# James B Mcquaid

## List of Publications by Year in descending order



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|---|---|---|---|
| 73 papers | 3,804 citations | 109264 35 h-index | 149623 56 g-index |
| 88 all docs | 88 docs citations | 88 times ranked | 4594 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Extensive halogen-mediated ozone destruction over the tropical Atlantic Ocean. Nature, 2008, 453, 1232-1235. | 13.7 | 432 |
| 2 | Optical properties of Saharan dust aerosol and contribution from the coarse mode as measured during the Fennec 2011 aircraft campaign. Atmospheric Chemistry and Physics, 2013, 13, 303-325. | 1.9 | 172 |
| 3 | Nitrogen management is essential to prevent tropical oil palm plantations from causing ground-level ozone pollution. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18447-18451. | 3.3 | 161 |
| 4 | Modeling OH, HO2, and RO2radicals in the marine boundary layer: 1. Model construction and comparison with field measurements. Journal of Geophysical Research, 1999, 104, 30241-30255. | 3.3 | 126 |
| 5 | Meteorology and dust in the central Sahara: Observations from Fennec supersiteâ€1 during the June 2011 Intensive Observation Period. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4069-4089. | 1.2 | 123 |
| 6 | South East Pacific atmospheric composition and variability sampled along 20Â° S during VOCALS-REx. Atmospheric Chemistry and Physics, 2011, 11, 5237-5262. | 1.9 | 119 |
| 7 | Meteorology, Air Quality, and Health in London: The ClearfLo Project. Bulletin of the American Meteorological Society, 2015, 96, 779-804. | 1.7 | 105 |
| 8 | Airborne observations of regional variation in fluorescent aerosol across the United States. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1153-1170. | 1.2 | 93 |
| 9 | Trace gas chemistry in a young biomass burning plume over Namibia: Observations and model simulations. Journal of Geophysical Research, 2003, 108, n/a-n/a. | 3.3 | 92 |
| 10 | Influence of chemical weathering and aging of iron oxides on the potential iron solubility of Saharan dust during simulated atmospheric processing. Global Biogeochemical Cycles, 2011, 25, n/a-n/a. | 1.9 | 90 |
| 11 | Secondary organic aerosol from biogenic VOCs over West Africa during AMMA. Atmospheric Chemistry and Physics, 2009, 9, 3841-3850. | 1.9 | 85 |
| 12 | Algal photophysiology drives darkening and melt of the Greenland Ice Sheet. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 5694-5705. | 3.3 | 81 |
| 13 | Coarse-mode mineral dust size distributions, composition and optical properties from AER-D aircraft measurements over the tropical eastern Atlantic. Atmospheric Chemistry and Physics, 2018, 18, 17225-17257. | 1.9 | 80 |
| 14 | Glacier algae accelerate melt rates on the south-western Greenland Ice Sheet. Cryosphere, 2020, 14, 309-330. | 1.5 | 78 |
| 15 | Biogenic nitrogen oxide emissions from soils: impact on NO<sub>x</sub> and ozone over west Africa during AMMA (African Monsoon Multidisciplinary Analysis): observational study. Atmospheric Chemistry and Physics, 2008, 8, 2285-2297. | 1.9 | 73 |
| 16 | Chemical composition observed over the mid-Atlantic and the detection of pollution signatures far from source regions. Journal of Geophysical Research, 2007, 112, . | 3.3 | 70 |
| 17 | Atmospheric Iceâ€Nucleating Particles in the Dusty Tropical Atlantic. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2175-2193. | 1.2 | 66 |
| 18 | The North Atlantic Marine Boundary Layer Experiment(NAMBLEX). Overview of the campaign held at Mace Head, Ireland, in summer 2002. Atmospheric Chemistry and Physics, 2006, 6, 2241-2272. | 1.9 | 65 |

