

Andreas Stohl

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3604491/publications.pdf>

Version: 2024-02-01

368
papers

34,855
citations

3726

89
h-index

6643

156
g-index

527
all docs

527
docs citations

527
times ranked

19220
citing authors

#	ARTICLE	IF	CITATIONS
1	Technical note: The Lagrangian particle dispersion model FLEXPART version 6.2. <i>Atmospheric Chemistry and Physics</i> , 2005, 5, 2461-2474.	1.9	1,679
2	Computation, accuracy and applications of trajectories – A review and bibliography. <i>Atmospheric Environment</i> , 1998, 32, 947-966.	1.9	872
3	Validation of the lagrangian particle dispersion model FLEXPART against large-scale tracer experiment data. <i>Atmospheric Environment</i> , 1998, 32, 4245-4264.	1.9	766
4	Atmospheric composition change – global and regional air quality. <i>Atmospheric Environment</i> , 2009, 43, 5268-5350.	1.9	714
5	Characteristics of atmospheric transport into the Arctic troposphere. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	578
6	Cesium-137 deposition and contamination of Japanese soils due to the Fukushima nuclear accident. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 19530-19534.	3.3	551
7	Xenon-133 and caesium-137 releases into the atmosphere from the Fukushima Dai-ichi nuclear power plant: determination of the source term, atmospheric dispersion, and deposition. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 2313-2343.	1.9	510
8	Atmospheric transport is a major pathway of microplastics to remote regions. <i>Nature Communications</i> , 2020, 11, 3381.	5.8	489
9	Arctic Air Pollution: Origins and Impacts. <i>Science</i> , 2007, 315, 1537-1540.	6.0	440
10	Stratosphere-troposphere exchange: A review, and what we have learned from STACCATO. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	413
11	Increasing springtime ozone mixing ratios in the free troposphere over western North America. <i>Nature</i> , 2010, 463, 344-348.	13.7	397
12	Frequency of extreme precipitation increases extensively with event rareness under global warming. <i>Scientific Reports</i> , 2019, 9, 16063.	1.6	393
13	Oceanic and terrestrial sources of continental precipitation. <i>Reviews of Geophysics</i> , 2012, 50, .	9.0	384
14	Arctic smoke – record high air pollution levels in the European Arctic due to agricultural fires in Eastern Europe in spring 2006. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 511-534.	1.9	372
15	Evaluating the climate and air quality impacts of short-lived pollutants. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 10529-10566.	1.9	365
16	Short-lived pollutants in the Arctic: their climate impact and possible mitigation strategies. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 1723-1735.	1.9	346
17	Interpolation Errors in Wind Fields as a Function of Spatial and Temporal Resolution and Their Impact on Different Types of Kinematic Trajectories. <i>Journal of Applied Meteorology and Climatology</i> , 1995, 34, 2149-2165.	1.7	339
18	Determination of time- and height-resolved volcanic ash emissions and their use for quantitative ash dispersion modeling: the 2010 Eyjafjallajökull eruption. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 4333-4351.	1.9	333

#	ARTICLE	IF	CITATIONS
19	A Lagrangian Analysis of the Atmospheric Branch of the Global Water Cycle. Part I: Method Description, Validation, and Demonstration for the August 2002 Flooding in Central Europe. Journal of Hydrometeorology, 2004, 5, 656-678.	0.7	332
20	Black carbon in the Arctic: the underestimated role of gas flaring and residential combustion emissions. Atmospheric Chemistry and Physics, 2013, 13, 8833-8855.	1.9	330
21	On the origin of continental precipitation. Geophysical Research Letters, 2010, 37, .	1.5	306
22	On the pathways and timescales of intercontinental air pollution transport. Journal of Geophysical Research, 2002, 107, ACH 6-1-ACH 6-17.	3.3	305
23	Trajectory statistics-A new method to establish source-receptor relationships of air pollutants and its application to the transport of particulate sulfate in Europe. Atmospheric Environment, 1996, 30, 579-587.	1.9	296
24	A backward modeling study of intercontinental pollution transport using aircraft measurements. Journal of Geophysical Research, 2003, 108, .	3.3	286
25	Transport of boreal forest fire emissions from Canada to Europe. Journal of Geophysical Research, 2001, 106, 22887-22906.	3.3	283
26	General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) â€œ integrating aerosol research from nano to global scales. Atmospheric Chemistry and Physics, 2011, 11, 13061-13143.	1.9	278
27	Airborne observations of the Eyjafjalla volcano ash cloud over Europe during air space closure in April and May 2010. Atmospheric Chemistry and Physics, 2011, 11, 2245-2279.	1.9	273
28	A 15-Year Climatology of Warm Conveyor Belts. Journal of Climate, 2004, 17, 218-237.	1.2	267
29	A Density Correction for Lagrangian Particle Dispersion Models. Boundary-Layer Meteorology, 1999, 90, 155-167.	1.2	262
30	Characteristics, sources, and transport of aerosols measured in spring 2008 during the aerosol, radiation, and cloud processes affecting Arctic Climate (ARCPAC) Project. Atmospheric Chemistry and Physics, 2011, 11, 2423-2453.	1.9	259
31	A textbook example of long-range transport: Simultaneous observation of ozone maxima of stratospheric and North American origin in the free troposphere over Europe. Journal of Geophysical Research, 1999, 104, 30445-30462.	3.3	257
32	The Lagrangian particle dispersion model FLEXPART-WRF version 3.1. Geoscientific Model Development, 2013, 6, 1889-1904.	1.3	256
33	A 1-year Lagrangian â€œclimatologyâ€œ of airstreams in the northern hemisphere troposphere and lowermost stratosphere. Journal of Geophysical Research, 2001, 106, 7263-7279.	3.3	251
34	A Lagrangian Analysis of the Atmospheric Branch of the Global Water Cycle. Part II: Moisture Transports between Earthâ€™s Ocean Basins and River Catchments. Journal of Hydrometeorology, 2005, 6, 961-984.	0.7	246
35	The Lagrangian particle dispersion model FLEXPART version 10.4. Geoscientific Model Development, 2019, 12, 4955-4997.	1.3	238
36	Long-range transport of Saharan dust to northern Europe: The 11-16 October 2001 outbreak observed with EARLINET. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	229

