# peter hess

## List of Publications by Year in descending order

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Version: 2024-02-01

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|---|---|---|---|
| 85 papers | 11,471 citations | 53751 45 h-index | 53190 85 g-index |
| 85 all docs | 85 docs citations | 85 times ranked | 10110 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Extending the Atmospheric River Concept to Aerosols: Climate and Air Quality Impacts. Geophysical Research Letters, 2021, 48, e2020GL091827. | 1.5 | 16 |
| 2 | Ensemble simulations of the role of the stratosphere in the attribution of northern extratropical tropospheric ozone variability. Atmospheric Chemistry and Physics, 2015, 15, 2341-2365. | 1.9 | 32 |
| 3 | On the capabilities and limitations of GCCM simulations of summertime regional air quality: A diagnostic analysis of ozone and temperature simulations in the US using CESM CAM-Chem. Atmospheric Environment, 2015, 101, 134-148. | 1.9 | 43 |
| 4 | The response of the equatorial tropospheric ozone to the Maddenâ€“Julian Oscillation in TES satellite observations and CAM-chem model simulation. Atmospheric Chemistry and Physics, 2014, 14, 11775-11790. | 1.9 | 8 |
| 5 | Off-line algorithm for calculation of vertical tracer transport in the troposphere due to deep convection. Atmospheric Chemistry and Physics, 2013, 13, 1093-1114. | 1.9 | 27 |
| 6 | Stratospheric impact on tropospheric ozone variability and trends: 1990â€“2009. Atmospheric Chemistry and Physics, 2013, 13, 649-674. | 1.9 | 78 |
| 7 | TransCom model simulations of methane: Comparison of vertical profiles with aircraft measurements. Journal of Geophysical Research D: Atmospheres, 2013, 118, 3891-3904. | 1.2 | 24 |
| 8 | A multimodel assessment of the influence of regional anthropogenic emission reductions on aerosol direct radiative forcing and the role of intercontinental transport. Journal of Geophysical Research D: Atmospheres, 2013, 118, 700-720. | 1.2 | 49 |
| 9 | Tropospheric ozone decrease due to the Mount Pinatubo eruption: Reduced stratospheric influx. Geophysical Research Letters, 2013, 40, 5553-5558. | 1.5 | 20 |
| 10 | CAM-chem: description and evaluation of interactive atmospheric chemistry in the Community Earth System Model. Geoscientific Model Development, 2012, 5, 369-411. | 1.3 | 633 |
| 11 | Toward a minimal representation of aerosols in climate models: description and evaluation in the Community Atmosphere Model CAM5. Geoscientific Model Development, 2012, 5, 709-739. | 1.3 | 807 |
| 12 | Tagged ozone mechanism for MOZART-4, CAM-chem and other chemical transport models. Geoscientific Model Development, 2012, 5, 1531-1542. | 1.3 | 59 |
| 13 | The changing radiative forcing of fires: global model estimates for past, present and future. Atmospheric Chemistry and Physics, 2012, 12, 10857-10886. | 1.9 | 212 |
| 14 | Modelling future changes in surface ozone: a parameterized approach. Atmospheric Chemistry and Physics, 2012, 12, 2037-2054. | 1.9 | 155 |
| 15 | The influence of ozone precursor emissions from four world regions on tropospheric composition and radiative climate forcing. Journal of Geophysical Research, 2012, 117, . | 3.3 | 97 |
| 16 | Asian influence on surface ozone in the United States: A comparison of chemistry, seasonality, and transport mechanisms. Journal of Geophysical Research, 2011, 116, . | 3.3 | 63 |
| 17 | Aerosol Impacts on Climate and Biogeochemistry. Annual Review of Environment and Resources, 2011, 36, 45-74. | 5.6 | 207 |
| 18 | TransCom model simulations of CH<sub>4</sub> and related species: linking transport, surface flux and chemical loss with CH<sub>4</sub> variability in the troposphere and lower stratosphere. Atmospheric Chemistry and Physics, 2011, 11, 12813-12837. | 1.9 | 331 |

