Larry Horowitz

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5213142/publications.pdf

Version: 2024-02-01

213 papers 29,483 citations

4960 84 h-index 158 g-index

263 all docs $\begin{array}{c} 263 \\ \text{docs citations} \end{array}$

times ranked

263

18964 citing authors

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Atmospheric energy transport to the Arctic 1979–2012. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 67, 25482. | 1.7 | 8 |
| 2 | Climate change penalty and benefit on surface ozone: a global perspective based on CMIP6 earth system models. Environmental Research Letters, 2022, 17, 024014. | 5.2 | 27 |
| 3 | Tripling of western US particulate pollution from wildfires in a warming climate. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2111372119. | 7.1 | 29 |
| 4 | Changes in anthropogenic precursor emissions drive shifts in the ozone seasonal cycle throughout the northern midlatitude troposphere. Atmospheric Chemistry and Physics, 2022, 22, 3507-3524. | 4.9 | 10 |
| 5 | Attribution of Stratospheric and Tropospheric Ozone Changes Between 1850 and 2014 in CMIP6 Models. Journal of Geophysical Research D: Atmospheres, 2022, 127, . | 3.3 | 5 |
| 6 | Effective radiative forcing from emissions of reactive gases and aerosols – a multi-model comparison. Atmospheric Chemistry and Physics, 2021, 21, 853-874. | 4.9 | 65 |
| 7 | Assessing the Influence of COVIDâ€19 on the Shortwave Radiative Fluxes Over the East Asian Marginal Seas. Geophysical Research Letters, 2021, 48, e2020GL091699. | 4.0 | 20 |
| 8 | Intercomparison of the representations of the atmospheric chemistry of pre-industrial methane and ozone in earth system and other global chemistry-transport models. Atmospheric Environment, 2021, 248, 118248. | 4.1 | 5 |
| 9 | Evaluating stratospheric ozone and water vapour changes in CMIP6 models from 1850 to 2100. Atmospheric Chemistry and Physics, 2021, 21, 5015-5061. | 4.9 | 54 |
| 10 | Tropospheric ozone in CMIP6 simulations. Atmospheric Chemistry and Physics, 2021, 21, 4187-4218. | 4.9 | 89 |
| 11 | Global modeling of hydrogen using GFDL-AM4.1: Sensitivity of soil removal and radiative forcing. International Journal of Hydrogen Energy, 2021, 46, 13446-13460. | 7.1 | 20 |
| 12 | Hydroxyl Radical (OH) Response to Meteorological Forcing and Implication for the Methane Budget. Geophysical Research Letters, 2021, 48, e2021GL094140. | 4.0 | 7 |
| 13 | Climate-driven chemistry and aerosol feedbacks in CMIP6 Earth system models. Atmospheric Chemistry and Physics, 2021, 21, 1105-1126. | 4.9 | 39 |
| 14 | Large uncertainties in global hydroxyl projections tied to fate of reactive nitrogen and carbon. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 15 |
| 15 | Revisiting the Impact of Sea Salt on Climate Sensitivity. Geophysical Research Letters, 2020, 47, e2019GL085601. | 4.0 | 12 |
| 16 | Reappraisal of the Climate Impacts of Ozoneâ€Depleting Substances. Geophysical Research Letters, 2020, 47, e2020GL088295. | 4.0 | 16 |
| 17 | Summer PM _{2.5} Pollution Extremes Caused by Wildfires Over the Western United States During 2017–2018. Geophysical Research Letters, 2020, 47, e2020GL089429. | 4.0 | 18 |
| 18 | Impact of volcanic aerosol hemispheric symmetry on Sahel rainfall. Climate Dynamics, 2020, 55, 1733-1758. | 3.8 | 17 |