#	ARTICLE	IF	CITATIONS
37	Around the world in 17 days - hemispheric-scale transport of forest fire smoke from Russia in May 2003. <i>Atmospheric Chemistry and Physics</i> , 2004, 4, 1311-1321.	1.9	228
38	The North Atlantic Oscillation controls air pollution transport to the Arctic. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 1769-1778.	1.9	227
39	Source identification of short-lived air pollutants in the Arctic using statistical analysis of measurement data and particle dispersion model output. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 669-693.	1.9	218
40	Accuracy of trajectories as determined from the conservation of meteorological tracers. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1998, 124, 1465-1484.	1.0	215
41	A replacement for simple back trajectory calculations in the interpretation of atmospheric trace substance measurements. <i>Atmospheric Environment</i> , 2002, 36, 4635-4648.	1.9	210
42	Raman lidar observations of aged Siberian and Canadian forest fire smoke in the free troposphere over Germany in 2003: Microphysical particle characterization. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	207
43	The influence of stratospheric intrusions on alpine ozone concentrations. <i>Atmospheric Environment</i> , 2000, 34, 1323-1354.	1.9	206
44	Pan-Arctic enhancements of light absorbing aerosol concentrations due to North American boreal forest fires during summer 2004. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	205
45	An analytical inversion method for determining regional and global emissions of greenhouse gases: Sensitivity studies and application to halocarbons. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 1597-1620.	1.9	204
46	Remote sources of water vapor forming precipitation on the Norwegian west coast at 60°N—a tale of hurricanes and an atmospheric river. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	201
47	A review of sea-spray aerosol source functions using a large global set of sea salt aerosol concentration measurements. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 1277-1297.	1.9	192
48	Weakening temperature control on the interannual variations of spring carbon uptake across northern lands. <i>Nature Climate Change</i> , 2017, 7, 359-363.	8.1	183
49	Processes influencing ozone levels in Alaskan forest fire plumes during long-range transport over the North Atlantic. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	182
50	Estimation of the vertical profile of sulfur dioxide injection into the atmosphere by a volcanic eruption using satellite column measurements and inverse transport modeling. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 3881-3897.	1.9	175
51	Black carbon physical properties and mixing state in the European megacity Paris. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 5831-5856.	1.9	174
52	Lead pollution recorded in Greenland ice indicates European emissions tracked plagues, wars, and imperial expansion during antiquity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5726-5731.	3.3	174
53	Quantification of topographic venting of boundary layer air to the free troposphere. <i>Atmospheric Chemistry and Physics</i> , 2004, 4, 497-509.	1.9	173
54	Sources of particulate matter in the northeastern United States in summer: 1. Direct emissions and secondary formation of organic matter in urban plumes. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	173

#	ARTICLE	IF	CITATIONS
55	An important contribution to springtime Arctic aerosol from biomass burning in Russia. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	172
56	Optical and microphysical characterization of biomass- burning and industrial-pollution aerosols from- multiwavelength lidar and aircraft measurements. <i>Journal of Geophysical Research</i> , 2002, 107, LAC 7-1-LAC 7-20.	3.3	169
57	Long-term trends of black carbon and sulphate aerosol in the Arctic: changes in atmospheric transport and source region emissions. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 9351-9368.	1.9	169
58	Volatile organic compounds composition of merged and aged forest fire plumes from Alaska and western Canada. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	165
59	Moisture Origin and Meridional Transport in Atmospheric Rivers and Their Association with Multiple Cyclones*. <i>Monthly Weather Review</i> , 2013, 141, 2850-2868.	0.5	164
60	Parameterization of Convective Transport in a Lagrangian Particle Dispersion Model and Its Evaluation. <i>Journal of Applied Meteorology and Climatology</i> , 2007, 46, 403-422.	0.6	149
61	Freezing thresholds and cirrus cloud formation mechanisms inferred from in situ measurements of relative humidity. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 1791-1806.	1.9	148
62	Current model capabilities for simulating black carbon and sulfate concentrations in the Arctic atmosphere: a multi-model evaluation using a comprehensive measurement data set. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 9413-9433.	1.9	145
63	Effects of mixing on evolution of hydrocarbon ratios in the troposphere. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	140
64	Asymmetries in the moisture origin of Antarctic precipitation. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	139
65	Alaskan and Canadian forest fires exacerbate ozone pollution over Houston, Texas, on 19 and 20 July 2004. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	138
66	State of the Climate in 2013. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, S1-S279.	1.7	138
67	Optical characteristics of biomass burning aerosols over Southeastern Europe determined from UV-Raman lidar measurements. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 2431-2440.	1.9	136
68	A New Perspective of Stratosphereâ€“Troposphere Exchange. <i>Bulletin of the American Meteorological Society</i> , 2003, 84, 1565-1574.	1.7	132
69	In-situ observations of mid-latitude forest fire plumes deep in the stratosphere. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	1.5	130
70	Global chemical weather forecasts for field campaign planning: predictions and observations of large-scale features during MINOS, CONTRACE, and INDOEX. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 267-289.	1.9	128
71	Sources and mixing state of size-resolved elemental carbon particles in a European megacity: Paris. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 1681-1700.	1.9	128
72	Impacts of sources and aging on submicrometer aerosol properties in the marine boundary layer across the Gulf of Maine. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	126

#	ARTICLE	IF	CITATIONS
73	Fire in the Air: Biomass Burning Impacts in a Changing Climate. <i>Critical Reviews in Environmental Science and Technology</i> , 2013, 43, 40-83.	6.6	125
74	Aerosol-ozone correlations during dust transport episodes. <i>Atmospheric Chemistry and Physics</i> , 2004, 4, 1201-1215.	1.9	123
75	An intercomparison of results from three trajectory models. <i>Meteorological Applications</i> , 2001, 8, 127-135.	0.9	121
76	Overview of the MOSAiC expedition: Atmosphere. <i>Elementa</i> , 2022, 10, .	1.1	121
77	Wildfire smoke in the Siberian Arctic in summer: source characterization and plume evolution from airborne measurements. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 9315-9327.	1.9	120
78	Aerosol composition and sources in the central Arctic Ocean during ASCOS. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10619-10636.	1.9	120
79	Arctic methane sources: Isotopic evidence for atmospheric inputs. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	119
80	Large upper tropospheric ozone enhancements above midlatitude North America during summer: In situ evidence from the IONS and MOZAIC ozone measurement network. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	113
81	Natural iron fertilization by the Eyjafjallajökull volcanic eruption. <i>Geophysical Research Letters</i> , 2013, 40, 921-926.	1.5	113
82	Characteristics of atmospheric transport into the Antarctic troposphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	112
83	Hydrochlorofluorocarbon and hydrofluorocarbon emissions in East Asia determined by inverse modeling. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 3545-3560.	1.9	110
84	A European inventory of soil nitric oxide emissions and the effect of these emissions on the photochemical formation of ozone. <i>Atmospheric Environment</i> , 1996, 30, 3741-3755.	1.9	108
85	Transport of north China air pollution by midlatitude cyclones: Case study of aircraft measurements in summer 2007. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	108
86	Satellite detection of a continental-scale plume of nitrogen oxides from boreal forest fires. <i>Geophysical Research Letters</i> , 2001, 28, 4579-4582.	1.5	107
87	Arctic Air Pollution: New Insights from POLARCAT-IPY. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 1873-1895.	1.7	107
88	A 15-year climatology of stratosphere-troposphere exchange with a Lagrangian particle dispersion model 2. Mean climate and seasonal variability. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	106
89	Record high peaks in PCB concentrations in the Arctic atmosphere due to long-range transport of biomass burning emissions. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 4527-4536.	1.9	106
90	Aerosol remote sensing in polar regions. <i>Earth-Science Reviews</i> , 2015, 140, 108-157.	4.0	106

