Andreas Volz-Thomas

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Evaluation of the Montsouris series of ozone measurements made in the nineteenth century. Nature, 1988, 332, 240-242. | 27.8 | 739 |
| 2 | An improved fast-response vacuum-UV resonance fluorescence CO instrument. Journal of Geophysical Research, 1999, 104, 1699-1704. | 3.3 | 322 |
| 3 | OH formation by HONO photolysis during the BERLIOZ experiment. Journal of Geophysical Research, 2003, 108, PHO 3-1. | 3.3 | 265 |
| 4 | Long-term changes in lower tropospheric baseline ozone concentrations at northern mid-latitudes. Atmospheric Chemistry and Physics, 2012, 12, 11485-11504. | 4.9 | 260 |
| 5 | Trends in surface ozone concentrations at Arosa (Switzerland). Atmospheric Environment, 1994, 28, 75-87. | 4.1 | 226 |
| 6 | Seasonal and latitudinal variation of ¹⁴ CO and the tropospheric concentration of OH radicals. Journal of Geophysical Research, 1981, 86, 5163-5171. | 3.3 | 189 |
| 7 | OH ―Radicals in the lower troposphere. Geophysical Research Letters, 1976, 3, 466-468. | 4.0 | 167 |
| 8 | Longâ€ŧerm changes in lower tropospheric baseline ozone concentrations: Comparing chemistry limate models and observations at northern midlatitudes. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5719-5736. | 3.3 | 149 |
| 9 | 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 |
| 10 | 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 |
| 11 | Simultaneous measurements of peroxy and nitrate radicals at Schauinsland. Journal of Atmospheric Chemistry, 1993, 16, 313-335. | 3.2 | 137 |
| 12 | 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 |
| 13 | 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 |
| 14 | Measurements of tropospheric OH concentrations: A comparison of field data with model predictions. Journal of Atmospheric Chemistry, 1987, 5, 185-216. | 3.2 | 116 |
| 15 | Climatologies of NOxx and NOy: A comparison of data and models. Atmospheric Environment, 1997, 31, 1851-1904. | 4.1 | 111 |
| 16 | Trends in stratospheric and free tropospheric ozone. Journal of Geophysical Research, 1997, 102, 1571-1590. | 3.3 | 106 |
| 17 | Simultaneously measured vertical profiles of H ₂ , CH ₄ , CO, N ₂ O, CFCl ₃ , and CF ₂ Cl ₂ in the midâ€latitude stratosphere and troposphere. Journal of Geophysical Research, 1979, 84, 3149-3154. | 3.3 | 100 |
| 18 | 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 |

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| 19 | Calibration source for peroxy radicals with built-in actinometry using H2O and O2photolysis at 185 nm. Journal of Geophysical Research, 1995, 100, 18811. | 3.3 | 96 |
| 20 | Airborne measurements of the photolysis frequency of NO2. Journal of Geophysical Research, 1996, 101, 18613-18627. | 3.3 | 95 |
| 21 | Lower tropospheric ozone at northern midlatitudes: Changing seasonal cycle. Geophysical Research Letters, 2013, 40, 1631-1636. | 4.0 | 95 |
| 22 | Measurements of nitric oxide between 0–12 km altitude and 67°N to 60°S latitude obtained during STRATOZ III. Journal of Geophysical Research, 1988, 93, 15831-15849. | 3.3 | 94 |
| 23 | The vertical distribution of stable trace gases at midâ€latitudes. Journal of Geophysical Research, 1981, 86, 5179-5184. | 3.3 | 93 |
| 24 | Peroxy radicals during BERLIOZ at Pabstthum: Measurements, radical budgets and ozone production. Journal of Geophysical Research, 2003, 108, . | 3.3 | 93 |
| 25 | Nighttime formation of peroxy and hydroxyl radicals during the BERLIOZ campaign: Observations and modeling studies. Journal of Geophysical Research, 2003, 108, . | 3.3 | 91 |
| 26 | Measurements of alkyl nitrates in rural and polluted air masses. Atmospheric Environment Part A General Topics, 1991, 25, 1951-1960. | 1.3 | 89 |
| 27 | Chemical air mass differences near fronts. Journal of Geophysical Research, 1998, 103, 13413-13434. | 3.3 | 83 |
| 28 | An optimized chemiluminescence detector for tropospheric NO measurements. Journal of Atmospheric Chemistry, 1985, 2, 287-306. | 3.2 | 80 |
| 29 | Numerical analysis of ESR spectra from atmospheric samples. Journal of Atmospheric Chemistry, 1990, 11, 271-297. | 3.2 | 79 |
| 30 | 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 |
| 31 | Interhemispheric asymmetry in OH abundance inferred from measurements of atmospheric 14CO. Nature, 1992, 356, 50-52. | 27.8 | 76 |
| 32 | Hydrogen peroxide, organic peroxides, carbonyl compounds, and organic acids measured at Pabstthum during BERLIOZ. Journal of Geophysical Research, 2003, 108, . | 3.3 | 72 |
| 33 | 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 |
| 34 | 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 |
| 35 | 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 |
| 36 | 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 |

