

# Andreas Volz-Thomas

## List of Publications by Year in descending order

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82  
papers

6,154  
citations

71102

41  
h-index

76900

74  
g-index

83  
all docs

83  
docs citations

83  
times ranked

4188  
citing authors

#	ARTICLE	IF	CITATIONS
1	Lightning NO <sub>x</sub> ; influence on large-scale NO <sub>y</sub> and O <sub>3</sub> ; plumes observed over the northern mid-latitudes. Tellus, Series B: Chemical and Physical Meteorology, 2022, 66, 25544.	1.6	8
2	Global-scale atmosphere monitoring by in-service aircraft – current achievements and future prospects of the European Research Infrastructure IAGOS. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28452.	1.6	118
3	The geographical distribution of meteorological parameters associated with high and low summer ozone levels in the lower troposphere and the boundary layer over the eastern Mediterranean (Cairo) Tj ETQq1 1 0.784314 rgt /Over	1.6	13
4	The first regular measurements of ozone, carbon monoxide and water vapour in the Pacific UTLS by IAGOS. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28385.	1.6	13
5	Instrumentation on commercial aircraft for monitoring the atmospheric composition on a global scale: the IAGOS system, technical overview of ozone and carbon monoxide measurements. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 27791.	1.6	61
6	Climatology of NO <sub>y</sub> in the troposphere and UT/LS from measurements made in MOZAIC. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28793.	1.6	4
7	Properties of small cirrus ice crystals from commercial aircraft measurements and implications for flight operations. Tellus, Series B: Chemical and Physical Meteorology, 2015, 67, 27876.	1.6	12
8	The backscatter cloud probe – a compact low-profile autonomous optical spectrometer. Atmospheric Measurement Techniques, 2014, 7, 1443-1457.	3.1	31
9	Long-term changes in lower tropospheric baseline ozone concentrations: Comparing chemistry–climate models and observations at northern midlatitudes. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5719-5736.	3.3	149
10	Lower tropospheric ozone at northern midlatitudes: Changing seasonal cycle. Geophysical Research Letters, 2013, 40, 1631-1636.	4.0	95
11	Examination of the atmospheric conditions associated with high and low summer ozone levels in the lower troposphere over the eastern Mediterranean. Atmospheric Chemistry and Physics, 2013, 13, 10339-10352.	4.9	61
12	Cloud-resolving chemistry simulation of a Hector thunderstorm. Atmospheric Chemistry and Physics, 2013, 13, 2757-2777.	4.9	20
13	The ACCENT-protocol: a framework for benchmarking and model evaluation. Geoscientific Model Development, 2012, 5, 611-618.	3.6	12
14	Aerosol observations and growth rates downwind of the anvil of a deep tropical thunderstorm. Atmospheric Chemistry and Physics, 2012, 12, 6157-6172.	4.9	17
15	Long-term changes in lower tropospheric baseline ozone concentrations at northern mid-latitudes. Atmospheric Chemistry and Physics, 2012, 12, 11485-11504.	4.9	260
16	Evaluation of ACE-FTS and OSIRIS Satellite retrievals of ozone and nitric acid in the tropical upper troposphere: Application to ozone production efficiency. Journal of Geophysical Research, 2011, 116, .	3.3	20
17	Representation of tropical deep convection in atmospheric models – Part 2: Tracer transport. Atmospheric Chemistry and Physics, 2011, 11, 8103-8131.	4.9	46
18	Composition of the TTL over Darwin: local mixing or long-range transport?. Atmospheric Chemistry and Physics, 2009, 9, 7725-7736.	4.9	20