| # | Article | lF | Citations |
|----|--|------|-----------|
| 19 | Historical total ozone radiative forcing derived from CMIP6 simulations. Npj Climate and Atmospheric Science, 2020, 3, . | 6.8 | 44 |
| 20 | The GFDL Global Atmospheric Chemistryâ€Climate Model AM4.1: Model Description and Simulation Characteristics. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002032. | 3.8 | 51 |
| 21 | The GFDL Earth System Model Version 4.1 (GFDLâ€ESM 4.1): Overall Coupled Model Description and Simulation Characteristics. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002015. | 3.8 | 277 |
| 22 | Ocean Ammonia Outgassing: Modulation by CO ₂ and Anthropogenic Nitrogen Deposition. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002026. | 3.8 | 5 |
| 23 | Influence of Dynamic Ozone Dry Deposition on Ozone Pollution. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032398. | 3.3 | 34 |
| 24 | Sensitivity of Tropospheric Ozone Over the Southeast USA to Dry Deposition. Geophysical Research Letters, 2020, 47, e2020GL087158. | 4.0 | 11 |
| 25 | Investigation of the global methane budget over 1980–2017 using GFDL-AM4.1. Atmospheric Chemistry and Physics, 2020, 20, 805-827. | 4.9 | 28 |
| 26 | Local and remote mean and extreme temperature response to regional aerosol emissions reductions. Atmospheric Chemistry and Physics, 2020, 20, 3009-3027. | 4.9 | 25 |
| 27 | Vegetation feedbacks during drought exacerbate ozone air pollution extremes in Europe. Nature Climate Change, 2020, 10, 444-451. | 18.8 | 96 |
| 28 | Stomatal conductance influences interannual variability and long-term changes in regional cumulative plant uptake of ozone. Environmental Research Letters, 2020, 15, 114059. | 5.2 | 11 |
| 29 | Characterizing sources of high surface ozone events in the southwestern US with intensive field measurements and two global models. Atmospheric Chemistry and Physics, 2020, 20, 10379-10400. | 4.9 | 15 |
| 30 | Trends in global tropospheric hydroxyl radical and methane lifetime since 1850 from AerChemMIP. Atmospheric Chemistry and Physics, 2020, 20, 12905-12920. | 4.9 | 55 |
| 31 | Historical and future changes in air pollutants from CMIP6 models. Atmospheric Chemistry and Physics, 2020, 20, 14547-14579. | 4.9 | 105 |
| 32 | Climate and air quality impacts due to mitigation of non-methane near-term climate forcers. Atmospheric Chemistry and Physics, 2020, 20, 9641-9663. | 4.9 | 30 |
| 33 | Climate Impacts From Large Volcanic Eruptions in a Highâ€Resolution Climate Model: The Importance of Forcing Structure. Geophysical Research Letters, 2019, 46, 7690-7699. | 4.0 | 28 |
| 34 | Sensitivity of Ozone Dry Deposition to Ecosystemâ€Atmosphere Interactions: A Critical Appraisal of Observations and Simulations. Global Biogeochemical Cycles, 2019, 33, 1264-1288. | 4.9 | 33 |
| 35 | Structure and Performance of GFDL's CM4.0 Climate Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 3691-3727. | 3.8 | 242 |
| 36 | Source attribution of black carbon affecting regional air quality, premature mortality and glacial deposition in 2000. Atmospheric Environment, 2019, 206, 144-155. | 4.1 | 5 |

3

| # | Article | IF | Citations |
|----|---|------|-----------|
| 37 | Halving warming with idealized solar geoengineering moderates key climate hazards. Nature Climate Change, 2019, 9, 295-299. | 18.8 | 139 |
| 38 | Air quality impacts from the electrification of light-duty passenger vehicles in the United States. Atmospheric Environment, 2019, 208, 95-102. | 4.1 | 48 |
| 39 | The GFDL Global Atmosphere and Land Model AM4.0/LM4.0: 2. Model Description, Sensitivity Studies, and Tuning Strategies. Journal of Advances in Modeling Earth Systems, 2018, 10, 735-769. | 3.8 | 185 |
| 40 | The GFDL Global Atmosphere and Land Model AM4.0/LM4.0: 1. Simulation Characteristics With Prescribed SSTs. Journal of Advances in Modeling Earth Systems, 2018, 10, 691-734. | 3.8 | 155 |
| 41 | Multimodel Surface Temperature Responses to Removal of U.S. Sulfur Dioxide Emissions. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2773-2796. | 3.3 | 15 |
| 42 | Equilibrium Climate Sensitivity Obtained From Multimillennial Runs of Two GFDL Climate Models. Journal of Geophysical Research D: Atmospheres, 2018, 123, 1921-1941. | 3.3 | 32 |
| 43 | Decadal changes in summertime reactive oxidized nitrogen and surface ozone over the Southeast United States. Atmospheric Chemistry and Physics, 2018, 18, 2341-2361. | 4.9 | 30 |
| 44 | Southeast Atmosphere Studies: learning from model-observation syntheses. Atmospheric Chemistry and Physics, 2018, 18, 2615-2651. | 4.9 | 36 |
| 45 | Representing sub-grid scale variations in nitrogen deposition associated with land use in a global Earth system model: implications for present and future nitrogen deposition fluxes over North America. Atmospheric Chemistry and Physics, 2018, 18, 17963-17978. | 4.9 | 25 |
| 46 | Peroxy acetyl nitrate (PAN) measurements at northern midlatitude mountain sites in April: a constraint on continental source–receptor relationships. Atmospheric Chemistry and Physics, 2018, 18, 15345-15361. | 4.9 | 3 |
| 47 | Exploring the relationship between surface PM _{2.5} and meteorology in Northern India. Atmospheric Chemistry and Physics, 2018, 18, 10157-10175. | 4.9 | 50 |
| 48 | Connecting regional aerosol emissions reductions to local and remote precipitation responses. Atmospheric Chemistry and Physics, 2018, 18, 12461-12475. | 4.9 | 38 |
| 49 | Changes in the aerosol direct radiative forcing from 2001 to 2015: observational constraints and regional mechanisms. Atmospheric Chemistry and Physics, 2018, 18, 13265-13281. | 4.9 | 57 |
| 50 | Combining model projections with site-level observations to estimate changes in distributions and seasonality of ozone in surface air over the U.S.A Atmospheric Environment, 2018, 193, 302-315. | 4.1 | 9 |
| 51 | Estimates of ozone return dates from Chemistry-Climate Model Initiative simulations. Atmospheric Chemistry and Physics, 2018, 18, 8409-8438. | 4.9 | 128 |
| 52 | Modulation of hydroxyl variability by ENSO in the absence of external forcing. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8931-8936. | 7.1 | 27 |
| 53 | Soluble Fe in Aerosols Sustained by Gaseous HO ₂ Uptake. Environmental Science and Technology Letters, 2017, 4, 98-104. | 8.7 | 22 |
| 54 | Interannual variability in ozone removal by a temperate deciduous forest. Geophysical Research Letters, 2017, 44, 542-552. | 4.0 | 56 |