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|---|---|---|---|
| 19 | Establishing Lagrangian connections between observations within air masses crossing the Atlantic during the International Consortium for Atmospheric Research on Transport and Transformation experiment. Journal of Geophysical Research, 2006, 111, . | 3.3 | 60 |
| 20 | HO<sub>x</sub> observations over West Africa during AMMA: impact of isoprene and NO<sub>x</sub>. Atmospheric Chemistry and Physics, 2010, 10, 9415-9429. | 1.9 | 59 |
| 21 | Cross-hemispheric transport of central African biomass burning pollutants: implications for downwind ozone production. Atmospheric Chemistry and Physics, 2010, 10, 3027-3046. | 1.9 | 58 |
| 22 | The Turbulent Structure and Diurnal Growth of the Saharan Atmospheric Boundary Layer. Journals of the Atmospheric Sciences, 2015, 72, 693-713. | 0.6 | 58 |
| 23 | Evaluation of a Lagrangian box model using field measurements from EASE (Eastern Atlantic Summer) Tj ETQq1 1 0.784314 rgBT /Over | 1.9 | 57 |
| 24 | Advances in understanding mineral dust and boundary layer processes over the Sahara from Fennec aircraft observations. Atmospheric Chemistry and Physics, 2015, 15, 8479-8520. | 1.9 | 57 |
| 25 | Contributions of biogenic material to the atmospheric ice-nucleating particle population in North Western Europe. Scientific Reports, 2018, 8, 13821. | 1.6 | 56 |
| 26 | Eastern Atlantic Spring Experiment 1997 (EASE97) 2. Comparisons of model concentrations of OH, HO2, and RO2with measurements. Journal of Geophysical Research, 2002, 107, ACH 5-1. | 3.3 | 55 |
| 27 | Two high-speed, portable GC systems designed for the measurement of non-methane hydrocarbons and PAN: Results from the Jungfraujoch High Altitude Observatory. Journal of Environmental Monitoring, 2004, 6, 234. | 2.1 | 55 |
| 28 | Direct estimates of emissions from the megacity of Lagos. Atmospheric Chemistry and Physics, 2009, 9, 8471-8477. | 1.9 | 55 |
| 29 | Physical Exchanges at the Airâ€“Sea Interface: UKâ€“SOLAS Field Measurements. Bulletin of the American Meteorological Society, 2009, 90, 629-644. | 1.7 | 52 |
| 30 | Meteorological and dust aerosol conditions over the western Saharan region observed at Fennec Supersiteâ€2 during the intensive observation period in June 2011. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8426-8447. | 1.2 | 52 |
| 31 | The ice-nucleating ability of quartz immersed in water and its atmospheric importance compared to K-feldspar. Atmospheric Chemistry and Physics, 2019, 19, 11343-11361. | 1.9 | 50 |
| 32 | Mineral phosphorus drives glacier algal blooms on the Greenland Ice Sheet. Nature Communications, 2021, 12, 570. | 5.8 | 50 |
| 33 | Atmospheric monitoring of volatile organic compounds using programmed temperature vaporization injection. Journal of High Resolution Chromatography, 1996, 19, 686-690. | 2.0 | 46 |
| 34 | Title is missing!. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 2921-2927. | 1.7 | 43 |
| 35 | Airborne measurements of trace gases and aerosols over the London metropolitan region. Atmospheric Chemistry and Physics, 2012, 12, 5163-5187. | 1.9 | 43 |
| 36 | Non-methane hydrocarbons in the Arctic boundary layer. Atmospheric Environment, 2002, 36, 3217-3229. | 1.9 | 41 |

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| 37 | The Fennec Automatic Weather Station (AWS) Network: Monitoring the Saharan Climate System. Journal of Atmospheric and Oceanic Technology, 2013, 30, 709-724. | 0.5 | 39 |
| 38 | The diversity of ice algal communities on the Greenland Ice Sheet as revealed by oligotyping. Microbial Genomics, 2018, 4, . | 1.0 | 39 |
| 39 | Rapid uplift of nonmethane hydrocarbons in a cold front over central Europe. Journal of Geophysical Research, 2003, 108, . | 3.3 | 36 |
| 40 | The atmospheric chemistry of trace gases and particulate matter emitted by different land uses in Borneo. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 3177-3195. | 1.8 | 36 |
| 41 | Diurnal cycles of short-lived tropospheric alkenes at a north Atlantic coastal site. Atmospheric Environment, 1999, 33, 2417-2422. | 1.9 | 35 |
| 42 | Quantifying particle size and turbulent scale dependence of dust flux in the Sahara using aircraft measurements. Journal of Geophysical Research D: Atmospheres, 2014, 119, 7577-7598. | 1.2 | 35 |
| 43 | Iceland is an episodic source of atmospheric ice-nucleating particles relevant for mixed-phase clouds. Science Advances, 2020, 6, eaba8137. | 4.7 | 33 |
| 44 | A detailed case study of isoprene chemistry during the EASE96 Mace Head campaign. Atmospheric Environment, 2000, 34, 2827-2836. | 1.9 | 32 |
| 45 | Aerosol Direct Radiative Impact Experiment (ADRIEX) overview. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 3-15. | 1.0 | 32 |
| 46 | Statistical inference of OH concentrations and air mass dilution rates from successive observations of nonmethane hydrocarbons in single air masses. Journal of Geophysical Research, 2007, 112, . | 3.3 | 31 |
| 47 | Processes controlling the concentration of hydroperoxides at Jungfraujoch Observatory, Switzerland. Atmospheric Chemistry and Physics, 2006, 6, 5525-5536. | 1.9 | 30 |
| 48 | The Use of the Helium Ionization Detector for Gas Chromatographic Monitoring of Trace Atmospheric Components. Journal of High Resolution Chromatography, 1998, 21, 75-80. | 2.0 | 28 |
| 49 | A comparison of modulating interface technologies in comprehensive two-dimensional gas chromatography (GCï¿½GC). Journal of Separation Science, 2000, 12, 187-193. | 1.0 | 28 |
| 50 | Bromoform in tropical Atlantic air from 25Â°N to 25Â°S. Geophysical Research Letters, 2007, 34, . | 1.5 | 27 |
| 51 | Size-segregated compositional analysis of aerosol particles collected in the European Arctic during the ACCACIA campaign. Atmospheric Chemistry and Physics, 2016, 16, 4063-4079. | 1.9 | 24 |
| 52 | An instrument for quantifying heterogeneous ice nucleation in multiwell plates using infrared emissions to detect freezing. Atmospheric Measurement Techniques, 2018, 11, 5629-5641. | 1.2 | 22 |
| 53 | Lagrangian dust model simulations for a case of moist convective dust emission and transport in the western Sahara region during Fennec/LADUNEX. Journal of Geophysical Research D: Atmospheres, 2015, 120, 6117-6144. | 1.2 | 20 |
| 54 | New Saharan wind observations reveal substantial biases in analysed dustâ€generating winds. Atmospheric Science Letters, 2017, 18, 366-372. | 0.8 | 20 |