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|---|---|---|---|
| 19 | Barriers to predicting changes in global terrestrial methane fluxes: analyses using CLM4Me, a methane biogeochemistry model integrated in CESM. Biogeosciences, 2011, 8, 1925-1953. | 1.3 | 325 |
| 20 | Impact of Mexico City emissions on regional air quality from MOZART-4 simulations. Atmospheric Chemistry and Physics, 2010, 10, 6195-6212. | 1.9 | 82 |
| 21 | Description and evaluation of the Model for Ozone and Related chemical Tracers, version 4 (MOZART-4). Geoscientific Model Development, 2010, 3, 43-67. | 1.3 | 1,590 |
| 22 | A multi-model analysis of vertical ozone profiles. Atmospheric Chemistry and Physics, 2010, 10, 5759-5783. | 1.9 | 70 |
| 23 | Constraints on black carbon aerosol distribution from Measurement of Pollution in the Troposphere (MOPITT) CO. Geophysical Research Letters, 2010, 37, . | 1.5 | 9 |
| 24 | Intercontinental Impacts of Ozone Pollution on Human Mortality. Environmental Science & Technology, 2009, 43, 6482-6487. | 4.6 | 126 |
| 25 | Multimodel estimates of intercontinental sourceâ€receptor relationships for ozone pollution. Journal of Geophysical Research, 2009, 114, . | 3.3 | 430 |
| 26 | Springtime warming and reduced snow cover from carbonaceous particles. Atmospheric Chemistry and Physics, 2009, 9, 2481-2497. | 1.9 | 492 |
| 27 | The influence of foreign vs. North American emissions on surface ozone in the US. Atmospheric Chemistry and Physics, 2009, 9, 5027-5042. | 1.9 | 141 |
| 28 | Interannual variability in hindcasts of atmospheric chemistry: the role of meteorology. Atmospheric Chemistry and Physics, 2009, 9, 5261-5280. | 1.9 | 23 |
| 29 | Impact of the summer 2004 Alaska fires on top of the atmosphere clearâ€sky radiation fluxes. Journal of Geophysical Research, 2008, 113, . | 3.3 | 30 |
| 30 | Contribution of isoprene to chemical budgets: A model tracer study with the NCAR CTM MOZARTâ€4. Journal of Geophysical Research, 2008, 113, . | 3.3 | 154 |
| 31 | 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 |
| 32 | Simulated lower stratospheric trends between 1970 and 2005: Identifying the role of climate and composition changes. Journal of Geophysical Research, 2008, 113, . | 3.3 | 57 |
| 33 | A multi-model study of the hemispheric transport and deposition of oxidised nitrogen. Geophysical Research Letters, 2008, 35, . | 1.5 | 76 |
| 34 | Analysis of the Summer 2004 ozone budget over the United States using Intercontinental Transport Experiment Ozonesonde Network Study (IONS) observations and Model of Ozone and Related Tracers (MOZARTâ€4) simulations. Journal of Geophysical Research, 2008, 113, . | 3.3 | 51 |
| 35 | A multi-model assessment of pollution transport to the Arctic. Atmospheric Chemistry and Physics, 2008, 8, 5353-5372. | 1.9 | 419 |
| 36 | Evaluating model performance of an ensemble-based chemical data assimilation system during INTEX-B field mission. Atmospheric Chemistry and Physics, 2007, 7, 5695-5710. | 1.9 | 53 |