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| 37 | 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 |
| 38 | On the Exchange of NO3 Radicals with Aqueous Solutions: Solubility and Sticking Coefficient. Journal of Atmospheric Chemistry, 1998, 29, 17-43. | 3.2 | 59 |
| 39 | Inorganic trace gases and peroxy radicals during BERLIOZ at Pabstthum: An investigation of the photostationary state of NOxand O3. Journal of Geophysical Research, 2003, 108, PHO 4-1. | 3.3 | 52 |
| 40 | North Atlantic Regional Experiment 1993 Summer Intensive: Foreword. Journal of Geophysical Research, 1996, 101, 28869-28875. | 3.3 | 47 |
| 41 | Representation of tropical deep convection in atmospheric models – Part 2: Tracer transport. Atmospheric Chemistry and Physics, 2011, 11, 8103-8131. | 4.9 | 46 |
| 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 | Title is missing!. Journal of Atmospheric Chemistry, 1997, 28, 263-282. | 3.2 | 44 |
| 44 | Preparation of organic nitrates from alcohols and N2O5 for species identification in atmospheric samples. Journal of Atmospheric Chemistry, 1993, 16, 349-359. | 3.2 | 40 |
| 45 | Carbon dioxide uptake of a forested region in southwest France derived from airborne CO2and CO measurements in a quasi-Lagrangian experiment. Journal of Geophysical Research, 2004, 109, . | 3.3 | 40 |
| 46 | Long-Term Measurements of Light Hydrocarbons (C2–C5) at Schauinsland (Black Forest). Journal of Atmospheric Chemistry, 1997, 28, 135-171. | 3.2 | 36 |
| 47 | Trace gas measurements during the Oxidizing Capacity of the Tropospheric Atmosphere campaign 1993 at IzaA±a. Journal of Geophysical Research, 1998, 103, 13505-13518. | 3.3 | 36 |
| 48 | Title is missing!. Journal of Atmospheric Chemistry, 2002, 42, 465-492. | 3.2 | 36 |
| 49 | The backscatter cloud probe – a compact low-profile autonomous optical spectrometer. Atmospheric Measurement Techniques, 2014, 7, 1443-1457. | 3.1 | 31 |
| 50 | A resonance-fluorescence instrument for the in-situ measurement of atmospheric carbon monoxide. Journal of Atmospheric Chemistry, 1985, 2, 345-357. | 3.2 | 30 |
| 51 | 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 |
| 52 | Title is missing!. Journal of Atmospheric Chemistry, 2002, 42, 289-321. | 3.2 | 30 |
| 53 | Quality Assurance of Hydrocarbon Measurements for the German Tropospheric Research Focus (TFS). Journal of Atmospheric Chemistry, 2002, 42, 255-279. | 3.2 | 30 |
| 54 | Hydrocarbon measurements at Pabstthum during the BERLIOZ campaign and modeling of free radicals. Journal of Geophysical Research, 2003, 108, . | 3.3 | 30 |