| # | Article | IF | Citations |
|----|--|------|-----------|
| 55 | Multimodel precipitation responses to removal of U.S. sulfur dioxide emissions. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5024-5038. | 3.3 | 32 |
| 56 | Cobenefits of global and domestic greenhouse gas emissions for air quality and human health. Lancet, The, 2017, 389, S23. | 13.7 | 13 |
| 57 | On the Seasonality of Arctic Black Carbon. Journal of Climate, 2017, 30, 4429-4441. | 3.2 | 22 |
| 58 | Long-Lived Species Enhance Summertime Attribution of North American Ozone to Upwind Sources. Environmental Science & Environme | 10.0 | 13 |
| 59 | A potential large and persistent black carbon forcing over Northern Pacific inferred from satellite observations. Scientific Reports, 2017, 7, 43429. | 3.3 | 7 |
| 60 | Impact of volcanic aerosols on stratospheric ozone recovery. Journal of Geophysical Research D: Atmospheres, 2017, 122, 9515-9528. | 3.3 | 6 |
| 61 | Future global mortality from changes in air pollution attributable to climate change. Nature Climate Change, 2017, 7, 647-651. | 18.8 | 177 |
| 62 | Gasâ€eerosol partitioning of ammonia in biomass burning plumes: Implications for the interpretation of spaceborne observations of ammonia and the radiative forcing of ammonium nitrate. Geophysical Research Letters, 2017, 44, 8084-8093. | 4.0 | 30 |
| 63 | Contrasting seasonal responses of sulfate aerosols to declining SO ₂ emissions in the Eastern U.S.: Implications for the efficacy of SO ₂ emission controls. Geophysical Research Letters, 2017, 44, 455-464. | 4.0 | 40 |
| 64 | Global O ₃ –CO correlations in a chemistry and transport model during July–August: evaluation with TES satellite observations and sensitivity to input meteorological data and emissions. Atmospheric Chemistry and Physics, 2017, 17, 8429-8452. | 4.9 | 10 |
| 65 | Global atmospheric chemistry – which air matters. Atmospheric Chemistry and Physics, 2017, 17, 9081-9102. | 4.9 | 32 |
| 66 | US surface ozone trends and extremes from 1980 to 2014: quantifying the roles of rising Asian emissions, domestic controls, wildfires, and climate. Atmospheric Chemistry and Physics, 2017, 17, 2943-2970. | 4.9 | 218 |
| 67 | Comparison of emissions inventories of anthropogenic air pollutants and greenhouse gases in China. Atmospheric Chemistry and Physics, 2017, 17, 6393-6421. | 4.9 | 116 |
| 68 | Review of the global models used within phase 1 of the Chemistry–Climate Model Initiative (CCMI). Geoscientific Model Development, 2017, 10, 639-671. | 3.6 | 277 |
| 69 | Air quality modeling with WRF-Chem v3.5 in East Asia: sensitivity to emissions and evaluation of simulated air quality. Geoscientific Model Development, 2016, 9, 1201-1218. | 3.6 | 55 |
| 70 | Seasonal cycles of O 3 in the marine boundary layer: Observation and model simulation comparisons. Journal of Geophysical Research D: Atmospheres, 2016, 121, 538-557. | 3.3 | 29 |
| 71 | Detection of trends in surface ozone in the presence of climate variability. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6112-6129. | 3.3 | 44 |
| 72 | Observational constraints on glyoxal production from isoprene oxidation and its contribution to organic aerosol over the Southeast United States. Journal of Geophysical Research D: Atmospheres, 2016, 121, 9849-9861. | 3.3 | 48 |