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| 37 | Ozone source attribution and its modulation by the Arctic oscillation during the spring months. Journal of Geophysical Research, 2007, 112, . | 3.3 | 43 |
| 38 | Observational constraints on the chemistry of isoprene nitrates over the eastern United States. Journal of Geophysical Research, 2007, 112, . | 3.3 | 200 |
| 39 | Sensitivity of chemical tracers to meteorological parameters in the MOZARTâ€3 chemical transport model. Journal of Geophysical Research, 2007, 112, . | 3.3 | 395 |
| 40 | Surface ozone in the Indian region. Atmospheric Environment, 2007, 41, 6572-6584. | 1.9 | 76 |
| 41 | An ozone depletion event in the sub-arctic surface layer over Hudson Bay, Canada. Journal of Atmospheric Chemistry, 2007, 57, 255-280. | 1.4 | 13 |
| 42 | The Impact of Boreal Forest Fire on Climate Warming. Science, 2006, 314, 1130-1132. | 6.0 | 765 |
| 43 | How does climate change contribute to surface ozone change over the United States?. Journal of Geophysical Research, 2006, 111, . | 3.3 | 188 |
| 44 | Ozone pollution from future ship traffic in the Arctic northern passages. Geophysical Research Letters, 2006, 33, . | 1.5 | 66 |
| 45 | Ozone production from the 2004 North American boreal fires. Journal of Geophysical Research, 2006, 111, . | 3.3 | 114 |
| 46 | Sensitivity of top-down estimates of CO sources to GCTM transport. Geophysical Research Letters, 2006, 33, . | 1.5 | 45 |
| 47 | Characteristics of Atmospheric Transport Using Three Numerical Formulations for Atmospheric Dynamics in a Single GCM Framework. Journal of Climate, 2006, 19, 2243-2266. | 1.2 | 61 |
| 48 | A comparison of two paradigms: The relative global roles of moist convective versus nonconvective transport. Journal of Geophysical Research, 2005, 110, . | 3.3 | 38 |
| 49 | Southern Ocean ventilation inferred from seasonal cycles of atmospheric N2O and O2/N2at Cape Grim, Tasmania. Tellus, Series B: Chemical and Physical Meteorology, 2005, 57, 218-229. | 0.8 | 29 |
| 50 | Tropospheric ozone evolution between 1890 and 1990. Journal of Geophysical Research, 2005, 110, . | 3.3 | 134 |
| 51 | Quantifying CO emissions from the 2004 Alaskan wildfires using MOPITT CO data. Geophysical Research Letters, 2005, 32, . | 1.5 | 163 |
| 52 | Response of a coupled chemistry-climate model to changes in aerosol emissions: Global impact on the hydrological cycle and the tropospheric burdens of OH, ozone, and NOx. Geophysical Research Letters, 2005, 32, . | 1.5 | 57 |
| 53 | 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 |
| 54 | Industrial emissions cause extreme urban ozone diurnal variability. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6346-6350. | 3.3 | 153 |

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| 55 | Arctic Oscillation modulation of the Northern Hemisphere spring tropospheric ozone. Geophysical Research Letters, 2004, 31, n/a-n/a. | 1.5 | 29 |
| 56 | Chemical characterization of ozone formation in the Houston-Galveston area: A chemical transport model study. Journal of Geophysical Research, 2004, 109, . | 3.3 | 79 |
| 57 | Assimilation of the 2000â€“2001 CO MOPITT retrievals with optimized surface emissions. Geophysical Research Letters, 2004, 31, . | 1.5 | 22 |
| 58 | Changes in the photochemical environment of the temperate North Pacific troposphere in response to increased Asian emissions. Journal of Geophysical Research, 2004, 109, . | 3.3 | 86 |
| 59 | Ozone, aerosol, potential vorticity, and trace gas trends observed at high-latitudes over North America from February to May 2000. Journal of Geophysical Research, 2003, 108, . | 3.3 | 59 |
| 60 | Effect of sulfate aerosol on tropospheric NOxand ozone budgets: Model simulations and TOPSE evidence. Journal of Geophysical Research, 2003, 108, . | 3.3 | 70 |
| 61 | Model analysis of the temporal and geographical origin of the CO distribution during the TOPSE campaign. Journal of Geophysical Research, 2003, 108, TOP 2-1. | 3.3 | 28 |
| 62 | Seasonal changes in the transport of pollutants into the Arctic troposphere-model study. Journal of Geophysical Research, 2003, 108, . | 3.3 | 150 |
| 63 | Budget of tropospheric ozone during TOPSE from two chemical transport models. Journal of Geophysical Research, 2003, 108, . | 3.3 | 56 |
| 64 | Intercontinental transport, chemical transformations, and baroclinic systems. Journal of Geophysical Research, 2003, 108, . | 3.3 | 23 |
| 65 | Effect of marine boundary layer clouds on tropospheric chemistry as analyzed in a regional chemistry transport model. Journal of Geophysical Research, 2002, 107, AAC 7-1-AAC 7-12. | 3.3 | 25 |
| 66 | Characterization of oscillation and a period-doubling transition to chaos reflecting dynamic instability in a simplified model of tropospheric chemistry. Journal of Geophysical Research, 2001, 106, 7553-7565. | 3.3 | 17 |
| 67 | Model and measurement analysis of springtime transport and chemistry of the Pacific basin. Journal of Geophysical Research, 2001, 106, 12689-12717. | 3.3 | 9 |
| 68 | Episodic modeling of the chemical structure of the troposphere as revealed during the spring MLOPEX 2 intensive. Journal of Geophysical Research, 2000, 105, 26809-26839. | 3.3 | 34 |
| 69 | Analysis of tropospheric transport in the Pacific Basin using the adjoint technique. Journal of Geophysical Research, 2000, 105, 7213-7230. | 3.3 | 49 |
| 70 | Hemispheric asymmetry of chemical species and its effect on stratospheric ozone: Emphasis on halogen loading. Advances in Space Research, 1999, 24, 1631-1636. | 1.2 | 2 |
| 71 | Three-dimensional model study of the influence of stratosphere-troposphere exchange and its distribution on tropospheric chemistry. Journal of Geophysical Research, 1999, 104, 26363-26372. | 3.3 | 20 |
| 72 | On tropospheric chemical oscillations. Journal of Geophysical Research, 1997, 102, 15949-15965. | 3.3 | 21 |

