Christoph Gerbig

List of Publications by Year
in descending order

143 papers	7,733 citations	53794 45 h-index	74163 75 g-index
219 all docs	219 docs citations	219 times ranked	5531 citing authors

#	Article	IF	Citations
1	Calibration of the Total Carbon Column Observing Network using aircraft profile data. Atmospheric Measurement Techniques, 2010, 3, 1351-1362.	3.1	441
2	An improved fast-response vacuum-UV resonance fluorescence CO instrument. Journal of Geophysical Research, 1999, 104, 1699-1704.	3.3	322
3	High-accuracy continuous airborne measurements of greenhouse gases (CO₂ and CH₄) using the cavity ring-down spectroscopy (CRDS) technique. Atmospheric Measurement Techniques, 2010, 3, 375-386.	3.1	272
4	A satelliteâ€based biosphere parameterization for net ecosystem CO₂ exchange: Vegetation Photosynthesis and Respiration Model (VPRM). Global Biogeochemical Cycles, 2008, 22, .	4.9	247
5	Atmospheric CH₄ in the first decade of the 21st century: Inverse modeling analysis using SCIAMACHY satellite retrievals and NOAA surface measurements. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7350-7369.	3.3	226
6	Validation of Measurements of Pollution in the Troposphere (MOPITT) CO retrievals with aircraft in situ profiles. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	209
7	Toward constraining regional-scale fluxes of CO2with atmospheric observations over a continent: 2. Analysis of COBRA data using a receptor-oriented framework. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	186
8	Vertical mixing in atmospheric tracer transport models: error characterization and propagation. Atmospheric Chemistry and Physics, 2008, 8, 591-602.	4.9	172
9	Toward constraining regional-scale fluxes of CO2with atmospheric observations over a continent: 1. Observed spatial variability from airborne platforms. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	162
10	Coupled weather research and forecastingâ€"stochastic time-inverted lagrangian transport (WRFâ€"STILT) model. Meteorology and Atmospheric Physics, 2010, 107, 51-64.	2.0	151
11	High accuracy measurements of dry mole fractions of carbon dioxide and methane in humid air. Atmospheric Measurement Techniques, 2013, 6, 837-860.	3.1	151
12	Continuous low-maintenance CO₂/CH₄/H<sub>2</sub& measurements at the Zotino Tall Tower Observatory (ZOTTO) in Central Siberia. Atmospheric Measurement Techniques, 2010, 3, 1113-1128.	3.1	144
13	Airborne intercomparison of vacuum ultraviolet fluorescence and tunable diode laser absorption measurements of tropospheric carbon monoxide. Journal of Geophysical Research, 2000, 105, 24251-24261.	3.3	141
14	Emissions of CH₄ and N₂O over the United States and Canada based on a receptorâ€oriented modeling framework and COBRAâ€NA atmospheric observations. Geophysical Research Letters, 2008, 35, .	4.0	132
15	In-situ observations of mid-latitude forest fire plumes deep in the stratosphere. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	130
16	Calibration of TCCON column-averaged CO₂: the first aircraft campaign over European TCCON sites. Atmospheric Chemistry and Physics, 2011, 11, 10765-10777.	4.9	120
17	Global-scale atmosphere monitoring by in-service aircraft â€" current achievements and future prospects of the European Research Infrastructure IAGOS. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28452.	1.6	118
18	CEFLES2: the remote sensing component to quantify photosynthetic efficiency from the leaf to the region by measuring sun-induced fluorescence in the oxygen absorption bands. Biogeosciences, 2009, 6, 1181-1198.	3.3	115

#	Article	IF	Citations
19	Climatologies of NOxx and NOy: A comparison of data and models. Atmospheric Environment, 1997, 31, 1851-1904.	4.1	111
