysical Research, 1998, 103, 28197-28217.	3.3	225
5	The Atmospheric Trace Molecule Spectroscopy (ATMOS) Experiment: Deployment on the ATLAS space shuttle missions. Geophysical Research Letters, 1996, 23, 2333-2336.	4.0	192
6	Reversal of global atmospheric ethane and propane trends largely due to US oil and natural gas production. Nature Geoscience, 2016, 9, 490-495.	12.9	149
7	Validation of ozone measurements from the Atmospheric Chemistry Experiment (ACE). Atmospheric Chemistry and Physics, 2009, 9, 287-343.	4.9	134
8	Increased Northern Hemispheric carbon monoxide burden in the troposphere in 2002 and 2003 detected from the ground and from space. Atmospheric Chemistry and Physics, 2005, 5, 563-573.	4.9	131
9	Past changes in the vertical distribution of ozone â€“ Part 3: Analysis and interpretation of trends. Atmospheric Chemistry and Physics, 2015, 15, 9965-9982.	4.9	115
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	Atmospheric Trace Molecule Spectroscopy (ATMOS) Experiment Version 3 data retrievals. Applied Optics, 2002, 41, 6968.	2.1	111
12	Recent Northern Hemisphere stratospheric HCl increase due to atmospheric circulation changes. Nature, 2014, 515, 104-107.	27.8	110
13	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.	4.9	109
14	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
15	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.	4.9	103
16	An update on ozone profile trends for the period 2000 to 2016. Atmospheric Chemistry and Physics, 2017, 17, 10675-10690.	4.9	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.	4.9	91
18	The 1985 chlorine and fluorine inventories in the stratosphere based on ATMOS observations at 30ï¿½ north latitude. Journal of Atmospheric Chemistry, 1992, 15, 171-186.	3.2	88

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19	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
20	Validation of ACE-FTS v2.2 methane profiles from the upper troposphere to the lower mesosphere. Atmospheric Chemistry and Physics, 2008, 8, 2421-2435.	4.9	85
21	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
22	Our changing atmosphere: Evidence based on long-term infrared solar observations at the Jungfraujoch since 1950. Science of the Total Environment, 2008, 391, 184-195.	8.0	82
23	Evaluating ethane and methane emissions associated with the development of oil and natural gas extraction in North America. Environmental Research Letters, 2016, 11, 044010.	5.2	82
24	Title is missing!. Journal of Atmospheric Chemistry, 1997, 28, 227-243.	3.2	80
25	Free tropospheric CO, C2H6, and HCN above central Europe: Recent measurements from the Jungfraujoch station including the detection of elevated columns during 1998. Journal of Geophysical Research, 2000, 105, 24235-24249.	3.3	80
26	Validation of ACE-FTS N₂O measurements. Atmospheric Chemistry and Physics, 2008, 8, 4759-4786.	4.9	76
27	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.	4.9	76
28	Validation of HNO₃, ClONO₂, and N₂O₅ from the Atmospheric Chemistry Experiment Fourier Transform Spectrometer (ACE-FTS). Atmospheric Chemistry and Physics, 2008, 8, 3529-3562.	4.9	75
29	Observed and simulated time evolution of HCl, ClONO₂, and HF total column abundances. Atmospheric Chemistry and Physics, 2012, 12, 3527-3556.	4.9	72
30	Improved spectral fitting of nitrogen dioxide from OMI in the 405â€“465 nm window. Atmospheric Measurement Techniques, 2015, 8, 1685-1699.	3.1	71
31	Ubiquitous atmospheric production of organic acids mediated by cloud droplets. Nature, 2021, 593, 233-237.	27.8	71
32	The 1994 northern midlatitude budget of stratospheric chlorine derived from ATMOS/ATLAS-3 observations. Geophysical Research Letters, 1996, 23, 2357-2360.	4.0	68
33	TROPOMIâ€“Sentinel-5 Precursor formaldehyde validation using an extensive network of ground-based Fourier-transform infrared stations. Atmospheric Measurement Techniques, 2020, 13, 3751-3767.	3.1	66
34	Validation of MIPAS ClONO₂ measurements. Atmospheric Chemistry and Physics, 2007, 7, 257-281.	4.9	65
35	Technical Note: Harmonized retrieval of column-integrated atmospheric water vapor from the FTIR network â€“ first examples for long-term records and station trends. Atmospheric Chemistry and Physics, 2009, 9, 8987-8999.	4.9	65