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19	Lightning-produced NO <sub>x</sub> during the Northern Australian monsoon; results from the ACTIVE campaign. Atmospheric Chemistry and Physics, 2009, 9, 7419-7429.	4.9	10
20	An idealized two-dimensional approach to study the impact of the West African monsoon on the meridional gradient of tropospheric ozone. Journal of Geophysical Research, 2008, 113, .	3.3	18
21	An In-Flight Calibration Method for Near-Real-Time Humidity Measurements with the Airborne MOZAIC Sensor. Journal of Atmospheric and Oceanic Technology, 2008, 25, 656-666.	1.3	18
22	Carbon dioxide uptake of a forested region in southwest France derived from airborne CO <sub>2</sub> and CO measurements in a quasi-Lagrangian experiment. Journal of Geophysical Research, 2004, 109, .	3.3	40
23	OH formation by HONO photolysis during the BERLIOZ experiment. Journal of Geophysical Research, 2003, 108, PHO 3-1.	3.3	265
24	Nighttime formation of peroxy and hydroxyl radicals during the BERLIOZ campaign: Observations and modeling studies. Journal of Geophysical Research, 2003, 108, .	3.3	91
25	Hydrocarbon measurements at Pabstthum during the BERLIOZ campaign and modeling of free radicals. Journal of Geophysical Research, 2003, 108, .	3.3	30
26	Peroxy radicals during BERLIOZ at Pabstthum: Measurements, radical budgets and ozone production. Journal of Geophysical Research, 2003, 108, .	3.3	93
27	Hydrogen peroxide, organic peroxides, carbonyl compounds, and organic acids measured at Pabstthum during BERLIOZ. Journal of Geophysical Research, 2003, 108, .	3.3	72
28	Inorganic trace gases and peroxy radicals during BERLIOZ at Pabstthum: An investigation of the photostationary state of NO <sub>x</sub> and O <sub>3</sub> . Journal of Geophysical Research, 2003, 108, PHO 4-1.	3.3	52
29	Introduction to Special Section: Photochemistry Experiment in BERLIOZ. Journal of Geophysical Research, 2003, 108, .	3.3	22
30	A Database for Volatile Organic Compounds. Journal of Atmospheric Chemistry, 2002, 42, 281-286.	3.2	19
31	Title is missing!. Journal of Atmospheric Chemistry, 2002, 42, 465-492.	3.2	36
32	Title is missing!. Journal of Atmospheric Chemistry, 2002, 42, 289-321.	3.2	30
33	Quality Assurance in TFS for Inorganic Compounds. Journal of Atmospheric Chemistry, 2002, 42, 235-253.	3.2	19
34	Quality Assurance of Hydrocarbon Measurements for the German Tropospheric Research Focus (TFS). Journal of Atmospheric Chemistry, 2002, 42, 255-279.	3.2	30
35	Characterization of a commercial gas chromatography-flame ionization detection system for the in situ determination of C <sub>5</sub> -C <sub>10</sub> hydrocarbons in ambient air. Journal of Chromatography A, 2000, 878, 215-234.	3.7	25
36	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

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37	Measurements of trace gases and photolysis frequencies during SLOPE96 and a coarse estimate of the local OH concentration from HNO <sub>3</sub> formation. Journal of Geophysical Research, 2000, 105, 1563-1583.	3.3	29
38	Schauinsland Ozone Precursor Experiment (SLOPE96): Scientific background and main results. Journal of Geophysical Research, 2000, 105, 1553-1561.	3.3	18
39	Influence of valley winds on transport and dispersion of airborne pollutants in the Freiburg-Schauinsland area. Journal of Geophysical Research, 2000, 105, 1585-1597.	3.3	60
40	On the budget of hydroxyl radicals at Schauinsland during the Schauinsland Ozone Precursor Experiment (SLOPE96). Journal of Geophysical Research, 2000, 105, 1611-1622.	3.3	30
41	TOR: An Overview of Tropospheric Ozone Research. , 2000, , 202-238.		0
42	Formation of hydroxyl and hydroperoxy radicals in the gas-phase ozonolysis of ethene. Chemical Physics Letters, 1999, 301, 559-564.	2.6	45
43	An improved fast-response vacuum-UV resonance fluorescence CO instrument. Journal of Geophysical Research, 1999, 104, 1699-1704.	3.3	322
44	On the Exchange of NO <sub>3</sub> Radicals with Aqueous Solutions: Solubility and Sticking Coefficient. Journal of Atmospheric Chemistry, 1998, 29, 17-43.	3.2	59
45	Photochemical box modeling of long-range transport from North America to Tenerife during the North Atlantic Regional Experiment (NARE) 1993. Journal of Geophysical Research, 1998, 103, 13477-13488.	3.3	26
46	Trace gas measurements during the Oxidizing Capacity of the Tropospheric Atmosphere campaign 1993 at Izaña. Journal of Geophysical Research, 1998, 103, 13505-13518.	3.3	36
47	Long-term measurements of alkyl nitrates in southern Germany: 1. General behavior and seasonal and diurnal variation. Journal of Geophysical Research, 1998, 103, 5729-5746.	3.3	66
48	Intercomparison of NO, NO <sub>2</sub> , NO <sub>y</sub> , O <sub>3</sub> , and RO <sub>x</sub> measurements during the Oxidizing Capacity of the Tropospheric Atmosphere (OCTA) campaign 1993 at Izaña. Journal of Geophysical Research, 1998, 103, 13615-13634.	3.3	23
49	Chemical air mass differences near fronts. Journal of Geophysical Research, 1998, 103, 13413-13434.	3.3	83
50	Preface [to special section on North Atlantic Regional Experiment (NARE II)]. Journal of Geophysical Research, 1998, 103, 13353-13355.	3.3	9
51	Trends in stratospheric and free tropospheric ozone. Journal of Geophysical Research, 1997, 102, 1571-1590.	3.3	106
52	Climatologies of NO <sub>x</sub> and NO <sub>y</sub> : A comparison of data and models. Atmospheric Environment, 1997, 31, 1851-1904.	4.1	111
53	Climatology of Ozone, PAN, CO, and NMHC in the Free Troposphere Over the Southern North Atlantic. Journal of Atmospheric Chemistry, 1997, 28, 245-262.	3.2	23
54	Title is missing!. Journal of Atmospheric Chemistry, 1997, 28, 263-282.	3.2	44