20	A multi-year methane inversion using SCIAMACHY, accounting for systematic errors using TCCON measurements. Atmospheric Chemistry and Physics, 2014, 14, 3991-4012.	4.9	106
21	Accounting for the effect of transport errors on tracer inversions. Geophysical Research Letters, 2005, 32, .	4.0	101
22	The CarboEurope Regional Experiment Strategy. Bulletin of the American Meteorological Society, 2006, 87, 1367-1380.	3.3	101
23	Los Angeles megacity: a high-resolution landâ€"atmosphere modelling system for urban CO₂ emissions. Atmospheric Chemistry and Physics, 2016, 16, 9019-9045.	4.9	101
24	Measurements of Pollution in the Troposphere (MOPITT) validation exercises during summer 2004 field campaigns over North America. Journal of Geophysical Research, 2007, 112, .	3.3	98
25	The importance of transport model uncertainties for the estimation of CO₂ sources and sinks using satellite measurements. Atmospheric Chemistry and Physics, 2010, 10, 9981-9992.	4.9	98
26	Carbon Monitoring Satellite (CarbonSat): assessment of atmospheric CO₂ and CH₄ retrieval errors by error parameterization. Atmospheric Measurement Techniques, 2013, 6, 3477-3500.	3.1	94
27	Mesoscale covariance of transport and CO₂ fluxes: Evidence from observations and simulations using the WRFâ€VPRM coupled atmosphereâ€biosphere model. Journal of Geophysical Research, 2007, 112, .	3.3	93
28	Interpreting seasonal changes in the carbon balance of southern Amazonia using measurements of XCO₂ and chlorophyll fluorescence from GOSAT. Geophysical Research Letters, 2013, 40, 2829-2833.	4.0	89
29	CHARM-Fâ€"a new airborne integrated-path differential-absorption lidar for carbon dioxide and methane observations: measurement performance and quantification of strong point source emissions. Applied Optics, 2017, 56, 5182.	2.1	87
30	Chemical air mass differences near fronts. Journal of Geophysical Research, 1998, 103, 13413-13434.	3.3	83
31	Satellite-inferred European carbon sink larger than expected. Atmospheric Chemistry and Physics, 2014, 14, 13739-13753.	4.9	83
32	Comparing high resolution WRF-VPRM simulations and two global CO₂ transport models with coastal tower measurements of CO₂. Biogeosciences, 2009, 6, 807-817.	3.3	81
33	Carbon monoxide and related trace gases and aerosols over the Amazon Basin during the wet and dry seasons. Atmospheric Chemistry and Physics, 2012, 12, 6041-6065.	4.9	81
34	Fast response resonance fluorescence CO measurements aboard the C-130: Instrument characterization and measurements made during North Atlantic Regional Experiment 1993. Journal of Geophysical Research, 1996, 101, 29229-29238.	3.3	79
35	Airborne measurements of NOx, tracer species, and small particles during the European Lightning Nitrogen Oxides Experiment. Journal of Geophysical Research, 2002, 107, ACH 5-1-ACH 5-24.	3.3	77
36	High-resolution simulations of atmospheric CO₂ over complex terrain â€" representing the Ochsenkopf mountain tall tower. Atmospheric Chemistry and Physics, 2011, 11, 7445-7464.	4.9	77

#	Article	IF	Citations
37	Inverse modelling of European CH₄ emissions during 2006â€“2012 using different inverse models and reassessed atmospheric observations. Atmospheric Chemistry and Physics, 2018, 18, 901-920.	4.9	77
38	Measuring fluxes of trace gases at regional scales by Lagrangian observations: Application to the CO2Budget and Rectification Airborne (COBRA) study. Journal of Geophysical Research, 2004, 109, .	3.3	73
39	Sources of carbon monoxide and formaldehyde in North America determined from high-resolution atmospheric data. Atmospheric Chemistry and Physics, 2008, 8, 7673-7696.	4.9	72
