

Stephen A Montzka

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6891252/publications.pdf>

Version: 2024-02-01

182
papers

19,587
citations

14655

66
h-index

13379

130
g-index

246
all docs

246
docs citations

246
times ranked

16877
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | The NASA Atmospheric Tomography (ATom) Mission: Imaging the Chemistry of the Global Atmosphere. <i>Bulletin of the American Meteorological Society</i> , 2022, 103, E761-E790. | 3.3 | 39 |
| 2 | ENSO-Driven Fires Cause Large Interannual Variability in the Naturally Emitted, Ozone-Depleting Trace Gas CH ₃ Br. <i>Geophysical Research Letters</i> , 2022, 49, . | 4.0 | 7 |
| 3 | A Post-Phaseout Retrospective Reassessment of the Global Methyl Bromide Budget. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, . | 3.3 | 3 |
| 4 | Continental-scale contributions to the global CFC-11 emission increase between 2012 and 2017. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 2891-2907. | 4.9 | 2 |
| 5 | Projections of hydrofluorocarbon (HFC) emissions and the resulting global warming based on recent trends in observed abundances and current policies. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 6087-6101. | 4.9 | 29 |
| 6 | Aircraft-Based Observations of Ozone-Depleting Substances in the Upper Troposphere and Lower Stratosphere in and Above the Asian Summer Monsoon. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033137. | 3.3 | 17 |
| 7 | Atmospheric oil and natural gas hydrocarbon trends in the Northern Colorado Front Range are notably smaller than inventory emissions reductions. <i>Elementa</i> , 2021, 9, . | 3.2 | 4 |
| 8 | Methyl Chloroform Continues to Constrain the Hydroxyl (OH) Variability in the Troposphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD033862. | 3.3 | 21 |
| 9 | A decline in global CFC-11 emissions during 2018~2019. <i>Nature</i> , 2021, 590, 428-432. | 27.8 | 55 |
| 10 | A decline in emissions of CFC-11 and related chemicals from eastern China. <i>Nature</i> , 2021, 590, 433-437. | 27.8 | 61 |
| 11 | A three-dimensional-model inversion of methyl chloroform to constrain the atmospheric oxidative capacity. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 4809-4824. | 4.9 | 13 |
| 12 | Inverse modelling of carbonyl sulfide: implementation, evaluation and implications for the global budget. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 3507-3529. | 4.9 | 28 |
| 13 | Observations of greenhouse gases as climate indicators. <i>Climatic Change</i> , 2021, 165, 12. | 3.6 | 30 |
| 14 | Carbonyl sulfide: comparing a mechanistic representation of the vegetation uptake in a land surface model and the leaf relative uptake approach. <i>Biogeosciences</i> , 2021, 18, 2917-2955. | 3.3 | 21 |
| 15 | Exploring the Potential of Using Carbonyl Sulfide to Track the Urban Biosphere Signal. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD034106. | 3.3 | 2 |
| 16 | Impact of stratospheric air and surface emissions on tropospheric nitrous oxide during ATom. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 11113-11132. | 4.9 | 5 |
| 17 | COS-derived GPP relationships with temperature and light help explain high-latitude atmospheric CO ₂ seasonal cycle amplification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 7.1 | 21 |
| 18 | Tropospheric Age-of-Air: Influence of SF ₆ Emissions on Recent Surface Trends and Model Biases. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD035451. | 3.3 | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | UAS Chromatograph for Atmospheric Trace Species (UCATS) – a versatile instrument for trace gas measurements on airborne platforms. <i>Atmospheric Measurement Techniques</i> , 2021, 14, 6795-6819. | 3.1 | 9 |
| 20 | Temporary pause in the growth of atmospheric ethane and propane in 2015–2018. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 15153-15170. | 4.9 | 6 |