| # | Article | IF | Citations |
|----|--|------|-----------|
| 73 | Prospects for a prolonged slowdown in global warming in the early 21st century. Nature Communications, 2016, 7, 13676. | 12.8 | 44 |
| 74 | Using beryllium-7 to assess cross-tropopause transport in global models. Atmospheric Chemistry and Physics, 2016, 16, 4641-4659. | 4.9 | 31 |
| 75 | The effect of future ambient air pollution on human premature mortality to 2100 using output from the ACCMIP model ensemble. Atmospheric Chemistry and Physics, 2016, 16, 9847-9862. | 4.9 | 101 |
| 76 | Sensitivity of nitrate aerosols to ammonia emissions and to nitrate chemistry: implications for present and future nitrate optical depth. Atmospheric Chemistry and Physics, 2016, 16, 1459-1477. | 4.9 | 79 |
| 77 | Formaldehyde production from isoprene oxidation acrossÂNO _{<i>x</i>} Âregimes. Atmospheric Chemistry and Physics, 2016, 16, 2597-2610. | 4.9 | 124 |
| 78 | Co-benefits of global and regional greenhouse gas mitigation for US air quality in 2050. Atmospheric Chemistry and Physics, 2016, 16, 9533-9548. | 4.9 | 25 |
| 79 | Effect of climate change on surface ozone over North America, Europe, and East Asia. Geophysical Research Letters, 2016, 43, 3509-3518. | 4.0 | 46 |
| 80 | Radiative forcing and climate response to projected 21st century aerosol decreases. Atmospheric Chemistry and Physics, 2015, 15, 12681-12703. | 4.9 | 80 |
| 81 | Use of North American and European air quality networks to evaluate global chemistry–climate modeling of surface ozone. Atmospheric Chemistry and Physics, 2015, 15, 10581-10596. | 4.9 | 50 |
| 82 | Revisiting the evidence of increasing springtime ozone mixing ratios in the free troposphere over western North America. Geophysical Research Letters, 2015, 42, 8719-8728. | 4.0 | 69 |
| 83 | Projecting policyâ€felevant metrics for high summertime ozone pollution events over the eastern United States due to climate and emission changes during the 21st century. Journal of Geophysical Research D: Atmospheres, 2015, 120, 784-800. | 3.3 | 46 |
| 84 | Climate variability modulates western US ozone air quality in spring via deep stratospheric intrusions. Nature Communications, 2015, 6, 7105. | 12.8 | 186 |
| 85 | Constraining Transient Climate Sensitivity Using Coupled Climate Model Simulations of Volcanic Eruptions. Journal of Climate, 2014, 27, 7781-7795. | 3.2 | 30 |
| 86 | Effects of transâ€Eurasian transport of air pollutants on surface ozone concentrations over Western China. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,338. | 3.3 | 31 |
| 87 | Tropospheric ozone trends at Mauna Loa Observatory tied to decadal climate variability. Nature Geoscience, 2014, 7, 136-143. | 12.9 | 151 |
| 88 | Estimating North American background ozone in U.S. surface air with two independent global models: Variability, uncertainties, and recommendations. Atmospheric Environment, 2014, 96, 284-300. | 4.1 | 98 |
| 89 | Declining Aerosols in CMIP5 Projections: Effects on Atmospheric Temperature Structure and Midlatitude Jets. Journal of Climate, 2014, 27, 6960-6977. | 3.2 | 40 |
| 90 | 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 |