40	Estimating regional carbon exchange in New England and Quebec by combining atmospheric, ground-based and satellite data. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 344-358.	1.6	70
41	Atmospheric CO2modeling at the regional scale: Application to the CarboEurope Regional Experiment. Journal of Geophysical Research, 2007, 112, .	3.3	65
42	Accurate measurements of carbon monoxide in humid air using the cavity ring-down spectroscopy (CRDS) technique. Atmospheric Measurement Techniques, 2013, 6, 1031-1040.	3.1	64
43	Net fluxes of CO2in Amazonia derived from aircraft observations. Journal of Geophysical Research, 2002, 107, ACH 4-1.	3.3	56
44	Error characterization of CO₂ vertical mixing in the atmospheric transport model WRF-VPRM. Atmospheric Chemistry and Physics, 2012, 12, 2441-2458.	4.9	56
45	Observed covariance between ecosystem carbon exchange and atmospheric boundary layer dynamics at a site in northern Wisconsin. Journal of Geophysical Research, 2004, 109, .	3.3	55
46	Atmospheric CO₂ modeling at the regional scale: an intercomparison of 5 meso-scale atmospheric models. Biogeosciences, 2007, 4, 1115-1126.	3.3	55
47	Calibration of column-averaged CH₄ over European TCCON FTS sites with airborne in-situ measurements. Atmospheric Chemistry and Physics, 2012, 12, 8763-8775.	4.9	55
48	On observational and modelling strategies targeted at regional carbon exchange over continents. Biogeosciences, 2009, 6, 1949-1959.	3.3	55
49	Severe chemical ozone loss inside the Arctic Polar Vortex during winter 1999-2000 Inferred fromin situairborne measurements. Geophysical Research Letters, 2001, 28, 2197-2200.	4.0	53
50	Methane airborne measurements and comparison to global models during BARCA. Journal of Geophysical Research, 2012, 117, .	3.3	53
51	The CO₂ release and Oxygen uptake from Fossil Fuel Emission Estimate (COFFEE) dataset: effects from varying oxidative ratios. Atmospheric Chemistry and Physics, 2011, 11, 6855-6870.	4.9	51
52	Tracking city CO₂ emissions from space using a high-resolution inverse modelling approach: a case study for Berlin, Germany. Atmospheric Chemistry and Physics, 2016, 16, 9591-9610.	4.9	51
53	Bridging the gap between atmospheric concentrations and local ecosystem measurements. Geophysical Research Letters, 2009, 36, .	4.0	46
54	A Bayesian inversion estimate of N₂O emissions for western and central Europe and the assessment of aggregation errors. Atmospheric Chemistry and Physics, 2011, 11, 3443-3458.	4.9	45

#	Article	IF	Citations
55	Evidence of the effect of summertime midlatitude convection on the subtropical lower stratosphere from CRYSTAL-FACE tracer measurements. Journal of Geophysical Research, 2004, 109, .	3.3	44
56	Comparing Lagrangian and Eulerian models for CO₂ transport â€“ a step towards Bayesian inverse modeling using WRF/STILT-VPRM. Atmospheric Chemistry and Physics, 2012, 12, 8979-8991.	4.9	40
57	Global methane emission estimates for 2000â€“2012 from CarbonTracker Europe-CH₄ v1.0. Geoscientific Model Development, 2017, 10, 1261-1289.	3.6	40
58	Identification of CO plumes from MOPITT data: Application to the August 2000 Idaho-Montana forest fires. Geophysical Research Letters, 2003, 30, .	4.0	39
59	Continuing global significance of emissions of Montreal Protocolâ€“restricted halocarbons in the United States and Canada. Journal of Geophysical Research, 2006, 111, .	3.3	39
60	Strong radiative effect induced by clouds and smoke on forest net ecosystem productivity in central Siberia. Agricultural and Forest Meteorology, 2018, 250-251, 376-387.	4.8	39
61	High resolution modeling of CO₂ over Europe: implications for representation errors of satellite retrievals. Atmospheric Chemistry and Physics, 2010, 10, 83-94.	4.9	38