| 21 | Multispecies Assessment of Factors Influencing Regional CO ₂ and CH ₄ Enhancements During the Winter 2017 ACT-America Campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031339. | 3.3 | 23 |
| 22 | The influence of the stratospheric Quasi-Biennial Oscillation on trace gas levels at the Earth's surface. <i>Nature Geoscience</i> , 2020, 13, 22-27. | 12.9 | 23 |
| 23 | Anthropogenic Impacts on Atmospheric Carbonyl Sulfide Since the 19th Century Inferred From Polar Firn Air and Ice Core Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD033074. | 3.3 | 10 |
| 24 | Renewed and emerging concerns over the production and emission of ozone-depleting substances. <i>Nature Reviews Earth & Environment</i> , 2020, 1, 251-263. | 29.7 | 32 |
| 25 | Quantifying contributions of chlorofluorocarbon banks to emissions and impacts on the ozone layer and climate. <i>Nature Communications</i> , 2020, 11, 1380. | 12.8 | 72 |
| 26 | A Synthesis Inversion to Constrain Global Emissions of Two Very Short Lived Chlorocarbons: Dichloromethane, and Perchloroethylene. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031818. | 3.3 | 18 |
| 27 | Global Climate. <i>Bulletin of the American Meteorological Society</i> , 2020, 101, S9-S128. | 3.3 | 61 |
| 28 | Investigating stratospheric changes between 2009 and 2018 with halogenated trace gas data from aircraft, AirCores, and a global model focusing on CFC-11. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 9771-9782. | 4.9 | 10 |
| 29 | The shared socio-economic pathway (SSP) greenhouse gas concentrations and their extensions to 2500. <i>Geoscientific Model Development</i> , 2020, 13, 3571-3605. | 3.6 | 539 |
| 30 | Ocean Biogeochemistry Control on the Marine Emissions of Brominated Very Short-Lived Ozone-Depleting Substances: A Machine Learning Approach. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 12319-12339. | 3.3 | 17 |
| 31 | Recent Trends in Stratospheric Chlorine From Very Short-Lived Substances. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 2318-2335. | 3.3 | 34 |
| 32 | Atmospheric histories, growth rates and solubilities in seawater and other natural waters of the potential transient tracers HCFC-22, HCFC-141b, HCFC-142b, HFC-134a, HFC-125, HFC-23, PFC-14 and PFC-116. <i>Ocean Science</i> , 2019, 15, 33-60. | 3.4 | 12 |
| 33 | Enhanced North American carbon uptake associated with El Niño. <i>Science Advances</i> , 2019, 5, eaaw0076. | 10.3 | 45 |
| 34 | Increase in CFC-11 emissions from eastern China based on atmospheric observations. <i>Nature</i> , 2019, 569, 546-550. | 27.8 | 148 |
| 35 | Long-Term Measurements Show Little Evidence for Large Increases in Total U.S. Methane Emissions Over the Past Decade. <i>Geophysical Research Letters</i> , 2019, 46, 4991-4999. | 4.0 | 35 |
| 36 | Constraints and biases in a tropospheric two-box model of OH. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 407-424. | 4.9 | 40 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Delay in recovery of the Antarctic ozone hole from unexpected CFC-11 emissions. <i>Nature Communications</i> , 2019, 10, 5781. | 12.8 | 58 |
| 38 | Chemical evidence of inter-hemispheric air mass intrusion into the Northern Hemisphere mid-latitudes. <i>Scientific Reports</i> , 2018, 8, 4669. | 3.3 | 11 |
| 39 | Observing the atmospheric evolution of ozone-depleting substances. <i>Comptes Rendus - Geoscience</i> , 2018, 350, 384-392. | 1.2 | 10 |
| 40 | Quantifying the vertical transport of CH ₃ Br and CH ₂ Br ₂ over the western Pacific. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 13135-13153. | 4.9 | 10 |
| 41 | An unexpected and persistent increase in global emissions of ozone-depleting CFC-11. <i>Nature</i> , 2018, 557, 413-417. | 27.8 | 269 |
| 42 | Reviews and syntheses: Carbonyl sulfide as a multi-scale tracer for carbon and water cycles. <i>Biogeosciences</i> , 2018, 15, 3625-3657. | 3.3 | 98 |
| 43 | Seasonal variation of bromocarbons at Hateruma Island, Japan: implications for global sources. <i>Journal of Atmospheric Chemistry</i> , 2017, 74, 171-185. | 3.2 | 8 |