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| 73 | Aircraft measurements made during the spring maximum of ozone over Hawaii: Peroxides, CO, O3, NOy, condensation nuclei, selected hydrocarbons, halocarbons, and alkyl nitrates between 0.5 and 9 km altitude. Journal of Geophysical Research, 1997, 102, 18935-18961. | 3.3 | 40 |
| 74 | Ozone mass exchange between the stratosphere and troposphere for background and volcanic sulfate aerosol conditions. Journal of Geophysical Research, 1997, 102, 25487-25500. | 3.3 | 19 |
| 75 | Hemispheric asymmetries and seasonal variations of the lowermost stratospheric water vapor and ozone derived from SAGE II data. Journal of Geophysical Research, 1997, 102, 28177-28184. | 3.3 | 60 |
| 76 | Trajectories and related variations in the chemical composition of air for the Mauna Loa Observatory during 1991 and 1992. Journal of Geophysical Research, 1996, 101, 14543-14568. | 3.3 | 28 |
| 77 | HNO3/NOxratio in the remote troposphere During MLOPEX 2: Evidence for nitric acid reduction on carbonaceous aerosols?. Geophysical Research Letters, 1996, 23, 2609-2612. | 1.5 | 110 |
| 78 | Three-dimensional study of the relative contributions of the different nitrogen sources in the troposphere. Journal of Geophysical Research, 1996, 101, 22955-22968. | 3.3 | 98 |
| 79 | A Three-Dimensional Modeling Study of the Extratropical Quasi-Biennial Oscillation in Ozone. Journals of the Atmospheric Sciences, 1995, 52, 1539-1554. | 0.6 | 16 |
| 80 | Maintenance of the Intertropical Convergence Zones and the Large-Scale Tropical Circulation on a Water-covered Earth. Journals of the Atmospheric Sciences, 1993, 50, 691-713. | 0.6 | 99 |
| 81 | The Relationship Between Mixed Rossby-Gravity Waves and Convection in a General Circulation Model. Journal of the Meteorological Society of Japan, 1993, 71, 321-338. | 0.7 | 3 |
| 82 | Mixing Processes Following the Final Stratospheric Warming. Journals of the Atmospheric Sciences, 1991, 48, 1625-1641. | 0.6 | 36 |
| 83 | Variance in trace constituents following the final stratospheric warming. Journal of Geophysical Research, 1990, 95, 13765-13779. | 3.3 | 10 |
| 84 | The Origin of Temporal Variance in Long-Lived Trace Constituents in the Summer Stratosphere. Journals of the Atmospheric Sciences, 1985, 42, 1455-1463. | 0.6 | 41 |
| 85 | Tracer Transport by Planetary Waves: A Comparison of Explicit and Parameterized Models. Journals of the Atmospheric Sciences, 1985, 42, 1580-1591. | 0.6 | 2 |