62	A new fully automated FTIR system for total column measurements of greenhouse gases. Atmospheric Measurement Techniques, 2010, 3, 1363-1375.	3.1	36
63	Estimating CH₄, CO₂ and CO emissions from coal mining and industrial activities in the Upper Silesian Coal Basin using an aircraft-based mass balance approach. Atmospheric Chemistry and Physics, 2020, 20, 12675-12695.	4.9	36
64	Aircraftâ€based CH₄ flux estimates for validation of emissions from an agriculturally dominated area in Switzerland. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4874-4887.	3.3	35
65	Technical Note: A new coupled system for global-to-regional downscaling of CO₂ concentration estimation. Atmospheric Chemistry and Physics, 2010, 10, 3205-3213.	4.9	33
66	WRF-Chem simulations in the Amazon region during wet and dry season transitions: evaluation of methane models and wetland inundation maps. Atmospheric Chemistry and Physics, 2013, 13, 7961-7982.	4.9	33
67	Impact of optimized mixing heights on simulated regional atmospheric transport of CO₂. Atmospheric Chemistry and Physics, 2014, 14, 7149-7172.	4.9	33
68	What have we learned from intensive atmospheric sampling field programmes of CO2?. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 331-343.	1.6	31
69	Ozone production and transport over the Amazon Basin during the dry-to-wet and wet-to-dry transition seasons. Atmospheric Chemistry and Physics, 2015, 15, 757-782.	4.9	31
70	The regional European atmospheric transport inversion comparison, EUROCOM: first results on European-wide terrestrial carbon fluxes for the period 2006â€“2015. Atmospheric Chemistry and Physics, 2020, 20, 12063-12091.	4.9	31
71	Atmospheric CO₂ inversions on the mesoscale using data-driven prior uncertainties: quantification of the European terrestrial CO₂ fluxes. Atmospheric Chemistry and Physics, 2018, 18, 3047-3064.	4.9	30
72	Analysis of total column CO₂ and CH₄ measurements in Berlin with WRF-GHG. Atmospheric Chemistry and Physics, 2019, 19, 11279-11302.	4.9	30

#	Article	IF	Citations
73	The IAGOS-core greenhouse gas package: a measurement system for continuous airborne observations of CO₂, CH₄, H₂O and CO. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 27989.	1.6	29
74	Can we evaluate a fine-grained emission model using high-resolution atmospheric transport modelling and regional fossil fuel CO₂ observations?. Tellus, Series B: Chemical and Physical Meteorology, 2022, 65, 18681.	1.6	28
75	Estimation of continuous anthropogenic CO₂: model-based evaluation of CO₂, CO, Î´¹³C(CO₂) and Î”¹⁴C(CO₂) tracer methods. Atmospheric Chemistry and Physics, 2015, 15, 12705-12729.	4.9	28
76	An empirical analysis of the spatial variability of atmospheric CO2: Implications for inverse analyses and space-borne sensors. Geophysical Research Letters, 2004, 31, .	4.0	27
77	Mesoscale modelling of the CO₂ interactions between the surface and the atmosphere applied to the April 2007 CERES field experiment. Biogeosciences, 2009, 6, 633-646.	3.3	27
78	First ground-based FTIR observations of methane in the inner tropics over several years. Atmospheric Chemistry and Physics, 2010, 10, 7231-7239.	4.9	27
79	Automated ground-based remote sensing measurements of greenhouse gases at the BiaÅ‚ystok site in comparison with collocated in situ measurements and model data. Atmospheric Chemistry and Physics, 2012, 12, 6741-6755.	4.9	25
80	Detecting regional variability in sources and sinks of carbon dioxide: a synthesis. Biogeosciences, 2009, 6, 1015-1026.	3.3	25
81	Strategies for measurement of atmospheric column means of carbon dioxide from aircraft using discrete sampling. Journal of Geophysical Research, 2003, 108, .	3.3	23