| 44 | Estimating methane emissions from biological and fossil fuel sources in the San Francisco Bay Area. <i>Geophysical Research Letters</i> , 2017, 44, 486-495. | 4.0 | 25 |
| 45 | Role of atmospheric oxidation in recent methane growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 5373-5377. | 7.1 | 231 |
| 46 | Ambient mixing ratios of atmospheric halogenated compounds at five background stations in China. <i>Atmospheric Environment</i> , 2017, 160, 55-69. | 4.1 | 34 |
| 47 | Peak growing season gross uptake of carbon in North America is largest in the Midwest USA. <i>Nature Climate Change</i> , 2017, 7, 450-454. | 18.8 | 39 |
| 48 | Large historical growth in global terrestrial gross primary production. <i>Nature</i> , 2017, 544, 84-87. | 27.8 | 219 |
| 49 | U.S. CH ₄ emissions from oil and gas production: Have recent large increases been detected?. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 4070-4083. | 3.3 | 47 |
| 50 | Considerable contribution of the Montreal Protocol to declining greenhouse gas emissions from the United States. <i>Geophysical Research Letters</i> , 2017, 44, 8075-8083. | 4.0 | 30 |
| 51 | Deriving Global OH Abundance and Atmospheric Lifetimes for Long-Lived Gases: A Search for CH ₃ CCl ₃ Alternatives. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 11,914. | 3.3 | 26 |
| 52 | The increasing threat to stratospheric ozone from dichloromethane. <i>Nature Communications</i> , 2017, 8, 15962. | 12.8 | 147 |
| 53 | Plant Uptake of Atmospheric Carbonyl Sulfide in Coast Redwood Forests. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 3391-3404. | 3.0 | 11 |
| 54 | Historical greenhouse gas concentrations for climate modelling (CMIP6). <i>Geoscientific Model Development</i> , 2017, 10, 2057-2116. | 3.6 | 350 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Continuous and high-precision atmospheric concentration measurements of COS, CO ₂ , CO and H ₂ O using a quantum cascade laser spectrometer (QCLS). Atmospheric Measurement Techniques, 2016, 9, 5293-5314. | 3.1 | 32 |
| 56 | State of the Climate in 2015. Bulletin of the American Meteorological Society, 2016, 97, Si-S275. | 3.3 | 142 |
| 57 | Atmospheric histories and global emissions of halons H ₁₂₁₁ (CBrClF ₂), H ₁₃₀₁ (CBrF ₃), and H ₂₄₀₂ (CBrF ₂ CBrF ₂). Journal of Geophysical Research D: Atmospheres, 2016, 121, 3663-3686. | 3.3 | 24 |
| 58 | A comprehensive estimate for loss of atmospheric carbon tetrachloride (CCl ₄) to the ocean. Atmospheric Chemistry and Physics, 2016, 16, 10899-10910. | 4.9 | 14 |
| 59 | A multi-model intercomparison of halogenated very short-lived substances (TransCom-VSLS): linking oceanic emissions and tropospheric transport for a reconciled estimate of the stratospheric source gas injection of bromine. Atmospheric Chemistry and Physics, 2016, 16, 9163-9187. | 4.9 | 51 |
| 60 | Role of OH variability in the stalling of the global atmospheric CH ₄ growth rate from 1999 to 2006. Atmospheric Chemistry and Physics, 2016, 16, 7943-7956. | 4.9 | 68 |
| 61 | Model sensitivity studies of the decrease in atmospheric carbon tetrachloride. Atmospheric Chemistry and Physics, 2016, 16, 15741-15754. | 4.9 | 5 |
| 62 | Global HCFC-22 measurements with MIPAS: retrieval, validation, global distribution and its evolution over 2005–2012. Atmospheric Chemistry and Physics, 2016, 16, 3345-3368. | 4.9 | 27 |
| 63 | Radiation and atmospheric circulation controls on carbonyl sulfide concentrations in the marine boundary layer. Journal of Geophysical Research D: Atmospheres, 2016, 121, 13,113. | 3.3 | 6 |
| 64 | Surrogate gas prediction model as a proxy for $\delta^{14}\text{C}$ -based measurements of fossil fuel CO ₂ . Journal of Geophysical Research D: Atmospheres, 2016, 121, 7489-7505. | 3.3 | 1 |
| 65 | Reversal of global atmospheric ethane and propane trends largely due to US oil and natural gas production. Nature Geoscience, 2016, 9, 490-495. | 12.9 | 149 |