36	Technical Note: New ground-based FTIR measurements at Ile de La RÃ©union: observations, error analysis, and comparisons with independent data. Atmospheric Chemistry and Physics, 2008, 8, 3483-3508.	4.9	61

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37	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.	4.9	59
38	Validation of methane and carbon monoxide from Sentinel-5 Precursor using TCCON and NDACC-IRWG stations. Atmospheric Measurement Techniques, 2021, 14, 6249-6304.	3.1	57
39	Observations of long-lived anthropogenic halocarbons at the high-Alpine site of Jungfraujoch (Switzerland) for assessment of trends and European sources. Science of the Total Environment, 2008, 391, 224-231.	8.0	56
40	What drives the observed variability of HCN in the troposphere and lower stratosphere?. Atmospheric Chemistry and Physics, 2009, 9, 8531-8543.	4.9	55
41	A global inventory of stratospheric chlorine in 2004. Journal of Geophysical Research, 2006, 111, .	3.3	53
42	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.	4.9	53
43	Heterogeneous conversion of N2O5to HNO3in the post-Mount Pinatubo eruption stratosphere. Journal of Geophysical Research, 1994, 99, 8213.	3.3	51
44	COVIDâ€‐19 Crisis Reduces Free Tropospheric Ozone Across the Northern Hemisphere. Geophysical Research Letters, 2021, 48, e2020GL091987.	4.0	51
45	Validation of version-4.61 methane and nitrous oxide observed by MIPAS. Atmospheric Chemistry and Physics, 2009, 9, 413-442.	4.9	50
46	Multiyear infrared solar spectroscopic measurements of HCN, CO, C2H6, and C2H2tropospheric columns above Lauder, New Zealand (45Â°S latitude). Journal of Geophysical Research, 2002, 107, ACH 1-1.	3.3	48
47	Ground-based FTIR measurements of CO from the Jungfraujoch: characterisation and comparison with in situ surface and MOPITT data. Atmospheric Chemistry and Physics, 2003, 3, 2217-2223.	4.9	48
48	Validation of MIPAS HNO₃ operational data. Atmospheric Chemistry and Physics, 2007, 7, 4905-4934.	4.9	48
49	Free tropospheric measurements of formic acid (HCOOH) from infrared ground-based solar absorption spectra: Retrieval approach, evidence for a seasonal cycle, and comparison with model calculations. Journal of Geophysical Research, 2004, 109, .	3.3	46
50	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.	4.9	46
51	Validation of IASI FORLI carbon monoxide retrievals using FTIR data from NDACC. Atmospheric Measurement Techniques, 2012, 5, 2751-2761.	3.1	45
52	Validation of MOPITT carbon monoxide using ground-based Fourier transform infrared spectrometer data from NDACC. Atmospheric Measurement Techniques, 2017, 10, 1927-1956.	3.1	44
53	Polar stratospheric descent of NOyand CO and Arctic denitrification during winter 1992-1993. Journal of Geophysical Research, 1999, 104, 1847-1861.	3.3	43
54	Revisiting global fossil fuel and biofuel emissions of ethane. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2493-2512.	3.3	43

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55	First space-based observations of formic acid (HCOOH): Atmospheric Chemistry Experiment austral spring 2004 and 2005 Southern Hemisphere tropical-mid-latitude upper tropospheric measurements. Geophysical Research Letters, 2006, 33, .	4.0	42
56	Using XCO₂ retrievals for assessing the long-term consistency of NDACC/FTIR data sets. Atmospheric Measurement Techniques, 2015, 8, 1555-1573.	3.1	39
57	ATMOS/ATLAS 3 INFRARED PROFILE MEASUREMENTS OF TRACE GASES IN THE NOVEMBER 1994 TROPICAL AND SUBTROPICAL UPPER TROPOSPHERE. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 60, 891-901.	2.3	38
58	Retrievals of formaldehyde from ground-based FTIR and MAX-DOAS observations at the Jungfraujoch station and comparisons with GEOS-Chem and IMAGES model simulations. Atmospheric Measurement Techniques, 2015, 8, 1733-1756.	3.1	38
59	Groundâ€based infrared measurements of carbonyl sulfide total column abundances: Longâ€term trends and variability. Journal of Geophysical Research, 1992, 97, 5995-6002.	3.3	37