82	Retrieval of tropospheric column-averaged CH₄ mole fraction by solar absorption FTIR-spectrometry using N₂O as a proxy. Atmospheric Measurement Techniques, 2014, 7, 3295-3305.	3.1	23
83	The consolidated European synthesis of CO₂ emissions and removals for the European Union and United Kingdom: 1990â€“2018. Earth System Science Data, 2021, 13, 2363-2406.	9.9	23
84	Inferences from CO₂ and CH₄ concentration profiles at the Zotino Tall Tower Observatory (ZOTTO) on regional summertime ecosystem fluxes. Biogeosciences, 2014, 11, 2055-2068.	3.3	22
85	COCAP: a carbon dioxide analyser for small unmanned aircraft systems. Atmospheric Measurement Techniques, 2018, 11, 1833-1849.	3.1	22
86	CO2 Transport, Variability, and Budget over the Southern California Air Basin Using the High-Resolution WRF-VPRM Model during the CalNex 2010 Campaign. Journal of Applied Meteorology and Climatology, 2018, 57, 1337-1352.	1.5	21
87	Quantifying the impact of the North American monsoon and deep midlatitude convection on the subtropical lowermost stratosphere using in situ measurements. Journal of Geophysical Research, 2007, 112, .	3.3	20
88	Atmospheric constraints on 2004 emissions of methane and nitrous oxide in North America from atmospheric measurements and a receptor-oriented modeling framework. Journal of Integrative Environmental Sciences, 2010, 7, 125-133.	2.5	20
89	Technical Note: Atmospheric CO₂ inversions on the mesoscale using data-driven prior uncertainties: methodology and system evaluation. Atmospheric Chemistry and Physics, 2018, 18, 3027-3045.	4.9	20
90	Model studies of the meteorology and chemical composition of the troposphere over the North Atlantic during August 18-30, 1993. Journal of Geophysical Research, 1996, 101, 29317-29334.	3.3	19

#	Article	IF	Citations
91	Ship-borne FTIR measurements of CO and O₃ in the Western Pacific from 43Â° N to 35Â° S: an evaluation of the sources. Atmospheric Chemistry and Physics, 2012, 12, 815-828.	4.9	19
92	Evolution of the aerosol, cloud and boundary-layer dynamic and thermodynamic characteristics during the 2nd Lagrangian experiment of ACE-2. Tellus, Series B: Chemical and Physical Meteorology, 2000, 52, 375-400.	1.6	18
93	A framework for comparing remotely sensed and in-situ CO₂ concentrations. Atmospheric Chemistry and Physics, 2008, 8, 2555-2568.	4.9	18
94	An objective prior error quantification for regional atmospheric inverse applications. Biogeosciences, 2015, 12, 7403-7421.	3.3	17
95	Evolution of the aerosol, cloud and boundary-layer dynamic and thermodynamic characteristics during the 2nd Lagrangian experiment of ACE-2. Tellus, Series B: Chemical and Physical Meteorology, 2022, 52, 375.	1.6	16
96	Quantification of CH₄ coal mining emissions in Upper Silesia by passive airborne remote sensing observations with the Methane Airborne MAPper (MAMAP) instrument during the CO₂ and Methane (CoMet) campaign. Atmospheric Chemistry and Physics, 2021, 21, 17345-17371.	4.9	16
97	Chemistry and aerosols in the marine boundary layer: 1-D modelling of the three ACE-2 Lagrangian experiments. Atmospheric Environment, 2000, 34, 5079-5094.	4.1	15
98	CO₂, Î´O₂/N₂ and APO: observations from the Lutjewad, Mace Head and F3 platform flask sampling network. Atmospheric Chemistry and Physics, 2010, 10, 10691-10704.	4.9	15
99	Validation of routine continuous airborne CO₂ observations near the Bialystok Tall Tower. Atmospheric Measurement Techniques, 2012, 5, 873-889.	3.1	15
100	Iconic CO ₂ Time Series at Risk. Science, 2012, 337, 1038-1040.	12.6	15
101	In situ observations of greenhouse gases over Europe during the CoMet 1.0 campaign aboard the HALO aircraft. Atmospheric Measurement Techniques, 2021, 14, 1525-1544.	3.1	15
102	The Community Inversion Framework v1.0: a unified system for atmospheric inversion studies. Geoscientific Model Development, 2021, 14, 5331-5354.	3.6	15