| 66 | Continued emissions of carbon tetrachloride from the United States nearly two decades after its phaseout for dispersive uses. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2880-2885. | 7.1 | 32 |
| 67 | O ₃ , CH ₄ , CO ₂ , CO, NO ₂ and NMHC aircraft measurements in the Uinta Basin oil and gas region under low and high ozone conditions in winter 2012 and 2013. Elementa, 2016, 4, . | 3.2 | 8 |
| 68 | U.S. emissions of HFC-134a derived for 2008–2012 from an extensive flask-air sampling network. Journal of Geophysical Research D: Atmospheres, 2015, 120, 801-825. | 3.3 | 30 |
| 69 | Growth in stratospheric chlorine from short-lived chemicals not controlled by the Montreal Protocol. Geophysical Research Letters, 2015, 42, 4573-4580. | 4.0 | 42 |
| 70 | Estimate of carbonyl sulfide tropical oceanic surface fluxes using Aura Tropospheric Emission Spectrometer observations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,012. | 3.3 | 43 |
| 71 | Modelling marine emissions and atmospheric distributions of halocarbons and dimethyl sulfide: the influence of prescribed water concentration vs. prescribed emissions. Atmospheric Chemistry and Physics, 2015, 15, 11753-11772. | 4.9 | 28 |
| 72 | Increasing concentrations of dichloromethane, CH ₂ Cl ₂ , inferred from CARIBIC air samples collected 1998–2012. Atmospheric Chemistry and Physics, 2015, 15, 1939-1958. | 4.9 | 51 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 73 | Increase in HFC-134a emissions in response to the success of the Montreal Protocol. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,728. | 3.3 | 15 |
| 74 | Seasonal climatology of CO ₂ across North America from aircraft measurements in the NOAA/ESRL Global Greenhouse Gas Reference Network. Journal of Geophysical Research D: Atmospheres, 2015, 120, 5155-5190. | 3.3 | 153 |
| 75 | Seasonal fluxes of carbonyl sulfide in a midlatitude forest. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14162-14167. | 7.1 | 69 |
| 76 | Efficiency of short-lived halogens at influencing climate through depletion of stratospheric ozone. Nature Geoscience, 2015, 8, 186-190. | 12.9 | 146 |
| 77 | Recent Trends in Global Emissions of Hydrochlorofluorocarbons and Hydrofluorocarbons: Reflecting on the 2007 Adjustments to the Montreal Protocol. Journal of Physical Chemistry A, 2015, 119, 4439-4449. | 2.5 | 84 |
| 78 | European emissions of HCFC-22 based on eleven years of high frequency atmospheric measurements and a Bayesian inversion method. Atmospheric Environment, 2015, 112, 196-207. | 4.1 | 24 |
| 79 | Changes in the levels and variability of halocarbons and the compliance with the Montreal Protocol from an urban view. Chemosphere, 2015, 138, 438-446. | 8.2 | 6 |
| 80 | Quantification and source apportionment of the methane emission flux from the city of Indianapolis. Elementa, 2015, 3, . | 3.2 | 50 |
| 81 | Comparison of halocarbon measurements in an atmospheric dry whole air sample. Elementa, 2015, 3, . | 3.2 | 5 |
| 82 | Characterization of Aura TES carbonyl sulfide retrievals over ocean. Atmospheric Measurement Techniques, 2014, 7, 163-172. | 3.1 | 34 |
| 83 | Results from the International Halocarbons in Air Comparison Experiment (IHALACE). Atmospheric Measurement Techniques, 2014, 7, 469-490. | 3.1 | 37 |
| 84 | State of the Climate in 2013. Bulletin of the American Meteorological Society, 2014, 95, S1-S279. | 3.3 | 138 |
| 85 | Global emissions of refrigerants HCFC-22 and HFC-134a: Unforeseen seasonal contributions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17379-17384. | 7.1 | 59 |
| 86 | Toward a better understanding and quantification of methane emissions from shale gas development. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6237-6242. | 7.1 | 296 |
| 87 | Ruminants, climate change and climate policy. Nature Climate Change, 2014, 4, 2-5. | 18.8 | 276 |
| 88 | Observational evidence for interhemispheric hydroxyl-radical parity. Nature, 2014, 513, 219-223. | 27.8 | 121 |