60	Vertical column abundances of HCN deduced from ground-based infrared solar spectra: Long-term trend and variability. Journal of Atmospheric Chemistry, 1995, 20, 299-310.	3.2	37
61	ATMOS/ATLAS-3 measurements of stratospheric chlorine and reactive nitrogen partitioning inside and outside the November 1994 Antarctic Vortex. Geophysical Research Letters, 1996, 23, 2365-2368.	4.0	37
62	Ground-based infrared spectroscopic measurements of carbonyl sulfide: Free tropospheric trends from a 24-year time series of solar absorption measurements. Journal of Geophysical Research, 2002, 107, ACH 24-1.	3.3	37
63	Trends of HF, HCl, CCl2F2, CCl3F, CHClF2(HCFC-22), and SF6in the lower stratosphere from Atmospheric Chemistry Experiment (ACE) and Atmospheric Trace Molecule Spectroscopy (ATMOS) measurements near 30Â°N latitude. Geophysical Research Letters, 2005, 32, .	4.0	36
64	Increase in levels of stratospheric chlorine and fluorine loading between 1985 and 1992. Geophysical Research Letters, 1994, 21, 2223-2226.	4.0	35
65	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
66	Hydrogen fluoride total and partial column time series above the Jungfraujoch from longâ€term FTIR measurements: Impact of the lineâ€shape model, characterization of the error budget and seasonal cycle, and comparison with satellite and model data. Journal of Geophysical Research, 2010, 115, .	3.3	34
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.	4.9	33
68	Post-Mount Pinatubo eruption ground-based infrared stratospheric column measurements of HNO3, NO, and NO2and their comparison with model calculations. Journal of Geophysical Research, 2003, 108, .	3.3	32
69	Retrieval of ammonia from ground-based FTIR solar spectra. Atmospheric Chemistry and Physics, 2015, 15, 12789-12803.	4.9	32
70	Retrieval of ethane from ground-based FTIR solar spectra using improved spectroscopy: Recent burden increase above Jungfraujoch. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 160, 36-49.	2.3	32
71	Validation of five years (2003â€"2007) of SCIAMACHY CO total column measurements using ground-based spectrometer observations. Atmospheric Measurement Techniques, 2010, 3, 1457-1471.	3.1	31
72	Atmospheric CO and CH₄ time series and seasonal variations on Reunion Island from ground-based in situ and FTIR (NDACC and TCCON) measurements. Atmospheric Chemistry and Physics, 2018, 18, 13881-13901.	4.9	31

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73	Line narrowing effect on the retrieval of HF and HCl vertical profiles from ground-based FTIR measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 95, 499-519.	2.3	30
74	Increase of stratospheric carbon tetrafluoride (CF4) based on ATMOS observations from space. Geophysical Research Letters, 1996, 23, 2353-2356.	4.0	29
75	Comparisons between ACE-FTS and ground-based measurements of stratospheric HCl and ClONO2loadings at northern latitudes. Geophysical Research Letters, 2005, 32, .	4.0	28
76	Self-broadening coefficients and improved line intensities for the Î½7 band of ethylene near <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0019.gif" overflow="scroll"><mml:mn>10.5</mml:mn><mml:mspace width="0.25em" /><mml:mi mathvariant="normal">Î¼</mml:mi><mml:mi mathvariant="normal">m</mml:mi></mml:math>, and impact on ethylene retrievals from Jungfraujoch solar spectra. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 148, 177-185.	2.3	28
77	Seasonal variability of surface and column carbon monoxide over the megacity Paris, high-altitude Jungfraujoch and Southern Hemispheric Wollongong stations. Atmospheric Chemistry and Physics, 2016, 16, 10911-10925.	4.9	28
78	Evolution of a dozen non-CO2 greenhouse gases above central Europe since the mid-1980s. Journal of Integrative Environmental Sciences, 2005, 2, 295-303.	0.8	27
79	Analysis of stratospheric NO₂ trends above Jungfraujoch using ground-based UV-visible, FTIR, and satellite nadir observations. Atmospheric Chemistry and Physics, 2012, 12, 8851-8864.	4.9	27
80	Increase of carbonyl fluoride (COF2) in the stratosphere and its contribution to the 1992 budget of inorganic fluorine in the upper stratosphere. Journal of Geophysical Research, 1994, 99, 16737.	3.3	26