#	ARTICLE	IF	CITATIONS
91	Observations of hydroxyl and the sum of peroxy radicals at Summit, Greenland during summer 2003. <i>Atmospheric Environment</i> , 2007, 41, 5122-5137.	1.9	105
92	Ozone variability and halogen oxidation within the Arctic and sub-Arctic springtime boundary layer. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 10223-10236.	1.9	104
93	A case study of pyro-convection using transport model and remote sensing data. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 173-185.	1.9	101
94	Aerosol particle measurements at three stationary sites in the megacity of Paris during summer 2009: meteorology and air mass origin dominate aerosol particle composition and size distribution. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 933-959.	1.9	101
95	Forest climatology: estimation of missing values for Bavaria, Germany. <i>Agricultural and Forest Meteorology</i> , 1999, 96, 131-144.	1.9	99
96	Emissions of Halogenated Compounds in East Asia Determined from Measurements at Jeju Island, Korea. <i>Environmental Science & Technology</i> , 2011, 45, 5668-5675.	4.6	99
97	Source apportionment of the summer time carbonaceous aerosol at Nordic rural background sites. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 13339-13357.	1.9	99
98	Saharan dust over a central European EARLINET-AERONET site: Combined observations with Raman lidar and Sun photometer. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	98
99	Tracing biomass burning plumes from the Southern Hemisphere during the AMMA 2006 wet season experiment. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 3951-3961.	1.9	98
100	Light-absorbing properties of ambient black carbon and brown carbon from fossil fuel and biomass burning sources. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 6619-6633.	1.2	98
101	Intercontinental transport of nitrogen oxide pollution plumes. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 387-393.	1.9	96
102	Long range transport and fate of a stratospheric volcanic cloud from Soufrière Hills volcano, Montserrat. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 5093-5103.	1.9	96
103	Ozone production and trace gas correlations during the June 2000 MINATROC intensive measurement campaign at Mt. Cimone. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 725-738.	1.9	95
104	Climatological aspects of the extreme European rainfall of August 2002 and a trajectory method for estimating the associated evaporative source regions. <i>Natural Hazards and Earth System Sciences</i> , 2004, 4, 733-746.	1.5	94
105	The influence of cruise ship emissions on air pollution in Svalbard – a harbinger of a more polluted Arctic?. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 8401-8409.	1.9	94
106	Remote sensing and inverse transport modeling of the Kasatochi eruption sulfur dioxide cloud. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	93
107	Substantial contribution of northern high-latitude sources to mineral dust in the Arctic. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 13678-13697.	1.2	93
108	Intercontinental air pollution transport from North America to Europe: Experimental evidence from airborne measurements and surface observations. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	92

#	ARTICLE	IF	CITATIONS
109	In situ, satellite measurement and model evidence on the dominant regional contribution to fine particulate matter levels in the Paris megacity. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 9577-9591.	1.9	92
110	Background ozone variations at Mt. Cimone Station. <i>Atmospheric Environment</i> , 2000, 34, 5183-5189.	1.9	89
111	Intercontinental transport and its influence on the ozone concentrations over central Europe: Three case studies. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	88
112	Assessing temporal trends and source regions of per- and polyfluoroalkyl substances (PFASs) in air under the Arctic Monitoring and Assessment Programme (AMAP). <i>Atmospheric Environment</i> , 2018, 172, 65-73.	1.9	87
113	A climatology of ⁷ Be at four high-altitude stations at the Alps and the Northern Apennines. <i>Atmospheric Environment</i> , 2001, 35, 6347-6360.	1.9	86
114	Forecasted deep stratospheric intrusions over Central Europe: case studies and climatologies. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 499-524.	1.9	85
115	High levels of particulate matter in Iceland due to direct ash emissions by the Eyjafjallajökull eruption and resuspension of deposited ash. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	85
116	Direct transport of midlatitude stratospheric ozone into the lower troposphere and marine boundary layer of the tropical Pacific Ocean. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	84
117	Cloud condensation nuclei as a modulator of ice processes in Arctic mixed-phase clouds. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 8003-8015.	1.9	84
118	Biomass burning and anthropogenic sources of CO over New England in the summer 2004. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	83
119	Reactive nitrogen transport and photochemistry in urban plumes over the North Atlantic Ocean. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	83
120	Performance assessment of a volcanic ash transport model mini-ensemble used for inverse modeling of the 2010 Eyjafjallajökull eruption. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	83
121	Stratospheric volcanic ash emissions from the 13 February 2014 Kelut eruption. <i>Geophysical Research Letters</i> , 2015, 42, 588-596.	1.5	82
122	Methane emissions in East Asia for 2000–2011 estimated using an atmospheric Bayesian inversion. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 4352-4369.	1.2	82
123	Evidence for a recurring eastern North America upper tropospheric ozone maximum during summer. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	81
124	Regional atmospheric emissions determined from measurements at Jeju Island, Korea: Halogenated compounds from China. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	80
125	Siberian Arctic black carbon sources constrained by model and observation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E1054-E1061.	3.3	80
126	An analysis of the mechanisms of North American pollutant transport to the central North Atlantic lower free troposphere. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	79

#	ARTICLE	IF	CITATIONS
127	Overview of the synoptic and pollution situation over Europe during the EUCAARI-LONGREX field campaign. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 1065-1082.	1.9	79
128	Long-term monitoring of persistent organic pollutants (POPs) at the Norwegian Troll station in Dronning Maud Land, Antarctica. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 6983-6992.	1.9	78
129	Nocturnal odd-oxygen budget and its implications for ozone loss in the lower troposphere. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	75
130	Evaluation of observed and modelled aerosol lifetimes using radioactive tracers of opportunity and an ensemble of 19 global models. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 3525-3561.	1.9	75
131	A 6-year analysis of stratospheric intrusions and their influence on ozone at Mt. Cimone (2165 m above) Tj ETQq1 1,0.784314 rgBT /Ow	3.3	74
132	Comparing GOSAT observations of localized CO ₂ enhancements by large emitters with inventory-based estimates. <i>Geophysical Research Letters</i> , 2016, 43, 3486-3493.	1.5	74
133	Extensive release of methane from Arctic seabed west of Svalbard during summer 2014 does not influence the atmosphere. <i>Geophysical Research Letters</i> , 2016, 43, 4624-4631.	1.5	74
134	Boundary layer aerosol chemistry during TexAQS/GoMACCS 2006: Insights into aerosol sources and transformation processes. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	73
135	Aerosol black carbon at five background measurement sites over Finland, a gateway to the Arctic. <i>Atmospheric Environment</i> , 2011, 45, 4042-4050.	1.9	73
136	Wildfire influences on the variability and trend of summer surface ozone in the mountainous western United States. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 14687-14702.	1.9	73
137	Quantifying black carbon from biomass burning by means of levoglucosan – a one-year time series at the Arctic observatory Zeppelin. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 6427-6442.	1.9	71
138	Estimating the NO _x produced by lightning from GOME and NLDN data: a case study in the Gulf of Mexico. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 1075-1089.	1.9	70
139	Satellite observations of long range transport of a large BrO plume in the Arctic. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 6515-6526.	1.9	70
140	A multi-model analysis of vertical ozone profiles. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5759-5783.	1.9	70
141	Influence of biomass burning and anthropogenic emissions on ozone, carbon monoxide and black carbon at the Mt. Cimone GAW-WMO global station (Italy, 2165 m a.s.l.). <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 15-30.	1.9	69
142	Separation of ash and sulfur dioxide during the 2011 GrÃsvÃtn eruption. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 7477-7501.	1.2	69
143	How stratospheric are deep stratospheric intrusions?. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 9941-9961.	1.9	69
144	The sources of atmospheric black carbon at a European gateway to the Arctic. <i>Nature Communications</i> , 2016, 7, 12776.	5.8	69