103	On the potential of the ICOS atmospheric CO₂ measurement network for estimating the biogenic CO₂ budget of Europe. Atmospheric Chemistry and Physics, 2015, 15, 12765-12787.	4.9	14
104	Hindcasting and forecasting of regional methane from coal mine emissions in the Upper Silesian Coal Basin using the online nested global regional chemistryâ€“climate model MECO(n) (MESSy v2.53). Geoscientific Model Development, 2020, 13, 1925-1943.	3.6	14
105	â€œDesigning Lagrangian experiments to measure regionalâ€scale trace gas fluxesâ€• Journal of Geophysical Research, 2007, 112, .	3.3	13
106	Dual-channel photoacoustic hygrometer for airborne measurements: background, calibration, laboratory and in-flight intercomparison tests. Atmospheric Measurement Techniques, 2015, 8, 33-42.	3.1	13
107	CoMet: an airborne mission to simultaneously measure CO2 and CH4 using lidar, passive remote sensing, and in-situ techniques. EPJ Web of Conferences, 2018, 176, 02003.	0.3	13
108	Correcting atmospheric CO₂ and CH₄ mole fractions obtained with Picarro analyzers for sensitivity of cavity pressure to water vapor. Atmospheric Measurement Techniques, 2019, 12, 1013-1027.	3.1	13

#	Article	IF	Citations
109	Numerical simulation of atmospheric CO2 concentration and flux over the Korean Peninsula using WRF-VPRM model during Korus-AQ 2016 campaign. PLoS ONE, 2020, 15, e0228106.	2.5	12
110	CO₂ budgeting at the regional scale using a Lagrangian experimental strategy and meso-scale modeling. Biogeosciences, 2009, 6, 113-127.	3.3	12
111	Novel quantification of regional fossil fuel CO ₂ reductions during COVID-19 lockdowns using atmospheric oxygen measurements. Science Advances, 2022, 8, eabl9250.	10.3	12
112	Studying atmospheric transport through Lagrangian models. Eos, 2011, 92, 177-178.	0.1	11
113	Greenhouse gas measurements over a 144 km open path in the Canary Islands. Atmospheric Measurement Techniques, 2012, 5, 2309-2319.	3.1	11
114	Understanding nighttime methane signals at the Amazon Tall Tower Observatory (ATTO). Atmospheric Chemistry and Physics, 2020, 20, 6583-6606.	4.9	11
115	Aircraft Measurements of a Warm Conveyor Belt â€“ A Case Study. Journal of Atmospheric Chemistry, 2003, 46, 117-129.	3.2	10
116	Co-located column and in situ measurements of CO₂ in the tropics compared with model simulations. Atmospheric Chemistry and Physics, 2010, 10, 5593-5599.	4.9	10
117	Using TROPOspheric Monitoring Instrument (TROPOMI) measurements and Weather Research and Forecasting (WRF) CO modelling to understand the contribution of meteorology and emissions to an extreme air pollution event in India. Atmospheric Chemistry and Physics, 2021, 21, 5393-5414.	4.9	10
118	Transport in the subtropical lowermost stratosphere during the Cirrus Regional Study of Tropical Anvils and Cirrus Layersâ€“Florida Area Cirrus Experiment. Journal of Geophysical Research, 2007, 112, .	3.3	9
119	Lagrangian Modeling of the Atmosphre: An Introduction. Geophysical Monograph Series, 0, , 1-11.	0.1	9
120	Surface flux estimates derived from UAS-based mole fraction measurements by means of a nocturnal boundary layer budget approach. Atmospheric Measurement Techniques, 2020, 13, 1671-1692.	3.1	9
121	Evaluation of the IAGOS-Core GHG package H₂O measurements during the DENCHAR airborne inter-comparison campaign in 2011. Atmospheric Measurement Techniques, 2018, 11, 5279-5297.	3.1	8
122	The CO₂ record at the Amazon Tall Tower Observatory: A new opportunity to study processes on seasonal and interâ€annual scales. Global Change Biology, 2022, 28, 588-611.	9.5	8