| 89 | Constraining surface carbon fluxes using in situ measurements of carbonyl sulfide and carbon dioxide. Global Biogeochemical Cycles, 2014, 28, 161-179. | 4.9 | 57 |
| 90 | Methyl chloride in the upper troposphere observed by the CARIBIC passenger aircraft observatory: Large-scale distributions and Asian summer monsoon outflow. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5542-5558. | 3.3 | 18 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 91 | Corrigendum to "Controls on the movement and composition of firn air at the West Antarctic Ice Sheet Divide". Atmospheric Chemistry and Physics, 2014, 14, 9511-9511. | 4.9 | 0 |
| 92 | Corrigendum to "Global and regional emission estimates for HCFC-22", Atmos. Chem. Phys., 12, 10033-10050, 2012. Atmospheric Chemistry and Physics, 2014, 14, 4857-4858. | 4.9 | 4 |
| 93 | On the consistency between global and regional methane emissions inferred from SCIAMACHY, TANSO-FTS, IASI and surface measurements. Atmospheric Chemistry and Physics, 2014, 14, 577-592. | 4.9 | 91 |
| 94 | Estimates of European emissions of methyl chloroform using a Bayesian inversion method. Atmospheric Chemistry and Physics, 2014, 14, 9755-9770. | 4.9 | 25 |
| 95 | A new look at methane and nonmethane hydrocarbon emissions from oil and natural gas operations in the Colorado Denver-Julesburg Basin. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6836-6852. | 3.3 | 257 |
| 96 | Methane emissions estimate from airborne measurements over a western United States natural gas field. Geophysical Research Letters, 2013, 40, 4393-4397. | 4.0 | 414 |
| 97 | A coupled model of the global cycles of carbonyl sulfide and CO ₂ : A possible new window on the carbon cycle. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 842-852. | 3.0 | 149 |
| 98 | Constraints on emissions of carbon monoxide, methane, and a suite of hydrocarbons in the Colorado Front Range using observations of CH ₄ and CO ₂ . Atmospheric Chemistry and Physics, 2013, 13, 11101-11120. | 4.9 | 27 |
| 99 | Anthropogenic emissions of methane in the United States. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20018-20022. | 7.1 | 437 |
| 100 | Ecosystem photosynthesis inferred from measurements of carbonyl sulphide flux. Nature Geoscience, 2013, 6, 186-190. | 12.9 | 137 |
| 101 | Allocation of Terrestrial Carbon Sources Using ¹⁴ CO ₂ : Methods, Measurement, and Modeling. Radiocarbon, 2013, 55, 1484-1495. | 1.8 | 35 |
| 102 | Re-evaluation of the lifetimes of the major CFCs and CH ₃ Cl ₃ using atmospheric trends. Atmospheric Chemistry and Physics, 2013, 13, 2691-2702. | 4.9 | 105 |
| 103 | Evaluating global emission inventories of biogenic bromocarbons. Atmospheric Chemistry and Physics, 2013, 13, 11819-11838. | 4.9 | 66 |
| 104 | State of the Climate in 2012. Bulletin of the American Meteorological Society, 2013, 94, S1-S258. | 3.3 | 129 |
| 105 | Tropospheric SF ₆ : Age of air from the Northern Hemisphere midlatitude surface. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,429. | 3.3 | 37 |
| 106 | Allocation of Terrestrial Carbon Sources Using ¹⁴ CO ₂ ; Methods, Measurement, and Modeling. Radiocarbon, 2013, 55, . | 1.8 | 9 |
| 107 | Preserving Montreal Protocol Climate Benefits by Limiting HFCs. Science, 2012, 335, 922-923. | 12.6 | 139 |
| 108 | Global and regional emission estimates for HCFC-22. Atmospheric Chemistry and Physics, 2012, 12, 10033-10050. | 4.9 | 40 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 109 | A new multi-gas constrained model of trace gas non-homogeneous transport in firn: evaluation and behaviour at eleven polar sites. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 11465-11483. | 4.9 | 46 |
| 110 | Hydrocarbon emissions characterization in the Colorado Front Range: A pilot study. <i>Journal of Geophysical Research</i> , 2012, 117, . | 3.3 | 359 |
| 111 | The contribution of natural and anthropogenic very short-lived species to stratospheric bromine. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 371-380. | 4.9 | 63 |