#	ARTICLE	IF	CITATIONS
145	A new aerosol wet removal scheme for the Lagrangian particle model FLEXPART v10. <i>Geoscientific Model Development</i> , 2017, 10, 1447-1466.	1.3	68
146	Source apportionment of circum-Arctic atmospheric black carbon from isotopes and modeling. <i>Science Advances</i> , 2019, 5, eaau8052.	4.7	68
147	Lightning-produced NO _x over Brazil during TROCCINOX: airborne measurements in tropical and subtropical thunderstorms and the importance of mesoscale convective systems. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 2987-3013.	1.9	67
148	Aircraft measurements over Europe of an air pollution plume from Southeast Asia – aerosol and chemical characterization. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 913-937.	1.9	67
149	In situ observations of new particle formation in the tropical upper troposphere: the role of clouds and the nucleation mechanism. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 9983-10010.	1.9	66
150	Dependence of solar radiative forcing of forest fire aerosol on ageing and state of mixture. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 881-891.	1.9	65
151	Arctic smoke – aerosol characteristics during a record smoke event in the European Arctic and its radiative impact. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 3035-3053.	1.9	65
152	Aerosol optical and hygroscopic properties during TexAQS/GoMACCS 2006 and their impact on aerosol direct radiative forcing. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	65
153	Simultaneous retrieval of aerosol and cloud properties during the MILAGRO field campaign. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 6245-6263.	1.9	65
154	Stratospheric ozone intrusion episodes recorded at Mt. Cimone during the VOTALP project: case studies. <i>Atmospheric Environment</i> , 2000, 34, 1355-1365.	1.9	64
155	Emission and transport of bromocarbons: from the West Pacific ocean into the stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 10633-10648.	1.9	64
156	Rapid intercontinental air pollution transport associated with a meteorological bomb. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 969-985.	1.9	62
157	Transport of mercury in the Arctic atmosphere: Evidence for a spring-time net sink and summer-time source. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	62
158	Atmospheric mercury observations from Antarctica: seasonal variation and source and sink region calculations. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 3241-3251.	1.9	62
159	MEGAPOLI: concept of multi-scale modelling of megacity impact on air quality and climate. <i>Advances in Science and Research</i> , 2010, 4, 115-120.	1.0	62
160	Stratosphere-to-troposphere transport: A model and method evaluation. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	61
161	An estimate of the impact of stratosphere-to-troposphere transport (STT) on the lower free tropospheric ozone over the Alps using ¹⁰ Be and ⁷ Be measurements. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	61
162	Extreme CO concentrations in the upper troposphere over northeast Asia in June 2003 from the in situ MOZAIC aircraft data. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	1.5	61

#	ARTICLE	IF	CITATIONS
163	Perturbation of the European free troposphere aerosol by North American forest fire plumes during the ICARTT-ITOP experiment in summer 2004. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 5105-5127.	1.9	61
164	Transport of forest fire emissions from Alaska and the Yukon Territory to Nova Scotia during summer 2004. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	61
165	The YAK-AEROSIB transcontinental aircraft campaigns: new insights on the transport of CO ₂ , CO and O ₃ across Siberia. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 60, 551.	0.8	61
166	The Finokalia Aerosol Measurement Experiment “2008 (FAME-08): an overview. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 6793-6806.	1.9	61
167	Lagrangian transport model forecasts and a transport climatology for the Intercontinental Transport and Chemical Transformation 2002 (ITCT 2K2) measurement campaign. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	60
168	Establishing Lagrangian connections between observations within air masses crossing the Atlantic during the International Consortium for Atmospheric Research on Transport and Transformation experiment. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	60
169	Patterns of CO ₂ and radiocarbon across high northern latitudes during International Polar Year 2008. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	59
170	Methane fluxes in the high northern latitudes for 2005–2013 estimated using a Bayesian atmospheric inversion. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 3553-3572.	1.9	59
171	Export of NO _y from the North American boundary layer during 1996 and 1997 North Atlantic Regional Experiments. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 11-1-ACH 11-13.	3.3	58
172	New-particle formation events in a continental boundary layer: first results from the SATURN experiment. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 1445-1459.	1.9	58
173	High-ozone layers in the middle and upper troposphere above Central Europe: potential import from the stratosphere along the subtropical jet stream. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 9343-9366.	1.9	58
174	Forecast, observation and modelling of a deep stratospheric intrusion event over Europe. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 763-777.	1.9	56
175	Ammonia sources, transport, transformation, and deposition in coastal New England during summer. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	56
176	Current status of the ability of the GEMS/MACC models to reproduce the tropospheric CO vertical distribution as measured by MOZIC. <i>Geoscientific Model Development</i> , 2010, 3, 501-518.	1.3	56
177	Input Data Requirements for Lagrangian Trajectory Models. <i>Bulletin of the American Meteorological Society</i> , 2013, 94, 1051-1058.	1.7	56
178	Wildfires in northern Eurasia affect the budget of black carbon in the Arctic – a 12-year retrospective synopsis (2002–2013). <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 7587-7604.	1.9	56
179	Discrepancy between simulated and observed ethane and propane levels explained by underestimated fossil emissions. <i>Nature Geoscience</i> , 2018, 11, 178-184.	5.4	56
180	Stratosphere-troposphere exchange: A model and method intercomparison. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	55

#	ARTICLE	IF	CITATIONS
181	Sulfur dioxide measurements in the lower, middle and upper troposphere: Deployment of an aircraft-based chemical ionization mass spectrometer with permanent in-flight calibration. <i>Atmospheric Environment</i> , 2007, 41, 2427-2437.	1.9	55
182	FLEXINVERT: an atmospheric Bayesian inversion framework for determining surface fluxes of trace species using an optimized grid. <i>Geoscientific Model Development</i> , 2014, 7, 2223-2242.	1.3	55
183	Intercomparison of tropospheric ozone models: Ozone transport in a complex tropopause folding event. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	54
184	Investigating the sources and atmospheric processing of fine particles from Asia and the Northwestern United States measured during INTEX B. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 1835-1853.	1.9	54
185	East Asian SO ₂ pollution plume over Europe – Part 1: Airborne trace gas measurements and source identification by particle dispersion model simulations. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 4717-4728.	1.9	54
186	Resuspension and atmospheric transport of radionuclides due to wildfires near the Chernobyl Nuclear Power Plant in 2015: An impact assessment. <i>Scientific Reports</i> , 2016, 6, 26062.	1.6	54
187	A Cautionary Note on the Use of Meteorological Analysis Fields for Quantifying Atmospheric Mixing. <i>Journals of the Atmospheric Sciences</i> , 2004, 61, 1446-1453.	0.6	53
188	Physical and optical properties of 2010 Eyjafjallajökull volcanic eruption aerosol: ground-based, Lidar and airborne measurements in France. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 1721-1736.	1.9	53
189	Arctic air pollution: Challenges and opportunities for the next decade. <i>Elementa</i> , 0, 4, 000104.	1.1	53
190	Volcanic dust characterization by EARLINET during Etna's eruptions in 2001–2002. <i>Atmospheric Environment</i> , 2008, 42, 893-905.	1.9	52
191	Source identification and airborne chemical characterisation of aerosol pollution from long-range transport over Greenland during POLARCAT summer campaign 2008. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10097-10123.	1.9	52
192	Tracing biomass burning aerosol from South America to Troll Research Station, Antarctica. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	51
193	Atmospheric removal times of the aerosol-bound radionuclides ¹³⁷ Cs and ¹³¹ I measured after the Fukushima Dai-ichi nuclear accident – a constraint for air quality and climate models. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 10759-10769.	1.9	51
194	Trace gas composition of midlatitude cyclones over the western North Atlantic Ocean: A seasonal comparison of O ₃ and CO. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 2-1.	3.3	50
195	Trajectory model validation using newly developed altitude-controlled balloons during the International Consortium for Atmospheric Research on Transport and Transformations 2004 campaign. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	50
196	New particle formation at a remote site in the eastern Mediterranean. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	50
197	Impact of the 2009 Attica wild fires on the air quality in urban Athens. <i>Atmospheric Environment</i> , 2012, 46, 536-544.	1.9	50
198	Impact of dust deposition on the albedo of Vatnajökull ice cap, Iceland. <i>Cryosphere</i> , 2017, 11, 741-754.	1.5	50