| # | Article | IF | CITATIONS |
|-----|---|--------------|-----------|
| 91 | Twentyâ€first century reversal of the surface ozone seasonal cycle over the northeastern United States. Geophysical Research Letters, 2014, 41, 7343-7350. | 4.0 | 44 |
| 92 | Analysis of transpacific transport of black carbon during HIPPO-3: implications for black carbon aging. Atmospheric Chemistry and Physics, 2014, 14, 6315-6327. | 4.9 | 32 |
| 93 | Impacts of 21st century climate change on global air pollution-related premature mortality. Climatic Change, 2013, 121, 239-253. | 3 . 6 | 91 |
| 94 | Global premature mortality due to anthropogenic outdoor air pollution and the contribution of past climate change. Environmental Research Letters, 2013, 8, 034005. | 5.2 | 381 |
| 95 | The roles of aerosol direct and indirect effects in past and future climate change. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4521-4532. | 3.3 | 169 |
| 96 | Influence of Ocean and Atmosphere Components on Simulated Climate Sensitivities. Journal of Climate, 2013, 26, 231-245. | 3.2 | 30 |
| 97 | Cloud tuning in a coupled climate model: Impact on 20th century warming. Geophysical Research Letters, 2013, 40, 2246-2251. | 4.0 | 115 |
| 98 | Response to "Comments on â€Global crop yield reductions due to surface ozone exposure: 1. Year 2000 crop production losses and economic damage' and â€Global crop yield reductions due to surface ozone exposure: 2. Year 2030 potential crop production losses and economic damage under two scenarios of O3 pollutionâ€M― Atmospheric Environment, 2013, 71, 410-411. | 4.1 | 5 |
| 99 | Co-benefits of mitigating global greenhouse gas emissions for future air quality and human health. Nature Climate Change, 2013, 3, 885-889. | 18.8 | 505 |
| 100 | Stratospheric Ozone and Temperature Simulated from the Preindustrial Era to the Present Day. Journal of Climate, 2013, 26, 3528-3543. | 3.2 | 33 |
| 101 | Sensitivity of tropospheric oxidants to biomass burning emissions: implications for radiative forcing. Geophysical Research Letters, 2013, 40, 1241-1246. | 4.0 | 36 |
| 102 | The Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP): overview and description of models, simulations and climate diagnostics. Geoscientific Model Development, 2013, 6, 179-206. | 3.6 | 388 |
| 103 | Preindustrial to present-day changes in tropospheric hydroxyl radical and methane lifetime from the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 5277-5298. | 4.9 | 288 |
| 104 | A 4-D climatology (1979–2009) of the monthly tropospheric aerosol optical depth distribution over the Mediterranean region from a comparative evaluation and blending of remote sensing and model products. Atmospheric Measurement Techniques, 2013, 6, 1287-1314. | 3.1 | 131 |
| 105 | Pre-industrial to end 21st century projections of tropospheric ozone from the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 2063-2090. | 4.9 | 570 |
| 106 | Evaluation of preindustrial to present-day black carbon and its albedo forcing from Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 2607-2634. | 4.9 | 125 |
| 107 | Summertime cyclones over the Great Lakes Storm Track from 1860–2100: variability, trends, and association with ozone pollution. Atmospheric Chemistry and Physics, 2013, 13, 565-578. | 4.9 | 37 |
| 108 | Corrigendum to "Evaluation of preindustrial to present-day black carbon and its albedo forcing from Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP)" published in Atmos. Chem. Phys., 13, 2607–2634, 2013. Atmospheric Chemistry and Physics, 2013, 13, 6553-6554. | 4.9 | 3 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 109 | Tropospheric ozone changes, radiative forcing and attribution to emissions in the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP). Atmospheric Chemistry and Physics, 2013, 13, 3063-3085. | 4.9 | 361 |
| 110 | Air pollution and associated human mortality: the role of air pollutant emissions, climate change and methane concentration increases from the preindustrial period to present. Atmospheric Chemistry and Physics, 2013, 13, 1377-1394. | 4.9 | 148 |
| 111 | Evaluation of factors controlling global secondary organic aerosol production from cloud processes. Atmospheric Chemistry and Physics, 2013, 13, 1913-1926. | 4.9 | 27 |
| 112 | Analysis of present day and future OH and methane lifetime in the ACCMIP simulations. Atmospheric Chemistry and Physics, 2013, 13, 2563-2587. | 4.9 | 257 |
| 113 | Radiative forcing in the ACCMIP historical and future climate simulations. Atmospheric Chemistry and Physics, 2013, 13, 2939-2974. | 4.9 | 395 |
| 114 | Evaluation of ACCMIP outgoing longwave radiation from tropospheric ozone using TES satellite observations. Atmospheric Chemistry and Physics, 2013, 13, 4057-4072. | 4.9 | 61 |
| 115 | Ozone and organic nitrates over the eastern United States: Sensitivity to isoprene chemistry. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,256. | 3.3 | 213 |
| 116 | Impact of preindustrial to presentâ€day changes in shortâ€lived pollutant emissions on atmospheric composition and climate forcing. Journal of Geophysical Research D: Atmospheres, 2013, 118, 8086-8110. | 3.3 | 103 |
| 117 | Using synthetic tracers as a proxy for summertime PM _{2.5} air quality over the Northeastern United States in physical climate models. Geophysical Research Letters, 2013, 40, 755-760. | 4.0 | 5 |
| 118 | Longâ€term ozone changes and associated climate impacts in CMIP5 simulations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5029-5060. | 3.3 | 243 |