| 112 | Linking emissions of fossil fuel CO ₂ and other anthropogenic trace gases using atmospheric ¹⁴ CO ₂ . <i>Journal of Geophysical Research</i> , 2012, 117, . | 3.3 | 121 |
| 113 | The potential of carbonyl sulfide as a proxy for gross primary production at flux tower sites. <i>Journal of Geophysical Research</i> , 2011, 116, . | 3.3 | 46 |
| 114 | Recent decreases in fossil-fuel emissions of ethane and methane derived from firn air. <i>Nature</i> , 2011, 476, 198-201. | 27.8 | 156 |
| 115 | Controls on the movement and composition of firn air at the West Antarctic Ice Sheet Divide. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 11007-11021. | 4.9 | 37 |
| 116 | Assessment of fossil fuel carbon dioxide and other anthropogenic trace gas emissions from airborne measurements over Sacramento, California in spring 2009. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 705-721. | 4.9 | 148 |
| 117 | Non-CO ₂ greenhouse gases and climate change. <i>Nature</i> , 2011, 476, 43-50. | 27.8 | 934 |
| 118 | The RCP greenhouse gas concentrations and their extensions from 1765 to 2300. <i>Climatic Change</i> , 2011, 109, 213-241. | 3.6 | 2,948 |
| 119 | Small Interannual Variability of Global Atmospheric Hydroxyl. <i>Science</i> , 2011, 331, 67-69. | 12.6 | 306 |
| 120 | Post-coring entrapment of modern air in some shallow ice cores collected near the firn-ice transition: evidence from CFC-12 measurements in Antarctic firn air and ice cores. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5135-5144. | 4.9 | 21 |
| 121 | Optimal estimation of the surface fluxes of methyl chloride using a 3-D global chemical transport model. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 5515-5533. | 4.9 | 51 |
| 122 | Ozone variability and halogen oxidation within the Arctic and sub-Arctic springtime boundary layer. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 10223-10236. | 4.9 | 104 |
| 123 | Enhanced ozone over western North America from biomass burning in Eurasia during April 2008 as seen in surface and profile observations. <i>Atmospheric Environment</i> , 2010, 44, 4497-4509. | 4.1 | 55 |
| 124 | Relationships between carbonyl sulfide (COS) and CO ₂ during leaf gas exchange. <i>New Phytologist</i> , 2010, 186, 869-878. | 7.3 | 110 |
| 125 | Recent increases in global HFC ₂₃ emissions. <i>Geophysical Research Letters</i> , 2010, 37, . | 4.0 | 38 |
| 126 | Variations in ozone depletion potentials of very short-lived substances with season and emission region. <i>Geophysical Research Letters</i> , 2010, 37, . | 4.0 | 39 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 127 | Deep air convection in the firn at a zero-accumulation site, central Antarctica. <i>Earth and Planetary Science Letters</i> , 2010, 293, 359-367. | 4.4 | 82 |
| 128 | An important contribution to springtime Arctic aerosol from biomass burning in Russia. <i>Geophysical Research Letters</i> , 2010, 37, . | 4.0 | 172 |
| 129 | Recovery of the Ozone Layer: The Ozone Depleting Gas Index. <i>Eos</i> , 2009, 90, 1-2. | 0.1 | 15 |
| 130 | Biomass burning in Siberia and Kazakhstan as an important source for haze over the Alaskan Arctic in April 2008. <i>Geophysical Research Letters</i> , 2009, 36, . | 4.0 | 289 |
| 131 | Accelerated increases observed for hydrochlorofluorocarbons since 2004 in the global atmosphere. <i>Geophysical Research Letters</i> , 2009, 36, . | 4.0 | 65 |
| 132 | Carbonyl sulfide as an inverse tracer for biogenic organic carbon in gas and aerosol phases. <i>Geophysical Research Letters</i> , 2009, 36, . | 4.0 | 11 |
| 133 | Observational constraints on recent increases in the atmospheric CH ₄ burden. <i>Geophysical Research Letters</i> , 2009, 36, . | 4.0 | 499 |
| 134 | Spatial distribution of ¹⁴ C/ ¹² C and CO ₂ across Eurasia: measurements from the TROICA-8 expedition. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 175-187. | 4.9 | 34 |