#	ARTICLE	IF	CITATIONS
199	Pervasive Arctic lead pollution suggests substantial growth in medieval silver production modulated by plague, climate, and conflict. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 14910-14915.	3.3	50
200	Atmospheric transport of persistent organic pollutants (POPs) to Björnåya (Bear island). <i>Journal of Environmental Monitoring</i> , 2007, 9, 1082.	2.1	49
201	In-situ observation of Asian pollution transported into the Arctic lowermost stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10975-10994.	1.9	49
202	Chemical characteristics of North American surface layer outflow: Insights from Chebogue Point, Nova Scotia. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	48
203	Sources of particulate matter in the northeastern United States in summer: 2. Evolution of chemical and microphysical properties. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	48
204	A springtime comparison of tropospheric ozone and transport pathways on the east and west coasts of the United States. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	47
205	Episodes of cross-polar transport in the Arctic troposphere during July 2008 as seen from models, satellite, and aircraft observations. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 3631-3651.	1.9	47
206	Validation of a Long-Range Trajectory Model Using Gas Balloon Tracks from the Gordon Bennett Cup 95. <i>Journal of Applied Meteorology and Climatology</i> , 1997, 36, 711-720.	1.7	46
207	The total release of xenon-133 from the Fukushima Dai-ichi nuclear power plant accident. <i>Journal of Environmental Radioactivity</i> , 2012, 112, 155-159.	0.9	46
208	Variability in Atmospheric Methane From Fossil Fuel and Microbial Sources Over the Last Three Decades. <i>Geophysical Research Letters</i> , 2018, 45, 11,499.	1.5	46
209	Open fires in Greenland in summer 2017: transport, deposition and radiative effects of BC, OC and BrC emissions. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 1393-1411.	1.9	46
210	Optical properties and vertical extension of aged ash layers over the Eastern Mediterranean as observed by Raman lidars during the Eyjafjallajökull eruption in May 2010. <i>Atmospheric Environment</i> , 2012, 48, 56-65.	1.9	45
211	Reconstructing the Chernobyl Nuclear Power Plant (CNPP) accident 30 years after. A unique database of air concentration and deposition measurements over Europe. <i>Environmental Pollution</i> , 2016, 216, 408-418.	3.7	45
212	Transport of ozone towards the Alps – results from trajectory analyses and photochemical model studies. <i>Atmospheric Environment</i> , 2000, 34, 1367-1377.	1.9	44
213	A 15-year climatology of stratosphere-troposphere exchange with a Lagrangian particle dispersion model: 1. Methodology and validation. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	43
214	Evaluation of black carbon emission inventories using a Lagrangian dispersion model – a case study over southern India. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 1447-1461.	1.9	43
215	Black Carbon Sources Constrained by Observations in the Russian High Arctic. <i>Environmental Science & Technology</i> , 2017, 51, 3871-3879.	4.6	43
216	Comparisons of box model calculations and measurements of formaldehyde from the 1997 North Atlantic Regional Experiment. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 3-1.	3.3	42

#	ARTICLE	IF	CITATIONS
217	Mixing between a stratospheric intrusion and a biomass burning plume. <i>Atmospheric Chemistry and Physics</i> , 2007, 7, 4229-4235.	1.9	42
218	Lagrangian Stochastic Modelling of Dispersion in the Convective Boundary Layer with Skewed Turbulence Conditions and a Vertical Density Gradient: Formulation and Implementation in the FLEXPART Model. <i>Boundary-Layer Meteorology</i> , 2015, 154, 367-390.	1.2	42
219	Interactions between the atmosphere, cryosphere, and ecosystems at northern high latitudes. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 2015-2061.	1.9	42
220	Injection in the lower stratosphere of biomass fire emissions followed by long-range transport: a MOZAIC case study. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 5829-5846.	1.9	41
221	Reference data set of volcanic ash physicochemical and optical properties. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 9485-9514.	1.2	41
222	Lead and Antimony in Basal Ice From Col du Dome (French Alps) Dated With Radiocarbon: A Record of Pollution During Antiquity. <i>Geophysical Research Letters</i> , 2019, 46, 4953-4961.	1.5	41
223	Evaluation of the aerosol indirect effect using satellite, tracer transport model, and aircraft data from the International Consortium for Atmospheric Research on Transport and Transformation. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	40
224	Changes in black carbon emissions over Europe due to COVID-19 lockdowns. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 2675-2692.	1.9	40
225	Variations in ozone depletion potentials of very short-lived substances with season and emission region. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	39
226	In-situ airborne observations of the microphysical properties of the Arctic tropospheric aerosol during late spring and summer. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 60, 392.	0.8	38
227	Boreal forest fires in 1997 and 1998: a seasonal comparison using transport model simulations and measurement data. <i>Atmospheric Chemistry and Physics</i> , 2004, 4, 1857-1868.	1.9	37
228	An assessment of the polar HOx photochemical budget based on 2003 Summit Greenland field observations. <i>Atmospheric Environment</i> , 2007, 41, 7806-7820.	1.9	37
229	Source-receptor relationships for airborne measurements of CO ₂ , CO and O ₃ above Siberia: a cluster-based approach. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 1671-1687.	1.9	37
230	Temporal and spatial variability of Icelandic dust emissions and atmospheric transport. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 10865-10878.	1.9	37
231	An extension of Measurement of Ozone and Water Vapour by Airbus In-service Aircraft (MOZAIC) ozone climatologies using trajectory statistics. <i>Journal of Geophysical Research</i> , 2001, 106, 27757-27768.	3.3	36
232	Lidar observations of Kasatochi volcano aerosols in the troposphere and stratosphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	36
233	Have aerosols affected trends in visibility and precipitation in Europe?. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	36
234	Mineral Dust Instantaneous Radiative Forcing in the Arctic. <i>Geophysical Research Letters</i> , 2018, 45, 4290-4298.	1.5	36