| 119 | Diagnosis of regimeâ€dependent cloud simulation errors in CMIP5 models using "Aâ€Train―satellite observations and reanalysis data. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2762-2780. | 3.3 | 90 |
| 120 | Climate versus emission drivers of methane lifetime against loss by tropospheric OH from 1860–2100. Atmospheric Chemistry and Physics, 2012, 12, 12021-12036. | 4.9 | 54 |
| 121 | Evaluation of cloud and water vapor simulations in CMIP5 climate models using NASA "A‶rain― satellite observations. Journal of Geophysical Research, 2012, 117, . | 3.3 | 316 |
| 122 | Scenarios of methane emission reductions to 2030: abatement costs and co-benefits to ozone air quality and human mortality. Climatic Change, 2012, 114, 441-461. | 3.6 | 21 |
| 123 | Application of the CALIOP layer product to evaluate the vertical distribution of aerosols estimated by global models: AeroCom phase I results. Journal of Geophysical Research, 2012, 117, . | 3.3 | 170 |
| 124 | Transport of Asian ozone pollution into surface air over the western United States in spring. Journal of Geophysical Research, 2012, 117, . | 3.3 | 218 |
| 125 | An observationally based evaluation of cloud ice water in CMIP3 and CMIP5 GCMs and contemporary reanalyses using contemporary satellite data. Journal of Geophysical Research, 2012, 117, . | 3.3 | 150 |
| 126 | Global inâ€eloud production of secondary organic aerosols: Implementation of a detailed chemical mechanism in the GFDL atmospheric model AM3. Journal of Geophysical Research, 2012, 117, . | 3.3 | 57 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 127 | Sensitivity of scattering and absorbing aerosol direct radiative forcing to physical climate factors. Journal of Geophysical Research, 2012, 117, . | 3.3 | 30 |
| 128 | Inferring ice formation processes from globalâ€scale black carbon profiles observed in the remote atmosphere and model simulations. Journal of Geophysical Research, 2012, 117, . | 3.3 | 25 |
| 129 | Springtime high surface ozone events over the western United States: Quantifying the role of stratospheric intrusions. Journal of Geophysical Research, 2012, 117, . | 3.3 | 219 |
| 130 | Global air quality and climate. Chemical Society Reviews, 2012, 41, 6663. | 38.1 | 428 |
| 131 | Surface ozone-temperature relationships in the eastern US: A monthly climatology for evaluating chemistry-climate models. Atmospheric Environment, 2012, 47, 142-153. | 4.1 | 152 |
| 132 | Evaluation of factors controlling long-range transport of black carbon to the Arctic. Journal of Geophysical Research, 2011, 116 , . | 3.3 | 144 |
| 133 | The impacts of changing transport and precipitation on pollutant distributions in a future climate. Journal of Geophysical Research, 2011, 116, . | 3.3 | 47 |
| 134 | Global dust model intercomparison in AeroCom phase I. Atmospheric Chemistry and Physics, 2011, 11, 7781-7816. | 4.9 | 839 |
| 135 | The impact of China's vehicle emissions on regional air quality in 2000 and 2020: a scenario analysis. Atmospheric Chemistry and Physics, 2011, 11, 9465-9484. | 4.9 | 74 |
| 136 | Global crop yield reductions due to surface ozone exposure: 1. Year 2000 crop production losses and economic damage. Atmospheric Environment, 2011, 45, 2284-2296. | 4.1 | 472 |
| 137 | Global crop yield reductions due to surface ozone exposure: 2. Year 2030 potential crop production losses and economic damage under two scenarios of O3 pollution. Atmospheric Environment, 2011, 45, 2297-2309. | 4.1 | 292 |
| 138 | The GFDL CM3 Coupled Climate Model: Characteristics of the Ocean and Sea Ice Simulations. Journal of Climate, 2011, 24, 3520-3544. | 3.2 | 288 |
| 139 | The Global Burden of Air Pollution on Mortality: Anenberg et al. Respond. Environmental Health Perspectives, 2011, 119, 158-159. | 6.0 | 9 |
| 140 | The Dynamical Core, Physical Parameterizations, and Basic Simulation Characteristics of the Atmospheric Component AM3 of the GFDL Global Coupled Model CM3. Journal of Climate, 2011, 24, 3484-3519. | 3.2 | 887 |
| 141 | Sensitivity of the Aerosol Indirect Effect to Subgrid Variability in the Cloud Parameterization of the GFDL Atmosphere General Circulation Model AM3. Journal of Climate, 2011, 24, 3145-3160. | 3.2 | 105 |
| 142 | Observational constraints on the global atmospheric budget of ethanol. Atmospheric Chemistry and Physics, 2010, 10, 5361-5370. | 4.9 | 54 |
| 143 | The Global Burden of Air Pollution on Mortality: Anenberg et al. respond. Environmental Health Perspectives, 2010, 118, . | 6.0 | 1 |
| 144 | An Estimate of the Global Burden of Anthropogenic Ozone and Fine Particulate Matter on Premature Human Mortality Using Atmospheric Modeling. Environmental Health Perspectives, 2010, 118, 1189-1195. | 6.0 | 604 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 145 | Sensitivity of the NO _{<i>y</i>} budget over the United States to anthropogenic and lightning NO _{<i>x</i>} in summer. Journal of Geophysical Research, 2010, 115, . | 3.3 | 24 |
| 146 | Present and potential future contributions of sulfate, black and organic carbon aerosols from China to global air quality, premature mortality and radiative forcing. Atmospheric Environment, 2009, 43, 2814-2822. | 4.1 | 106 |
| 147 | Evaluating inter-continental transport of fine aerosols: (1) Methodology, global aerosol distribution and optical depth. Atmospheric Environment, 2009, 43, 4327-4338. | 4.1 | 59 |
| 148 | Evaluating inter-continental transport of fine aerosols:(2) Global health impact. Atmospheric Environment, 2009, 43, 4339-4347. | 4.1 | 86 |
| 149 | Simulating PM concentration during a winter episode in a subtropical valley: Sensitivity simulations and evaluation methods. Atmospheric Environment, 2009, 43, 5971-5977. | 4.1 | 12 |