| 135 | Recent trends in atmospheric methyl bromide: analysis of post-Montreal Protocol variability. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 5963-5974. | 4.9 | 63 |
| 136 | Photosynthetic Control of Atmospheric Carbonyl Sulfide During the Growing Season. <i>Science</i> , 2008, 322, 1085-1088. | 12.6 | 196 |
| 137 | Oceanic distributions and emissions of short-lived halocarbons. <i>Global Biogeochemical Cycles</i> , 2007, 21, . | 4.9 | 173 |
| 138 | Present and future sources and emissions of halocarbons: Toward new constraints. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 30 |
| 139 | On the global distribution, seasonality, and budget of atmospheric carbonyl sulfide (COS) and some similarities to CO ₂ . <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 213 |
| 140 | When will the Antarctic ozone hole recover?. <i>Geophysical Research Letters</i> , 2006, 33, . | 4.0 | 151 |
| 141 | Tracking climate forcing: The annual greenhouse gas index. <i>Eos</i> , 2006, 87, 509. | 0.1 | 27 |
| 142 | Long-term observations of stratospheric bromine reveal slow down in growth. <i>Geophysical Research Letters</i> , 2006, 33, . | 4.0 | 67 |
| 143 | Temporal decrease in upper atmospheric chlorine. <i>Geophysical Research Letters</i> , 2006, 33, . | 4.0 | 62 |
| 144 | The role of carbon dioxide in climate forcing from 1979 to 2004: introduction of the Annual Greenhouse Gas Index. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2006, 58, 614-619. | 1.6 | 132 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 145 | New Directions: Watching over tropospheric hydroxyl (OH). Atmospheric Environment, 2006, 40, 5741-5743. | 4.1 | 24 |
| 146 | Background Concentrations of 18 Air Toxics for North America. Journal of the Air and Waste Management Association, 2006, 56, 3-11. | 1.9 | 34 |
| 147 | Atmospheric variability of methyl chloride during the last 300 years from an Antarctic ice core and firn air. Geophysical Research Letters, 2004, 31, . | 4.0 | 33 |
| 148 | Rapid growth of hydrofluorocarbon 134a and hydrochlorofluorocarbons 141b, 142b, and 22 from Advanced Global Atmospheric Gases Experiment (AGAGE) observations at Cape Grim, Tasmania, and Mace Head, Ireland. Journal of Geophysical Research, 2004, 109, n/a-n/a. | 3.3 | 96 |
| 149 | A 350-year atmospheric history for carbonyl sulfide inferred from Antarctic firn air and air trapped in ice. Journal of Geophysical Research, 2004, 109, n/a-n/a. | 3.3 | 84 |
| 150 | Urban/industrial pollution for the New York City-Washington, D. C., corridor, 1996-1998: 1. Providing independent verification of CO and PCE emissions inventories. Journal of Geophysical Research, 2003, 108, . | 3.3 | 12 |
| 151 | Urban/industrial pollution for the New York City-Washington, D. C., corridor, 1996-1998: 2. A study of the efficacy of the Montreal Protocol and other regulatory measures. Journal of Geophysical Research, 2003, 108, . | 3.3 | 17 |
| 152 | Chlorine budget and partitioning during the Stratospheric Aerosol and Gas Experiment (SAGE) III Ozone Loss and Validation Experiment (SOLVE). Journal of Geophysical Research, 2003, 108, . | 3.3 | 69 |
| 153 | A decline in tropospheric organic bromine. Geophysical Research Letters, 2003, 30, . | 4.0 | 129 |
| 154 | Three-dimensional climatological distribution of tropospheric OH: Update and evaluation. Journal of Geophysical Research, 2000, 105, 8931-8980. | 3.3 | 730 |
| 155 | Implications of methyl bromide supersaturations in the temperate North Atlantic Ocean. Journal of Geophysical Research, 2000, 105, 19763-19769. | 3.3 | 39 |
| 156 | New Observational Constraints for Atmospheric Hydroxyl on Global and Hemispheric Scales. Science, 2000, 288, 500-503. | 12.6 | 124 |
| 157 | Present and future trends in the atmospheric burden of ozone-depleting halogens. Nature, 1999, 398, 690-694. | 27.8 | 313 |
| 158 | A record of atmospheric halocarbons during the twentieth century from polar firn air. Nature, 1999, 399, 749-755. | 27.8 | 235 |