123	Effects of point source emission heights in WRFâ€“STILT: a step towards exploiting nocturnal observations in models. Geoscientific Model Development, 2022, 15, 5391-5406.	3.6	8
124	On the representation of IAGOS/MOZAIC vertical profiles in chemical transport models: contribution of different error sources in the example of carbon monoxide. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28292.	1.6	7
125	Multi-species inversion and IAGOS airborne data for a better constraint of continental-scale fluxes. Atmospheric Chemistry and Physics, 2018, 18, 9225-9241.	4.9	7
126	Combining a receptor-oriented framework for tracer distributions with a cloud-resolving model to study transport in deep convective clouds: Application to the NASA CRYSTAL-FACE campaign. Geophysical Research Letters, 2004, 31, .	4.0	6

#	Article	IF	Citations
127	How Can We Satisfy the Well-Mixed Criterion in Highly Inhomogeneous Flows? A Practical Approach. Geophysical Monograph Series, 0, , 59-70.	0.1	6
128	Extending methane profiles from aircraft into the stratosphere for satellite total column validation using the ECMWF C-IFS and TOMCAT/SLIMCAT 3-D model. Atmospheric Chemistry and Physics, 2017, 17, 6663-6678.	4.9	6
129	Toward Assimilation of Observation-Derived Mixing Heights to Improve Atmospheric Tracer Transport Models. Geophysical Monograph Series, 0, , 185-206.	0.1	5
130	Retrieval and validation of carbon dioxide, methane and water vapor for the Canary Islands IR-laser occultation experiment. Atmospheric Measurement Techniques, 2015, 8, 3315-3336.	3.1	5
131	Emission ratio and isotopic signatures of molecular hydrogen emissions from tropical biomass burning. Atmospheric Chemistry and Physics, 2013, 13, 9401-9413.	4.9	4
132	Factors influencing surface CO2 variations in LPRU, Thailand and IESM, Philippines. Environmental Pollution, 2014, 195, 282-291.	7.5	4
133	Error estimation for localized signal properties: application to atmospheric mixing height retrievals. Atmospheric Measurement Techniques, 2015, 8, 4215-4230.	3.1	4
134	The constraint of CO₂ measurements made onboard passenger aircraft on surfaceâ€“atmosphere fluxes: the impact of transport model errors in vertical mixing. Atmospheric Chemistry and Physics, 2017, 17, 5665-5675.	4.9	4
135	Net ecosystem exchange (NEE) estimates 2006â€“2019 over Europe from a pre-operational ensemble-inversion system. Atmospheric Chemistry and Physics, 2022, 22, 7875-7892.	4.9	4
136	Regional Representativeness of CH4 and N2O Mixing Ratio Measurements at High-Altitude Mountain Station Kasprowy Wierch, Southern Poland. Aerosol and Air Quality Research, 2016, 16, 568-580.	2.1	3
137	Short-term forecasting of regional biospheric CO₂ fluxes in Europe using a light-use-efficiency model (VPRM, MPI-BGC version 1.2). Geoscientific Model Development, 2020, 13, 4091-4106.	3.6	3
138	Regional Measurements and Modelling of Carbon Exchange. Ecological Studies, 2008, , 285-307.	1.2	2
139	Reconciling the Carbon Balance of Northern Sweden Through Integration of Observations and Modelling. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035185.	3.3	2
140	Correction to â€œSevere chemical ozone loss inside the Arctic Polar Vortex during winter 1999-2000 inferred fromin-Situairborne measurementsâ€• Geophysical Research Letters, 2001, 28, 3167-3167.	4.0	1
141	CH4 and CO2 IPDA Lidar Measurements During the Comet 2018 Airborne Field Campaign. EPJ Web of Conferences, 2020, 237, 03005.	0.3	1
142	Corrigendum to "Greenhouse gas measurements over a 144 km open path in the Canary Islands" published in Atmos. Meas. Tech., 5, 2309â€“2319, 2012. Atmospheric Measurement Techniques, 2012, 5, 2349-2349.	3.1	0
143	Applications of Lagrangian Modeling: Greenhouse Gases-Overview. Geophysical Monograph Series, 2013, , 144-148.	0.1	0