| 150 | Multimodel estimates of intercontinental sourceâ€receptor relationships for ozone pollution. Journal of Geophysical Research, 2009, 114, . | 3.3 | 430 |
| 151 | Estimating the contribution of strong daily export events to total pollutant export from the United States in summer. Journal of Geophysical Research, 2009, 114, . | 3.3 | 13 |
| 152 | Effect of regional precursor emission controls on long-range ozone transport – Part 2: Steady-state changes in ozone air quality and impacts on human mortality. Atmospheric Chemistry and Physics, 2009, 9, 6095-6107. | 4.9 | 45 |
| 153 | Effect of regional precursor emission controls on long-range ozone transport – Part 1: Short-term changes in ozone air quality. Atmospheric Chemistry and Physics, 2009, 9, 6077-6093. | 4.9 | 35 |
| 154 | Evaluation of black carbon estimations in global aerosol models. Atmospheric Chemistry and Physics, 2009, 9, 9001-9026. | 4.9 | 585 |
| 155 | MICS-Asia II: Impact of global emissions on regional air quality in Asia. Atmospheric Environment, 2008, 42, 3543-3561. | 4.1 | 40 |
| 156 | Predicted change in global secondary organic aerosol concentrations in response to future climate, emissions, and land use change. Journal of Geophysical Research, 2008, 113, . | 3.3 | 335 |
| 157 | Multimodel projections of climate change from shortâ€lived emissions due to human activities. Journal of Geophysical Research, 2008, 113, . | 3.3 | 74 |
| 158 | Characterizing the tropospheric ozone response to methane emission controls and the benefits to climate and air quality. Journal of Geophysical Research, 2008, 113, . | 3.3 | 128 |
| 159 | Strong sensitivity of late 21st century climate to projected changes in shortâ€ived air pollutants. Journal of Geophysical Research, 2008, 113, . | 3.3 | 80 |
| 160 | Estimating the summertime tropospheric ozone distribution over North America through assimilation of observations from the Tropospheric Emission Spectrometer. Journal of Geophysical Research, 2008, 113, . | 3.3 | 87 |
| 161 | A multi-model study of the hemispheric transport and deposition of oxidised nitrogen. Geophysical Research Letters, 2008, 35, . | 4.0 | 76 |
| 162 | A multi-model assessment of pollution transport to the Arctic. Atmospheric Chemistry and Physics, 2008, 8, 5353-5372. | 4.9 | 419 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 163 | Source-receptor relationships between East Asian sulfur dioxide emissions and Northern Hemisphere sulfate concentrations. Atmospheric Chemistry and Physics, 2008, 8, 3721-3733. | 4.9 | 45 |
| 164 | Modeling the Interactions between Aerosols and Liquid Water Clouds with a Self-Consistent Cloud Scheme in a General Circulation Model. Journals of the Atmospheric Sciences, 2007, 64, 1189-1209. | 1.7 | 91 |
| 165 | The effect of harmonized emissions on aerosol properties in global models – an AeroCom experiment. Atmospheric Chemistry and Physics, 2007, 7, 4489-4501. | 4.9 | 228 |
| 166 | On the sensitivity of radiative forcing from biomass burning aerosols and ozone to emission location. Geophysical Research Letters, 2007, 34, . | 4.0 | 45 |
| 167 | Ozone air quality and radiative forcing consequences of changes in ozone precursor emissions. Geophysical Research Letters, 2007, 34, . | 4.0 | 59 |
| 168 | Influence of lateral and top boundary conditions on regional air quality prediction: A multiscale study coupling regional and global chemical transport models. Journal of Geophysical Research, 2007, 112, . | 3.3 | 82 |
| 169 | Transport of radonâ€222 and methyl iodide by deep convection in the GFDL Global Atmospheric Model AM2. Journal of Geophysical Research, 2007, 112, . | 3.3 | 16 |
| 170 | Reactive nitrogen distribution and partitioning in the North American troposphere and lowermost stratosphere. Journal of Geophysical Research, 2007, 112, . | 3.3 | 102 |
| 171 | Observational constraints on the chemistry of isoprene nitrates over the eastern United States. Journal of Geophysical Research, 2007, 112 , . | 3.3 | 200 |
| 172 | Improving regional ozone modeling through systematic evaluation of errors using the aircraft observations during the International Consortium for Atmospheric Research on Transport and Transformation. Journal of Geophysical Research, 2007, 112 , . | 3.3 | 13 |
| 173 | Threeâ€dimensional SF ₆ data and tropospheric transport simulations: Signals, modeling accuracy, and implications for inverse modeling. Journal of Geophysical Research, 2007, 112, . | 3.3 | 35 |
| 174 | Nitrogen and sulfur deposition on regional and global scales: A multimodel evaluation. Global Biogeochemical Cycles, 2006, 20, n/a-n/a. | 4.9 | 846 |
| 175 | Multimodel ensemble simulations of present-day and near-future tropospheric ozone. Journal of Geophysical Research, 2006, 111 , . | 3.3 | 743 |
| 176 | Evaluation of aerosol distribution and optical depth in the Geophysical Fluid Dynamics Laboratory coupled model CM2.1 for present climate. Journal of Geophysical Research, 2006, 111, . | 3.3 | 68 |
| 177 | Past, present, and future concentrations of tropospheric ozone and aerosols: Methodology, ozone evaluation, and sensitivity to aerosol wet removal. Journal of Geophysical Research, 2006, 111, . | 3.3 | 145 |
| 178 | Impact of meteorology and emissions on methane trends, 1990–2004. Geophysical Research Letters, 2006, 33, . | 4.0 | 67 |
| 179 | Multimodel simulations of carbon monoxide: Comparison with observations and projected near-future changes. Journal of Geophysical Research, 2006, 111, . | 3.3 | 254 |
| 180 | The Global Atmospheric Environment for the Next Generation. Environmental Science & Emp; Technology, 2006, 40, 3586-3594. | 10.0 | 338 |