| 159 | Distribution of halon-1211 in the upper troposphere and lower stratosphere and the 1994 total bromine budget. Journal of Geophysical Research, 1998, 103, 1513-1526. | 3.3 | 131 |
| 160 | Growth and distribution of halons in the atmosphere. Journal of Geophysical Research, 1998, 103, 1503-1511. | 3.3 | 48 |
| 161 | Photochemical ozone production in the rural southeastern United States during the 1990 Rural Oxidants in the Southern Environment (ROSE) program. Journal of Geophysical Research, 1998, 103, 22491-22508. | 3.3 | 74 |
| 162 | Undersaturation of CH ₃ Br in the Southern Ocean. Geophysical Research Letters, 1997, 24, 171-172. | 4.0 | 54 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 163 | Observations of HFC-134a in the remote troposphere. <i>Geophysical Research Letters</i> , 1996, 23, 169-172. | 4.0 | 70 |
| 164 | Airborne gas chromatograph for in situ measurements of long-lived species in the upper troposphere and lower stratosphere. <i>Geophysical Research Letters</i> , 1996, 23, 347-350. | 4.0 | 158 |
| 165 | Decline in the Tropospheric Abundance of Halogen from Halocarbons: Implications for Stratospheric Ozone Depletion. <i>Science</i> , 1996, 272, 1318-1322. | 12.6 | 301 |
| 166 | Estimates of total organic and inorganic chlorine in the lower stratosphere from in situ and flask measurements during AASE II. <i>Journal of Geophysical Research</i> , 1995, 100, 3057. | 3.3 | 99 |
| 167 | A Net Sink for Atmospheric CH ₃ Br in the East Pacific Ocean. <i>Science</i> , 1995, 267, 1002-1005. | 12.6 | 144 |
| 168 | Measurements of 3-methyl furan, methyl vinyl ketone, and methacrolein at a rural forested site in the southeastern United States. <i>Journal of Geophysical Research</i> , 1995, 100, 11393. | 3.3 | 74 |
| 169 | Evaluation of ozone precursor source types using principal component analysis of ambient air measurements in rural Alabama. <i>Journal of Geophysical Research</i> , 1995, 100, 22853. | 3.3 | 38 |
| 170 | Evolution of alkyl nitrates with air mass age. <i>Journal of Geophysical Research</i> , 1995, 100, 22805. | 3.3 | 104 |
| 171 | Hydrocarbon measurements in the southeastern United States: The Rural Oxidants in the Southern Environment (ROSE) Program 1990. <i>Journal of Geophysical Research</i> , 1995, 100, 25945. | 3.3 | 191 |
| 172 | Early trends in the global tropospheric abundance of hydrochlorofluorocarbon-141b and 142b. <i>Geophysical Research Letters</i> , 1994, 21, 2483-2486. | 4.0 | 42 |
| 173 | Isoprene and its oxidation products, methyl vinyl ketone and methacrolein, in the rural troposphere. <i>Journal of Geophysical Research</i> , 1993, 98, 1101-1111. | 3.3 | 169 |
| 174 | The observation of a C ₅ alcohol emission in a North American pine forest. <i>Geophysical Research Letters</i> , 1993, 20, 1039-1042. | 4.0 | 145 |
| 175 | Global tropospheric distribution and calibration scale of HCFC-22. <i>Geophysical Research Letters</i> , 1993, 20, 703-706. | 4.0 | 81 |
| 176 | Kinetics of the OH Reaction with Methyl Chloroform and Its Atmospheric Implications. <i>Science</i> , 1992, 257, 227-230. | 12.6 | 38 |
| 177 | Peroxy radicals in the ROSE experiment: Measurement and theory. <i>Journal of Geophysical Research</i> , 1992, 97, 20671-20686. | 3.3 | 94 |
| 178 | A decrease in the growth rates of atmospheric halon concentrations. <i>Nature</i> , 1992, 359, 403-405. | 27.8 | 55 |
| 179 | Low-temperature oxidation of YBa ₂ Cu ₃ O _{6.0} with nitrogen dioxide. <i>Journal of Materials Research</i> , 1991, 6, 891-894. | 2.6 | 4 |
| 180 | Superconductor metal oxide catalyst in a chemiluminescence chromatography detector. <i>Journal of Chromatography A</i> , 1988, 452, 75-83. | 3.7 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 181 | Chapter 2. Source Gases that Affect Stratospheric Ozone. , 0, , 33-77. | | 4 |
| 182 | Hydrocarbon Tracers Suggest Methane Emissions from Fossil Sources Occur Predominately Before Gas Processing and That Petroleum Plays Are a Significant Source. Environmental Science & Technology, 0, , . | 10.0 | 3 |