#	ARTICLE	IF	CITATIONS
235	Atmospheric aerosol in the Finnish Arctic: Particle number concentrations, chemical characteristics, and source analysis. <i>Water, Air, and Soil Pollution</i> , 1995, 85, 1997-2002.	1.1	35
236	Nitric acid phase partitioning and cycling in the New England coastal atmosphere. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	35
237	Quantifying wet scavenging processes in aircraft observations of nitric acid and cloud condensation nuclei. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	35
238	Source-receptor matrix calculation for deposited mass with the Lagrangian particle dispersion model FLEXPART v10.2 in backward mode. <i>Geoscientific Model Development</i> , 2017, 10, 4605-4618.	1.3	35
239	Origin of ozone in Vienna and surroundings, Austria. <i>Atmospheric Environment</i> , 1994, 28, 1255-1266.	1.9	34
240	Source Quantification of South Asian Black Carbon Aerosols with Isotopes and Modeling. <i>Environmental Science & Technology</i> , 2020, 54, 11771-11779.	4.6	34
241	Anthropogenic and forest fire pollution aerosol transported to the Arctic: observations from the POLARCAT-France spring campaign. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 6437-6454.	1.9	33
242	Optical, microphysical, mass and geometrical properties of aged volcanic particles observed over Athens, Greece, during the Eyjafjallajökull eruption in April 2010 through synergy of Raman lidar and sunphotometer measurements. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 9303-9320.	1.9	33
243	Evaluation of trajectories calculated from ECMWF data against constant volume balloon flights during TEX. <i>Atmospheric Environment</i> , 1998, 32, 4151-4156.	1.9	32
244	New Insights on the Chemical Composition of the Siberian Air Shed From The Yak-Aerosib Aircraft Campaigns. <i>Bulletin of the American Meteorological Society</i> , 2010, 91, 625-642.	1.7	32
245	A modelling study of an extraordinary night time ozone episode over Madrid domain. <i>Environmental Modelling and Software</i> , 2005, 20, 587-593.	1.9	30
246	Physical and chemical properties of pollution aerosol particles transported from North America to Greenland as measured during the POLARCAT summer campaign. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10947-10963.	1.9	30
247	Moisture Sources and Large-Scale Dynamics Associated With a Flash Flood Event. <i>Geophysical Monograph Series</i> , 0, , 111-126.	0.1	30
248	A method for computing single trajectories representing boundary layer transport. <i>Atmospheric Environment</i> , 1995, 29, 3235-3238.	1.9	29
249	The residence times of aircraft emissions in the stratosphere using a mean emission inventory and emissions along actual flight tracks. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	29
250	The travel-related carbon dioxide emissions of atmospheric researchers. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 6499-6504.	1.9	29
251	Volcanic aerosol optical properties and phase partitioning behavior after long-range advection characterized by UV-Lidar measurements. <i>Atmospheric Environment</i> , 2012, 48, 76-84.	1.9	29
252	Smoke dispersion modeling over complex terrain using high resolution meteorological data and satellite observations - The FireHub platform. <i>Atmospheric Environment</i> , 2015, 119, 348-361.	1.9	29

#	ARTICLE	IF	CITATIONS
253	Uncertainties in the inverse modelling of sulphur dioxide eruption profiles. <i>Geomatics, Natural Hazards and Risk</i> , 2011, 2, 201-216.	2.0	28
254	History of Lagrangian Stochastic Models for Turbulent Dispersion. <i>Geophysical Monograph Series</i> , 0, 19-36.	0.1	28
255	The dispersion characteristics of air pollution from the world's megacities. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 9975-9996.	1.9	28
256	A robust method for inverse transport modeling of atmospheric emissions using blind outlier detection. <i>Geoscientific Model Development</i> , 2014, 7, 2303-2311.	1.3	28
257	Observation and origin of organochlorine compounds and polycyclic aromatic hydrocarbons in the free troposphere over central Europe. <i>Environmental Pollution</i> , 2009, 157, 3264-3271.	3.7	27
258	Large Emissions of Perfluorocarbons in East Asia Deduced from Continuous Atmospheric Measurements. <i>Environmental Science & Technology</i> , 2010, 44, 4089-4095.	4.6	27
259	Airborne DOAS measurements in Arctic: vertical distributions of aerosol extinction coefficient and NO ₂ concentration. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 9219-9236.	1.9	26
260	Aerosol properties of the Eyjafjallajökull ash derived from sun photometer and satellite observations over the Iberian Peninsula. <i>Atmospheric Environment</i> , 2012, 48, 22-32.	1.9	26
261	CARIBIC aircraft measurements of Eyjafjallajökull volcanic clouds in April/May 2010. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 879-902.	1.9	25
262	Sulfur hexafluoride (SF ₆) emissions in East Asia determined by inverse modeling. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 4779-4791.	1.9	25
263	Estimates of European emissions of methyl chloroform using a Bayesian inversion method. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 9755-9770.	1.9	25
264	LS-APC v1.0: a tuning-free method for the linear inverse problem and its application to source-term determination. <i>Geoscientific Model Development</i> , 2016, 9, 4297-4311.	1.3	25
265	Aerosol radiative forcing from the 2010 Eyjafjallajökull volcanic eruptions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 9481-9491.	1.2	24
266	Seasonal variability of atmospheric nitrogen oxides and non-methane hydrocarbons at the GEOSummit station, Greenland. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 6827-6849.	1.9	24
267	European emissions of HCFC-22 based on eleven years of high frequency atmospheric measurements and a Bayesian inversion method. <i>Atmospheric Environment</i> , 2015, 112, 196-207.	1.9	24
268	Origin of elemental carbon in snow from western Siberia and northwestern European Russia during winter-spring 2014, 2015 and 2016. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 963-977.	1.9	24
269	Atmospheric composition in the European Arctic and 30 years of the Zeppelin Observatory, Ny-Ålesund. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 3321-3369.	1.9	24
270	Multiannual Top-Down Estimate of HFC-23 Emissions in East Asia. <i>Environmental Science & Technology</i> , 2015, 49, 4345-4353.	4.6	23

#	ARTICLE	IF	CITATIONS
271	Source attribution using FLEXPART and carbon monoxide emission inventories: SOFT-IO version 1.0. Atmospheric Chemistry and Physics, 2017, 17, 15271-15292.	1.9	23
272	Source regions of some persistent organic pollutants measured in the atmosphere at Birkenes, Norway. Atmospheric Chemistry and Physics, 2009, 9, 6597-6610.	1.9	22
273	Vertical profiles of microphysical particle properties derived from inversion with two-dimensional regularization of multiwavelength Raman lidar data: experiment. Applied Optics, 2011, 50, 2069.	2.1	22
274	Effects of long-range aerosol transport on the microphysical properties of low-level liquid clouds in the Arctic. Atmospheric Chemistry and Physics, 2016, 16, 4661-4674.	1.9	22
275	Inverse modeling of the Chernobyl source term using atmospheric concentration and deposition measurements. Atmospheric Chemistry and Physics, 2017, 17, 8805-8824.	1.9	22
276	Rainfall drives atmospheric ice-nucleating particles in the coastal climate of southern Norway. Atmospheric Chemistry and Physics, 2017, 17, 11065-11073.	1.9	22
277	Bayesian inverse modeling and source location of an unintended C_{13}I release in Europe in the fall of 2011. Atmospheric Chemistry and Physics, 2017, 17, 12677-12696.	1.9	22
278	Perfluorocyclobutane (PFC-318,) C_4F_8 / Overlooked C_4F_8 in the global atmosphere. Atmospheric Chemistry and Physics, 2019, 19, 10335-10359.	1.9	22
279	Simulation of Volcanic Ash Ingestion Into a Large Aero Engine: Particle-Fan Interactions. Journal of Turbomachinery, 2019, 141, .	0.9	22
280	Boundary layer photochemistry during a total solar eclipse. Meteorologische Zeitschrift, 2001, 10, 187-192.	0.5	21
281	Forecasting for a Lagrangian aircraft campaign. Atmospheric Chemistry and Physics, 2004, 4, 1113-1124.	1.9	21
282	Space-based evaluation of interactions between aerosols and low-level Arctic clouds during the Spring and Summer of 2008. Atmospheric Chemistry and Physics, 2011, 11, 3359-3373.	1.9	21
283	Primary source regions of polychlorinated biphenyls (PCBs) measured in the Arctic. Atmospheric Environment, 2012, 46, 391-399.	1.9	21
284	Chemical properties of Arctic aerosol particles collected at the Zeppelin station during the aerosol transition period in May and June of 2004. Tellus, Series B: Chemical and Physical Meteorology, 2022, 60, 405.	0.8	20
285	Field experiments on atmospheric hazards. Nature, 2011, 473, 285-285.	13.7	20
286	Annual cycle of Antarctic baseline aerosol: controlled by photooxidation-limited aerosol formation. Atmospheric Chemistry and Physics, 2014, 14, 3083-3093.	1.9	20
287	Black Carbon Emission Reduction Due to COVID-19 Lockdown in China. Geophysical Research Letters, 2021, 48, e2021GL093243.	1.5	20
288	Changes in short-lived climate pollutants during the COVID-19 pandemic in Tehran, Iran. Environmental Monitoring and Assessment, 2021, 193, 331.	1.3	20