| # | Article | IF | CITATIONS |
|-----|--|-------------|-----------|
| 181 | An AeroCom initial assessment $\hat{a}\in$ optical properties in aerosol component modules of global models. Atmospheric Chemistry and Physics, 2006, 6, 1815-1834. | 4.9 | 697 |
| 182 | Aerosol direct radiative effects over the northwest Atlantic, northwest Pacific, and North Indian Oceans: estimates based on in-situ chemical and optical measurements and chemical transport modeling. Atmospheric Chemistry and Physics, 2006, 6, 1657-1732. | 4.9 | 135 |
| 183 | Multi-model ensemble simulations of tropospheric NO ₂ compared with GOME retrievals for the year 2000. Atmospheric Chemistry and Physics, 2006, 6, 2943-2979. | 4.9 | 127 |
| 184 | A direct carbon budgeting approach to infer carbon sources and sinks. Design and synthetic application to complement the NACP observation network. Tellus, Series B: Chemical and Physical Meteorology, 2006, 58, 366-375. | 1.6 | 17 |
| 185 | GFDL's CM2 Global Coupled Climate Models. Part I: Formulation and Simulation Characteristics. Journal of Climate, 2006, 19, 643-674. | 3.2 | 1,431 |
| 186 | Global health benefits of mitigating ozone pollution with methane emission controls. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3988-3993. | 7.1 | 210 |
| 187 | Analysis of seasonal and interannual variability in transpacific transport. Journal of Geophysical Research, 2005, 110 , . | 3. 3 | 49 |
| 188 | Evaluating the contribution of changes in isoprene emissions to surface ozone trends over the eastern United States. Journal of Geophysical Research, 2005, 110, . | 3.3 | 163 |
| 189 | Direct radiative forcing of anthropogenic organic aerosol. Journal of Geophysical Research, 2005, 110, | 3. 3 | 45 |
| 190 | Assessing future nitrogen deposition and carbon cycle feedback using a multimodel approach: Analysis of nitrogen deposition. Journal of Geophysical Research, 2005, 110 , . | 3.3 | 266 |
| 191 | Net radiative forcing due to changes in regional emissions of tropospheric ozone precursors. Journal of Geophysical Research, 2005, 110 , . | 3. 3 | 92 |
| 192 | Geophysical Fluid Dynamics Laboratory general circulation model investigation of the indirect radiative effects of anthropogenic sulfate aerosol. Journal of Geophysical Research, 2005, 110, . | 3.3 | 23 |
| 193 | The New GFDL Global Atmosphere and Land Model AM2–LM2: Evaluation with Prescribed SST Simulations. Journal of Climate, 2004, 17, 4641-4673. | 3.2 | 756 |
| 194 | Impact of air pollution on wet deposition of mineral dust aerosols. Geophysical Research Letters, 2004, 31, . | 4.0 | 89 |
| 195 | A case study of transpacific warm conveyor belt transport: Influence of merging airstreams on trace gas import to North America. Journal of Geophysical Research, 2004, 109, . | 3.3 | 169 |
| 196 | Impact of Asian emissions on observations at Trinidad Head, California, during ITCT 2K2. Journal of Geophysical Research, 2004, 109, . | 3.3 | 83 |
| 197 | Multiscale simulations of tropospheric chemistry in the eastern Pacific and on the U.S. West Coast during spring 2002. Journal of Geophysical Research, 2004, 109, . | 3.3 | 30 |
| 198 | Effect of sulfate aerosol on tropospheric NOxand ozone budgets: Model simulations and TOPSE evidence. Journal of Geophysical Research, 2003, 108, . | 3.3 | 70 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Fresh air in the 21st century?. Geophysical Research Letters, 2003, 30, . | 4.0 | 192 |
| 200 | Radiative forcing in the 21st century due to ozone changes in the troposphere and the lower stratosphere. Journal of Geophysical Research, 2003, 108, n/a-n/a. | 3.3 | 153 |
| 201 | Budget of tropospheric ozone during TOPSE from two chemical transport models. Journal of Geophysical Research, 2003, 108, . | 3.3 | 56 |
| 202 | A global simulation of tropospheric ozone and related tracers: Description and evaluation of MOZART, version 2. Journal of Geophysical Research, 2003, 108, n/a-n/a. | 3.3 | 848 |
| 203 | Effects of aerosols on tropospheric oxidants: A global model study. Journal of Geophysical Research, 2001, 106, 22931-22964. | 3.3 | 165 |
| 204 | Three-dimensional climatological distribution of tropospheric OH: Update and evaluation. Journal of Geophysical Research, 2000, 105, 8931-8980. | 3.3 | 730 |
| 205 | Seasonal characteristics of tropospheric ozone production and mixing ratios over East Asia: A global three-dimensional chemical transport model analysis. Journal of Geophysical Research, 2000, 105, 17895-17910. | 3.3 | 96 |
| 206 | Global impact of fossil fuel combustion on atmospheric NOx. Journal of Geophysical Research, 1999, 104, 23823-23840. | 3.3 | 55 |
| 207 | Seasonal budgets of reactive nitrogen species and ozone over the United States, and export fluxes to the global atmosphere. Journal of Geophysical Research, 1998, 103, 13435-13450. | 3.3 | 159 |
| 208 | Export of reactive nitrogen from North America during summertime: Sensitivity to hydrocarbon chemistry. Journal of Geophysical Research, 1998, 103, 13451-13476. | 3.3 | 171 |
| 209 | Photochemical oxidant formation over southern Switzerland: 2. Model results. Journal of Geophysical Research, 1997, 102, 23363-23373. | 3.3 | 64 |
| 210 | Results from the Intergovernmental Panel on Climatic Change Photochemical Model Intercomparison (PhotoComp). Journal of Geophysical Research, 1997, 102, 5979-5991. | 3.3 | 68 |
| 211 | Seasonal variation of the ozone production efficiency per unit NOxat Harvard Forest, Massachusetts. Journal of Geophysical Research, 1996, 101, 12659-12666. | 3.3 | 71 |
| 212 | Seasonal transition from NOx- to hydrocarbon-limited conditions for ozone production over the eastern United States in September. Journal of Geophysical Research, 1995, 100, 9315. | 3.3 | 150 |
| 213 | Formaldehyde, glyoxal, and methylglyoxal in air and cloudwater at a rural mountain site in central Virginia. Journal of Geophysical Research, 1995, 100, 9325. | 3.3 | 150 |