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55	Long-Term Measurements of Light Hydrocarbons (C <sub>2</sub> –C <sub>5</sub> ) at Schauinsland (Black Forest). Journal of Atmospheric Chemistry, 1997, 28, 135-171.	3.2	36
56	An Overview of Tropospheric Ozone Research. , 1997, , 1-34.		3
57	Temporal variations in formaldehyde, acetaldehyde and acetone and budget of formaldehyde at a rural site in Southern Germany. Atmospheric Environment, 1996, 30, 3667-3676.	4.1	65
58	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
59	North Atlantic Regional Experiment 1993 Summer Intensive: Foreword. Journal of Geophysical Research, 1996, 101, 28869-28875.	3.3	47
60	Airborne measurements of the photolysis frequency of NO <sub>2</sub> . Journal of Geophysical Research, 1996, 101, 18613-18627.	3.3	95
61	Temporal variability of summer-time ozone and aerosols in the free troposphere over the eastern North Atlantic. Geophysical Research Letters, 1995, 22, 2925-2928.	4.0	100
62	Calibration source for peroxy radicals with built-in actinometry using H <sub>2</sub> O and O <sub>2</sub> photolysis at 185 nm. Journal of Geophysical Research, 1995, 100, 18811.	3.3	96
63	Trends in surface ozone concentrations at Arosa (Switzerland). Atmospheric Environment, 1994, 28, 75-87.	4.1	226
64	Simultaneous measurements of peroxy and nitrate radicals at Schauinsland. Journal of Atmospheric Chemistry, 1993, 16, 313-335.	3.2	137
65	Preparation of organic nitrates from alcohols and N <sub>2</sub> O <sub>5</sub> for species identification in atmospheric samples. Journal of Atmospheric Chemistry, 1993, 16, 349-359.	3.2	40
66	On the interaction of isotopic exchange processes with photochemical reactions in atmospheric oxides of nitrogen. Journal of Geophysical Research, 1993, 98, 14791-14796.	3.3	129
67	Interhemispheric asymmetry in OH abundance inferred from measurements of atmospheric <sup>14</sup> CO. Nature, 1992, 356, 50-52.	27.8	76
68	Measurements of alkyl nitrates in rural and polluted air masses. Atmospheric Environment Part A General Topics, 1991, 25, 1951-1960.	1.3	89
69	Numerical analysis of ESR spectra from atmospheric samples. Journal of Atmospheric Chemistry, 1990, 11, 271-297.	3.2	79
70	A photoelectric detector for the measurement of photolysis frequencies of ozone and other atmospheric molecules. Journal of Atmospheric Chemistry, 1989, 8, 203-227.	3.2	147
71	Evaluation of the Montsouris series of ozone measurements made in the nineteenth century. Nature, 1988, 332, 240-242.	27.8	739
72	Measurements of nitric oxide between 0–12 km altitude and 67°N to 60°S latitude obtained during STRAT03 III. Journal of Geophysical Research, 1988, 93, 15831-15849.	3.3	94

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73	Measurements of tropospheric OH concentrations: A comparison of field data with model predictions. Journal of Atmospheric Chemistry, 1987, 5, 185-216.	3.2	116
74	An optimized chemiluminescence detector for tropospheric NO measurements. Journal of Atmospheric Chemistry, 1985, 2, 287-306.	3.2	80
75	A resonance-fluorescence instrument for the in-situ measurement of atmospheric carbon monoxide. Journal of Atmospheric Chemistry, 1985, 2, 345-357.	3.2	30
76	Seasonal and latitudinal variation of $^{14}\text{CO}$ and the tropospheric concentration of OH radicals. Journal of Geophysical Research, 1981, 86, 5163-5171.	3.3	189
77	Comment [on "Improved airborne measurements of OH in the atmosphere using the technique of laser-induced fluorescence" by C. C. Wang, L. I. Davis, Jr., P. M. Selzer, and R. Munoz]. Journal of Geophysical Research, 1981, 86, 12155-12155.	3.3	3
78	The vertical distribution of stable trace gases at mid-latitudes. Journal of Geophysical Research, 1981, 86, 5179-5184.	3.3	93
79	Simultaneously measured vertical profiles of $\text{H}_2$ , $\text{CH}_4$ , CO, $\text{N}_2\text{O}$ , $\text{CFCl}_3$ , and $\text{CF}_2\text{Cl}_2$ in the mid-latitude stratosphere and troposphere. Journal of Geophysical Research, 1979, 84, 3149-3154.	3.3	100
80	The vertical distribution of CFM and related species in the stratosphere. Pure and Applied Geophysics, 1978, 116, 545-553.	1.9	10
81	Depth profiles of chlorofluoromethanes in the Norwegian sea. Pure and Applied Geophysics, 1978, 116, 575-582.	1.9	18
82	OH Radicals in the lower troposphere. Geophysical Research Letters, 1976, 3, 466-468.	4.0	167