#	ARTICLE	IF	CITATIONS
289	Hemispheric black carbon increase after the 13th-century Māori arrival in New Zealand. <i>Nature</i> , 2021, 598, 82-85.	13.7	20
290	Methane at Svalbard and over the European Arctic Ocean. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 17207-17224.	1.9	19
291	Top-down estimates of benzene and toluene emissions in the Pearl River Delta and Hong Kong, China. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 3369-3382.	1.9	18
292	Estimating Upper Silesian coal mine methane emissions from airborne in situ observations and dispersion modeling. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 8791-8807.	1.9	18
293	East Asian SO ₂ pollution plume over Europe – Part 2: Evolution and potential impact. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 4729-4745.	1.9	17
294	Sampling of an STT event over the Eastern Mediterranean region by lidar and electrochemical sonde. <i>Annales Geophysicae</i> , 2005, 23, 2039-2050.	0.6	16
295	Aerosol indirect effects on the nighttime Arctic Ocean surface from thin, predominantly liquid clouds. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 7311-7332.	1.9	16
296	The BAYSOFI Campaign - Measurements carried out during the total solar eclipse of August 11, 1999. <i>Meteorologische Zeitschrift</i> , 2001, 10, 165-170.	0.5	15
297	A close look at oceanic sources of continental precipitation. <i>Eos</i> , 2011, 92, 193-194.	0.1	15
298	Low concentrations of near-surface ozone in Siberia. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 64, 11607.	0.8	15
299	Forest climatology: reconstruction of mean climatological data for Bavaria, Germany. <i>Agricultural and Forest Meteorology</i> , 1999, 96, 117-129.	1.9	14
300	Overview of aerosol properties associated with air masses sampled by the ATR-42 during the EUCAARI campaign (2008). <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 4877-4893.	1.9	14
301	A satellite-based estimate of combustion aerosol cloud microphysical effects over the Arctic Ocean. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 14949-14964.	1.9	14
302	The Fukushima inverse problem. , 2013, , .		13
303	Entropy-Based and Static Stability-Based Lagrangian Model Grids. <i>Geophysical Monograph Series</i> , 2013, , 99-110.	0.1	13
304	A model sensitivity study of the impact of clouds on satellite detection and retrieval of volcanic ash. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 1935-1949.	1.2	13
305	Cadmium Pollution From Zinc Smelters up to Fourfold Higher Than Expected in Western Europe in the 1980s as Revealed by Alpine Ice. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087537.	1.5	13
306	Arctic haze over Central Europe. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2003, 55, 796-807.	0.8	12

#	ARTICLE	IF	CITATIONS
307	Correction to "Transport of north China air pollution by midlatitude cyclones: Case study of aircraft measurements in summer 2007". <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	12
308	Tropospheric ozone over Siberia in spring 2010: remote influences and stratospheric intrusion. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2013, 65, 19688.	0.8	12
309	Extraordinary halocarbon emissions initiated by the 2011 Tohoku earthquake. <i>Geophysical Research Letters</i> , 2015, 42, 2500-2507.	1.5	12
310	Detection and simulation of wildfire smoke impacting a Mediterranean urban atmosphere. <i>Atmospheric Pollution Research</i> , 2016, 7, 494-502.	1.8	12
311	Diagnostic Downscaling of Large-Scale Wind Fields to Compute Local-Scale Trajectories. <i>Journal of Applied Meteorology and Climatology</i> , 1997, 36, 931-942.	1.7	11
312	The urban plume of Vienna. <i>Atmospheric Environment</i> , 1998, 32, 2479-2489.	1.9	11
313	The offline Lagrangian particle model FLEXPART "NorESM/CAM (v1): model description and comparisons with the online NorESM transport scheme and with the reference FLEXPART model. <i>Geoscientific Model Development</i> , 2016, 9, 4029-4048.	1.3	11
314	On the Convergence and Capability of the Large-Eddy Simulation of Concentration Fluctuations in Passive Plumes for a Neutral Boundary Layer at Infinite Reynolds Number. <i>Boundary-Layer Meteorology</i> , 2020, 176, 291-327.	1.2	11
315	Eine Wetterlagenklassifikation mittels Trajektorienclustering. <i>Meteorologische Zeitschrift</i> , 1994, 3, 333-336.	0.5	11
316	A case of transatlantic aerosol transport detected at the Schneefernerhaus Observatory (2650 m) on the northern edge of the Alps. <i>Meteorologische Zeitschrift</i> , 2010, 19, 591-600.	0.5	10
317	Estimating European Halocarbon Emissions Using Lagrangian Backward Transport Modeling and in Situ Measurements at the Jungfrauoch High-Alpine Site. <i>Geophysical Monograph Series</i> , 0, , 207-222.	0.1	10
318	Constraints on oceanic methane emissions west of Svalbard from atmospheric in situ measurements and Lagrangian transport modeling. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 14188-14200.	1.2	10
319	Three-dimensional methane distribution simulated with FLEXPART 8-CTM-1.1 constrained with observation data. <i>Geoscientific Model Development</i> , 2018, 11, 4469-4487.	1.3	10
320	Top-down estimates of black carbon emissions at high latitudes using an atmospheric transport model and a Bayesian inversion framework. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 15307-15327.	1.9	10
321	Ash Metrics for European and Transatlantic Air Routes During the Eyjafjallajökull Eruption 14 April to 23 May 2010. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 5469-5483.	1.2	10
322	Alpine Ice Core Evidence of a Large Increase in Vanadium and Molybdenum Pollution in Western Europe During the 20th Century. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033211.	1.2	10
323	Atmospheric Black Carbon over the North Atlantic and the Russian Arctic Seas in Summer-Autumn Time. <i>Chemistry for Sustainable Development</i> , 2016, , .	0.0	10
324	Tropospheric Ozone in Tehran, Iran, during the last 20 years. <i>Environmental Geochemistry and Health</i> , 2022, 44, 3615-3637.	1.8	10