81	Secular trend and seasonal variability of the column abundance of N2O above the Jungfraujoch station determined from IR solar spectra. Journal of Geophysical Research, 1994, 99, 16745.	3.3	26
82	Profiles of stratospheric chlorine nitrate (ClONO2) from atmospheric trace molecule spectroscopy/ATLAS 1 infrared solar occultation spectra. Journal of Geophysical Research, 1994, 99, 18895.	3.3	26
83	Formic acid above the Jungfraujoch during 1985â€“2007: observed variability, seasonality, but no long-term background evolution. Atmospheric Chemistry and Physics, 2010, 10, 10047-10065.	4.9	26
84	Comparison of mean age of air in five reanalyses using the BASCOE transport model. Atmospheric Chemistry and Physics, 2018, 18, 14715-14735.	4.9	26
85	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.	4.9	26
86	Tropospheric water vapour isotopologue data (H₂¹⁶O,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2 Earth System Science Data, 2017, 9, 15-29.	9.9	26
87	Trends of OCS, HCN, SF6, CHClF2(HCFC-22) in the lower stratosphere from 1985 and 1994 Atmospheric Trace Molecule Spectroscopy Experiment measurements near 30Â°N latitude. Geophysical Research Letters, 1996, 23, 2349-2352.	4.0	25
88	Ground-based infrared solar spectroscopic measurements of carbon monoxide during 1994 Measurement of Air Pollution From Space flights. Journal of Geophysical Research, 1998, 103, 19317-19325.	3.3	23
89	Enhanced tropospheric HCN columns above Kitt Peak during the 1982â€“1983 and 1997â€“1998 El NiÃ±o warm phases. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 69, 3-8.	2.3	22
90	The A1Î-X1Î£+ transition of AlCl. Journal of Molecular Spectroscopy, 1989, 134, 317-328.	1.2	21

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91	Biomass Burning Unlikely to Account for Missing Source of Carbonyl Sulfide. Geophysical Research Letters, 2019, 46, 14912-14920.	4.0	21
92	Spaceborne Measurements of Formic and Acetic Acids: A Global View of the Regional Sources. Geophysical Research Letters, 2020, 47, e2019GL086239.	4.0	21
93	1997â€"2007 CO trend at the high Alpine site Jungfraujoch: a comparison between NDIR surface in situ and FTIR remote sensing observations. Atmospheric Chemistry and Physics, 2011, 11, 6735-6748.	4.9	20
94	Towards understanding the variability in biospheric CO₂Âfluxes: using FTIR spectrometry and a chemical transport model to investigate the sources and sinks of carbonyl sulfide and its link to CO₂. Atmospheric Chemistry and Physics, 2016, 16, 2123-2138.	4.9	20
95	ATMOS/ATLAS 1 measurements of sulfur hexafluoride (SF₆) in the lower stratosphere and upper troposphere. Journal of Geophysical Research, 1993, 98, 20491-20494.	3.3	19
96	ATMOS/ATLAS 3 INFRARED PROFILE MEASUREMENTS OF CLOUDS IN THE TROPICAL AND SUBTROPICAL UPPER TROPOSPHERE. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 60, 903-919.	2.3	18
97	April 1993 Arctic profiles of stratospheric HCl, ClONO2, and CCl2F2from atmospheric trace molecule spectroscopy/ATLAS 2 infrared solar occultation spectra. Journal of Geophysical Research, 1995, 100, 14019.	3.3	17
98	Measurements of long-term changes in atmospheric OCS (carbonyl sulfide) from infrared solar observations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 2679-2686.	2.3	17
99	Validation of SCIAMACHY HDO/H₂O measurements using the TCCON and NDACC-MUSICA networks. Atmospheric Measurement Techniques, 2015, 8, 1799-1818.	3.1	17
100	Diurnal cycle and multi-decadal trend of formaldehyde in the remote atmosphere near 46Â°â€¯N. Atmospheric Chemistry and Physics, 2016, 16, 4171-4189.	4.9	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.	4.9	17
102	Secular evolution of the vertical column abundances of CHClF2 (HCFC-22) in the Earth's atmosphere inferred from ground-based IR solar observations at the Jungfraujoch and at Kitt Peak, and comparison with model calculations. Journal of Atmospheric Chemistry, 1994, 18, 129-148.	3.2	16
103	SF6 ground-based infrared solar absorption measurements: long-term trend, pollution events, and a search for SF5CF3 absorption. Journal of Quantitative Spectroscopy and Radiative Transfer, 2003, 78, 41-53.	2.3	16