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| 55 | Laboratory analysis of the effects of elevated atmospheric carbon dioxide on respiration in biological soil crusts. Journal of Arid Environments, 2013, 98, 52-59. | 1.2 | 18 |
| 56 | A new thermal gradient ice nucleation diffusion chamber instrument: design, development and first results using Saharan mineral dust. Atmospheric Measurement Techniques, 2009, 2, 221-229. | 1.2 | 16 |
| 57 | Impact of the 2019/2020 Australian Megafires on Air Quality and Health. GeoHealth, 2021, 5, e2021GH000454. | 1.9 | 16 |
| 58 | Rapid metal pollutant deposition from the volcanic plume of KÄ«lauea, Hawaiâ€™i. Communications Earth & Environment, 2021, 2, . | 2.6 | 15 |
| 59 | Characterisation of the filter inlet system on the FAAM BAe-146 research aircraft and its use for size-resolved aerosol composition measurements. Atmospheric Measurement Techniques, 2019, 12, 5741-5763. | 1.2 | 14 |
| 60 | A Major Combustion Aerosol Event Had a Negligible Impact on the Atmospheric Iceâ€Nucleating Particle Population. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032938. | 1.2 | 14 |
| 61 | On the composition of Caribbean maritime aerosol particles measured during RICO. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 1059-1063. | 1.0 | 12 |
| 62 | Intercomparison of VACC- and AMS-derived nitrate, sulphate and ammonium aerosol loadings during ADRIEX. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 77-84. | 1.0 | 10 |
| 63 | Sub-ppt Atmospheric Measurements Using PTV-GC-FID and Real-Time Digital Signal Processing. Journal of High Resolution Chromatography, 1998, 21, 181-184. | 2.0 | 9 |
| 64 | Mineral and biological ice-nucleating particles above the South East of the British Isles. Environmental Science Atmospheres, 2021, 1, 176-191. | 0.9 | 9 |
| 65 | A note on the emission of nitrogen oxides from silage in opened bunker silos. Environmental Monitoring and Assessment, 2002, 74, 209-215. | 1.3 | 8 |
| 66 | Impact on air quality and health due to the Saddleworth Moor fire in northern England. Environmental Research Letters, 2020, 15, 074018. | 2.2 | 8 |
| 67 | Title is missing!. Journal of Atmospheric Chemistry, 1999, 34, 185-205. | 1.4 | 6 |
| 68 | Megacity and local contributions to regional air pollution: an aircraft case study over London. Atmospheric Chemistry and Physics, 2020, 20, 7193-7216. | 1.9 | 6 |
| 69 | Supplement to Physical Exchanges at the Airâ€“Sea Interface: UKâ€“SOLAS Field Measurements. Bulletin of the American Meteorological Society, 2009, 90, ES9-ES16. | 1.7 | 5 |
| 70 | Impact of the June 2018 Saddleworth Moor wildfires on air quality in northern England. Environmental Research Communications, 2020, 2, 031001. | 0.9 | 5 |
| 71 | Temporal Variability of Surface Reflectance Supersedes Spatial Resolution in Defining Greenlandâ€™s Bare-Ice Albedo. Remote Sensing, 2022, 14, 62. | 1.8 | 4 |
| 72 | Kinetics of the reactions of OH with 3-methyl-2-cyclohexen-1-one and 3,5,5-trimethyl-2-cyclohexen-1-one under simulated atmospheric conditions. International Journal of Chemical Kinetics, 2002, 34, 7-11. | 1.0 | 3 |

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| 73 | A comparison of modulating interface technologies in comprehensive two-dimensional gas chromatography (GCÃ—GC). , 2000, 12, 187. | | 1 |