#	ARTICLE	IF	CITATIONS
325	EARLINET correlative measurements for CALIPSO. , 2007, , .		9
326	Simulation of SEVIRI infrared channels: a case study from the Eyjafjallaj�r�kull April/May 2010 eruption. Atmospheric Measurement Techniques, 2013, 6, 649-660.	1.2	9
327	Lagrangian Modeling of the Atmosphre: An Introduction. Geophysical Monograph Series, 0, , 1-11.	0.1	9
328	Observed and Modeled Black Carbon Deposition and Sources in the Western Russian Arctic 1800��2014. Environmental Science & Technology, 2021, 55, 4368-4377.	4.6	9
329	Characterization of the atmospheric environment during extreme precipitation events associated with atmospheric rivers in Norway - Seasonal and regional aspects. Weather and Climate Extremes, 2021, 34, 100370.	1.6	9
330	Overview: Recent advances in the understanding of the northern Eurasian environments and of the urban air quality in China �� a Pan-Eurasian Experiment (PEEX) programme perspective. Atmospheric Chemistry and Physics, 2022, 22, 4413-4469.	1.9	9
331	Estimating the uncertainty of a Lagrangian photochemical air quality simulation model caused by inexact meteorological input data. Reliability Engineering and System Safety, 1997, 57, 31-40.	5.1	8
332	Chapter 21 Computation, accuracy and applications of trajectories�� a review and bibliography. Developments in Environmental Science, 2002, 1, 615-654.	0.5	8
333	Practical considerations to speed up Lagrangian stochastic particle models. Computers and Geosciences, 2002, 28, 143-154.	2.0	8
334	Integration of measurements and model simulations to characterize Eyjafjallaj�r�kull volcanic aerosols over south-eastern Italy. Atmospheric Chemistry and Physics, 2012, 12, 10001-10013.	1.9	8
335	Large Circulation Patterns Strongly Modulate Long��Term Variability of Arctic Black Carbon Levels and Areas of Origin. Geophysical Research Letters, 2021, 48, e2021GL092876.	1.5	8
336	Structure, Process, and Mechanism. , 2020, , 15-43.		8
337	On the tuning of atmospheric inverse methods: comparisons with the European Tracer Experiment (ETEX) and Chernobyl datasets using the atmospheric transport model FLEXPART. Geoscientific Model Development, 2020, 13, 5917-5934.	1.3	8
338	Thallium Pollution in Europe Over the Twentieth Century Recorded in Alpine Ice: Contributions From Coal Burning and Cement Production. Geophysical Research Letters, 2022, 49, .	1.5	8
339	Tropospheric aerosol layers after a cold front passage in January 2000 as observed at several stations of the German Lidar Network. Atmospheric Research, 2002, 63, 39-58.	1.8	7
340	Overview of the findings from measurements of halogenated compounds at Gosan (Jeju Island, Korea) quantifying emissions in East Asia. Journal of Integrative Environmental Sciences, 2012, 9, 71-80.	1.0	7
341	Observation of turbulent dispersion of artificially released SO��;sub>2>; puffs with UV cameras. Atmospheric Measurement Techniques, 2018, 11, 6169-6188.	1.2	7
342	Backscatter lidar observation of the aerosol stratification in the lower troposphere during winter Bise: a case study. Meteorologische Zeitschrift, 2005, 14, 663-669.	0.5	6

#	ARTICLE	IF	CITATIONS
343	Forecasting long-range atmospheric transport episodes of polychlorinated biphenyls using FLEXPART. Atmospheric Environment, 2013, 71, 335-339.	1.9	6
344	Airborne investigation of the aerosolsâ€“cloud interactions in the vicinity and within a marine stratocumulus over the North Sea during EUCAARI (2008). Atmospheric Environment, 2013, 81, 288-303.	1.9	6
345	Correction for Yasunari et al., Cesium-137 deposition and contamination of Japanese soils due to the Fukushima nuclear accident. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7525-7528.	3.3	6
346	An aerosol particle containing enriched uranium encountered in the remote upper troposphere. Journal of Environmental Radioactivity, 2018, 184-185, 95-100.	0.9	6
347	Stratosphere-troposphere exchanges: case studies recorded at Mt. Cimone during VOTALP project. Physics and Chemistry of the Earth, Part C: Solar, Terrestrial and Planetary Science, 1999, 24, 443-446.	0.2	5
348	Arctic haze over Central Europe. Tellus, Series B: Chemical and Physical Meteorology, 2022, 55, 796.	0.8	4
349	Lagrangian Models for Nuclear Studies: Examples and Applications. Geophysical Monograph Series, 0, , 329-348.	0.1	4
350	A Bayesian Method to Rank Different Model Forecasts of the Same Volcanic Ash Cloud. Geophysical Monograph Series, 2013, , 299-310.	0.1	4
351	The Association Between the North Atlantic Oscillation and the Interannual Variability of the Tropospheric Transport Pathways in Western Europe. Geophysical Monograph Series, 2013, , 127-142.	0.1	4
352	Support to Aviation for Volcanic Ash Avoidance (SAVAA). , 2008, , .		3
353	Chemical composition of tropospheric air masses encountered during high altitude flights (>11.5Åkm) during the 2009 fall Operation Ice Bridge field campaign. Journal of Geophysical Research, 2012, 117, .	3.3	3
354	Global-Scale Tropospheric Lagrangian Particle Models With Linear Chemistry. Geophysical Monograph Series, 0, , 235-250.	0.1	3
355	The Use of a High-Resolution Emission Data Set in a Global Eulerian-Lagrangian Coupled Model. Geophysical Monograph Series, 2013, , 173-184.	0.1	3
356	Long-Range Transport of Ozone from the North American Boundary Layer to Europe: Observations and Model Results. , 2004, , 257-266.		2
357	Operational Volcanic Ash Cloud Modeling: Discussion on Model Inputs, Products, and the Application of Real-Time Probabilistic Forecasting. Geophysical Monograph Series, 0, , 271-298.	0.1	2
358	Linking Carbon Dioxide Variability at Hateruma Station to East Asia Emissions by Bayesian Inversion. Geophysical Monograph Series, 2013, , 163-172.	0.1	2
359	Operational Emergency Preparedness Modeling-Overview. Geophysical Monograph Series, 2013, , 266-269.	0.1	1
360	Outlier removal for improved source estimation in atmospheric inverse problems. , 2014, , .		1

#	ARTICLE	IF	CITATIONS
361	Physical properties and sources of atmospheric aerosol in the finnish arctic. , 1996, , 593-596.		1
362	Assessing the radiative impact of aerosol smoke using MODTRAN5. , 2008, , .		0
363	Uncertainties in the inverse modelling of sulphur dioxide eruption profiles. Geomatics, Natural Hazards and Risk, 2012, 3, 97-97.	2.0	0
364	Applications of Lagrangian Modeling: Greenhouse Gases-Overview. Geophysical Monograph Series, 2013, , 144-148.	0.1	0
365	The Effect Of Unresolved Mesoscale Wind Velocity Fluctuations On Dispersion Model Results. , 2000, , 311-320.		0
366	Determination of NOx Sources by Combination of Satellite Images with Transport Modelling. , 2004, , 271-280.		0
367	Atmospheric Aerosol in the Finnish Arctic: Particle Number Concentrations, Chemical Characteristics, and Source Analysis. , 1995, , 1997-2002.		0
368	Can statistics of turbulent tracer dispersion be inferred from camera observations of SO ₂ in the ultraviolet? A modelling study. Atmospheric Measurement Techniques, 2020, 13, 3303-3318.	1.2	0