104	Sulphur hexafluoride (): comparison of FTIR-measurements at three sites and determination of its trend in the northern hemisphere. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 92, 383-392.	2.3	16
105	First groundâ€based infrared solar absorption measurements of free tropospheric methanol (CH₃OH): Multidecade infrared time series from Kitt Peak (31.9Â°N 111.6Â°W): Trend, seasonal cycle, and comparison with previous measurements. Journal of Geophysical Research, 2009, 114, .	3.3	16
106	Trends of atmospheric water vapour in Switzerland from ground-based radiometry, FTIR and GNSS data. Atmospheric Chemistry and Physics, 2020, 20, 11223-11244.	4.9	16
107	The triplet states of AlCl. Journal of Molecular Spectroscopy, 1989, 138, 264-271.	1.2	15
108	Long-term stratospheric carbon tetrafluoride (CF4) increase inferred from 1985â€"2004 infrared space-based solar occultation measurements. Geophysical Research Letters, 2006, 33, .	4.0	15

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109	First characterization and validation of FORLI-HNO₃ vertical profiles retrieved from IASI/Metop. Atmospheric Measurement Techniques, 2016, 9, 4783-4801.	3.1	15
110	Optimized approach to retrieve information on atmospheric carbonyl sulfide (OCS) above the Jungfraujoch station and change in its abundance since 1995. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 186, 81-95.	2.3	15
111	ClONO2total vertical column abundances above the Jungfraujoch Station, 1986-1994: Long-term trend and winter-spring enhancements. Journal of Geophysical Research, 1996, 101, 3891-3899.	3.3	13
112	Title is missing!. Journal of Atmospheric Chemistry, 1998, 29, 119-134.	3.2	13
113	ATMOS version 3 water vapor measurements: Comparisons with observations from two ER-2 Lyman-Î± hygrometers, MkIV, HALOE, SAGE II, MAS, and MLS. Journal of Geophysical Research, 2002, 107, ACH 2-1.	3.3	13
114	Stratospheric HF column abundances above Kitt Peak (31.9Â°N latitude): trends from 1977 to 2001 and correlations with stratospheric HCl columns. Journal of Quantitative Spectroscopy and Radiative Transfer, 2002, 74, 205-216.	2.3	13
115	An approach to retrieve information on the carbonyl fluoride (COF₂) vertical distributions above Jungfraujoch by FTIR multi-spectrum multi-window fitting. Atmospheric Chemistry and Physics, 2009, 9, 9027-9042.	4.9	13
116	HCOOH distributions from IASI for 2008â€“2014: comparison with ground-based FTIR measurements and a global chemistry-transport model. Atmospheric Chemistry and Physics, 2016, 16, 8963-8981.	4.9	13
117	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
118	Observed Hemispheric Asymmetry in Stratospheric Transport Trends From 1994 to 2018. Geophysical Research Letters, 2020, 47, e2020GL088567.	4.0	13
119	Long-term evolution in the tropospheric concentration of chlorofluorocarbon 12 (CCl2F2) derived from high-spectral resolution infrared solar absorption spectra: retrieval and comparison with in situ surface measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 92, 201-209.	2.3	12
120	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
121	Measurements of hydrogen cyanide (HCN) and acetylene (C₂H₂) from the Infrared Atmospheric Sounding Interferometer (IASI). Atmospheric Measurement Techniques, 2013, 6, 917-925.	3.1	12
122	Atmospheric Implications of Large C₂â€C₅ Alkane Emissions From the U.S. Oil and Gas Industry. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1148-1169.	3.3	12
123	The reduction in C₂H₆ from 2015 to 2020 over Hefei, eastern China, points to air quality improvement in China. Atmospheric Chemistry and Physics, 2021, 21, 11759-11779.	4.9	12
124	Global Atmospheric OCS Trend Analysis From 22 NDACC Stations. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	12
125	Correlation relationships of stratospheric molecular constituents from high spectral resolution, ground-based infrared solar absorption spectra. Journal of Geophysical Research, 2000, 105, 14637-14652.	3.3	11
126	Long-term trend of at northern mid-latitudes: Comparison between ground-based infrared solar and surface sampling measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 97, 457-466.	2.3	11