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| 55 | Measurements of trace gases and photolysis frequencies during SLOPE96 and a coarse estimate of the local OH concentration from HNO3formation. Journal of Geophysical Research, 2000, 105, 1563-1583. | 3.3 | 29 |
| 56 | 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 |
| 57 | Characterization of a commercial gas chromatography–flame ionization detection system for the in situ determination of C5–C10 hydrocarbons in ambient air. Journal of Chromatography A, 2000, 878, 215-234. | 3.7 | 25 |
| 58 | 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 |
| 59 | Intercomparison of NO, NO2, NOy, O3, and ROxmeasurements during the Oxidizing Capacity of the Tropospheric Atmosphere (OCTA) campaign 1993 at Izaña. Journal of Geophysical Research, 1998, 103, 13615-13634. | 3.3 | 23 |
| 60 | 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 ETQq0 C |) 0 ng 8T /C | Dve do ck 10 Tf |
| 61 | Introduction to Special Section: Photochemistry Experiment in BERLIOZ. Journal of Geophysical Research, 2003, 108, . | 3.3 | 22 |
| 62 | Composition of the TTL over Darwin: local mixing or long-range transport?. Atmospheric Chemistry and Physics, 2009, 9, 7725-7736. | 4.9 | 20 |
| 63 | 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 |
| 64 | Cloud-resolving chemistry simulation of a Hector thunderstorm. Atmospheric Chemistry and Physics, 2013, 13, 2757-2777. | 4.9 | 20 |
| 65 | A Database for Volatile Organic Compounds. Journal of Atmospheric Chemistry, 2002, 42, 281-286. | 3.2 | 19 |
| 66 | Quality Assurance in TFS for Inorganic Compounds. Journal of Atmospheric Chemistry, 2002, 42, 235-253. | 3.2 | 19 |
| 67 | Depth profiles of chlorofluoromethanes in the Norwegian sea. Pure and Applied Geophysics, 1978, 116, 575-582. | 1.9 | 18 |
| 68 | Schauinsland Ozone Precursor Experiment (SLOPE96): Scientific background and main results. Journal of Geophysical Research, 2000, 105, 1553-1561. | 3.3 | 18 |
| 69 | An idealized twoâ€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 |
| 70 | 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 |
| 71 | 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 |
| 72 | 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 |

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| 73 | The ACCENT-protocol: a framework for benchmarking and model evaluation. Geoscientific Model Development, 2012, 5, 611-618. | 3.6 | 12 |
| 74 | 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 |
| 75 | The vertical distribution of CFM and related species in the stratosphere. Pure and Applied Geophysics, 1978, 116, 545-553. | 1.9 | 10 |
| 76 | Lightning-produced NO _x during the Northern Australian monsoon; results from the ACTIVE campaign. Atmospheric Chemistry and Physics, 2009, 9, 7419-7429. | 4.9 | 10 |
| 77 | Preface [to special section on North Atlantic Regional Experiment (NARE II)]. Journal of Geophysical Research, 1998, 103, 13353-13355. | 3.3 | 9 |
| 78 | Lightning NO _x influence on large-scale NO _y and O ₃ plumes observed over the northern mid-latitudes. Tellus, Series B: Chemical and Physical Meteorology, 2022, 66, 25544. | 1.6 | 8 |
| 79 | Climatology of NO _y in the troposphere and UT/LS from measurements made in MOZAIC. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28793. | 1.6 | 4 |
| 80 | Comment [on "Improved airborne measurements of OH in the atmosphere using the technique of laserâ€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 |
| 81 | An Overview of Tropospheric Ozone Research. , 1997, , 1-34. | | 3 |
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TOR: An Overview of Tropospheric Ozone Research. , 2000, , 202-238.