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127	Long-term trends of tropospheric carbon monoxide and hydrogen cyanide from analysis of high resolution infrared solar spectra. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 104, 40-51.	2.3	11
128	Decrease of the carbon tetrachloride (CCl4) loading above Jungfraujoch, based on high resolution infrared solar spectra recorded between 1999 and 2011. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1322-1329.	2.3	11
129	Ground-based FTIR retrievals of SF₆ on Reunion Island. Atmospheric Measurement Techniques, 2018, 11, 651-662.	3.1	11
130	Rotational analysis of the a3Îr-X1Î£+ transition of 69Ga35Cl. Journal of Molecular Spectroscopy, 1991, 150, 477-485.	1.2	10
131	Spectroscopic detection of COClF in the tropical and mid-latitude lower stratosphere. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 105, 467-475.	2.3	10
132	First measurements of the HCFC-142b trend from atmospheric chemistry experiment (ACE) solar occultation spectra. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 2127-2134.	2.3	10
133	Intercomparison of in situ NDIR and column FTIR measurements of CO₂ at Jungfraujoch. Atmospheric Chemistry and Physics, 2016, 16, 9935-9949.	4.9	10
134	Retrieval of HCFC-142b (CH 3 CClF 2) from ground-based high-resolution infrared solar spectra: Atmospheric increase since 1989 and comparison with surface and satellite measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 186, 96-105.	2.3	10
135	Observing the atmospheric evolution of ozone-depleting substances. Comptes Rendus - Geoscience, 2018, 350, 384-392.	1.2	10
136	Trend of lower stratospheric methane (CH4) from atmospheric chemistry experiment (ACE) and atmospheric trace molecule spectroscopy (ATMOS) measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 1066-1071.	2.3	9
137	Climatological impact of the Brewerâ€"Dobson circulation on the N₂O budget in WACCM, a chemical reanalysis and a CTM driven by four dynamical reanalyses. Atmospheric Chemistry and Physics, 2020, 20, 12609-12631.	4.9	9
138	Stratospheric CO at tropical and mid-latitudes: ATMOS measurements and photochemical steady-state model calculations. Geophysical Research Letters, 2000, 27, 1395-1398.	4.0	8
139	Stratospheric fluorine as a tracer of circulation changes: comparison between infrared remoteâ€sensing observations and simulations with five modern reanalyses. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034995.	3.3	8
140	Spectrometric monitoring of atmospheric carbon tetrafluoride (CF₄) above the Jungfraujoch station since 1989: evidence of continued increase but at a slowing rate. Atmospheric Measurement Techniques, 2014, 7, 333-344.	3.1	7
141	Acetylene (C₂H₂) and hydrogen cyanide (HCN) from IASI satellite observations: global distributions, validation, and comparison with model. Atmospheric Chemistry and Physics, 2015, 15, 10509-10527.	4.9	7
142	A statistical analysis of time trends in atmospheric ethane. Climatic Change, 2020, 162, 105-125.	3.6	7
143	First retrievals of peroxyacetyl nitrate (PAN) from ground-based FTIR solar spectra recorded at remote sites, comparison with model and satellite data. Elementa, 2021, 9, .	3.2	7
144	Analysis of CO₂, CH₄, and CO surface and column concentrations observed at RÃ©union Island by assessing WRF-Chem simulations. Atmospheric Chemistry and Physics, 2022, 22, 7763-7792.	4.9	7

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145	The VUV absorption spectrum of the SiF free radical. Journal of Molecular Spectroscopy, 1992, 152, 131-136.	1.2	5
146	Monitoring of the atmospheric burdens of CH4, N2O, CO, CHClF2 and CF2Cl2 above Central Europe during the last decade. Environmental Monitoring and Assessment, 1994, 31-31, 203-209.	2.7	5
147	Long-term evolution and seasonal modulation of methanol above Jungfraujoch (46.5Â° N, 8.0Â° E): optimisation of the retrieval strategy, comparison with model simulations and independent observations. Atmospheric Measurement Techniques, 2014, 7, 3861-3872.	3.1	5
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