Chris Wilson

List of Publications by Year
in descending order

30 papers	2,346 citations	393982 19 h-index	454577 30 g-index
51 all docs	51 docs citations	51 times ranked	3551 citing authors

#	Article	IF	Citations
1	A comprehensive quantification of global nitrous oxide sources and sinks. Nature, 2020, 586, 248-256.	13.7	814
2	TransCom model simulations of CH₄ and related species: linking transport, surface flux and chemical loss with CH₄ variability in the troposphere and lower stratosphere. Atmospheric Chemistry and Physics, 2011, 11, 12813-12837.	1.9	331
3	Acceleration of global N2O emissions seen from two decades of atmospheric inversion. Nature Climate Change, 2019, 9, 993-998.	8.1	229
4	Impact on short-lived climate forcers increases projected warming due to deforestation. Nature Communications, 2018, 9, 157.	5.8	86
5	Multi-model study of chemical and physical controls on transport of anthropogenic and biomass burning pollution to the Arctic. Atmospheric Chemistry and Physics, 2015, 15, 3575-3603.	1.9	83
6	Trends in atmospheric halogen containing gases since 2004. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2552-2566.	1.1	81
7	Impact of transport model errors on the global and regional methane emissions estimated by inverse modelling. Atmospheric Chemistry and Physics, 2013, 13, 9917-9937.	1.9	68
8	Role of OH variability in the stalling of the global atmospheric CH₄ growth rate from 1999 to 2006. Atmospheric Chemistry and Physics, 2016, 16, 7943-7956.	1.9	68
9	Evaluating year-to-year anomalies in tropical wetland methane emissions using satellite CH4 observations. Remote Sensing of Environment, 2018, 211, 261-275.	4.6	55
10	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.	1.9	51
11	Attribution of recent increases in atmospheric methane through 3-D inverse modelling. Atmospheric Chemistry and Physics, 2018, 18, 18149-18168.	1.9	51
12	Contribution of regional sources to atmospheric methane over the Amazon Basin in 2010 and 2011. Global Biogeochemical Cycles, 2016, 30, 400-420.	1.9	42
13	Role of regional wetland emissions in atmospheric methane variability. Geophysical Research Letters, 2016, 43, 11,433.	1.5	37
14	Tropical land carbon cycle responses to 2015/16 El NiÃ±o as recorded by atmospheric greenhouse gas and remote sensing data. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170302.	1.8	37
15	The TOMCAT global chemical transport model v1.6: description of chemical mechanism and model evaluation. Geoscientific Model Development, 2017, 10, 3025-3057.	1.3	35
16	TransCom N₂O model inter-comparison â€“ Part 1: Assessing the influence of transport and surface fluxes on tropospheric N₂O variability. Atmospheric Chemistry and Physics, 2014, 14, 4349-4368.	1.9	34
17	Development of a variational flux inversion system (INVICAT v1.0) using the TOMCAT chemical transport model. Geoscientific Model Development, 2014, 7, 2485-2500.	1.3	32
18	Comparison of the HadGEM2 climate-chemistry model against in situ and SCIAMACHY atmospheric methane data. Atmospheric Chemistry and Physics, 2014, 14, 13257-13280.	1.9	29

#	Article	IF	Citations
19	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
20	On the Regional and Seasonal Ozone Depletion Potential of Chlorinated Very Shortâ€Lived Substances. Geophysical Research Letters, 2019, 46, 5489-5498.	1.5	21
21	A Synthesis Inversion to Constrain Global Emissions of Two Very Short Lived Chlorocarbons: Dichloromethane, and Perchloroethylene. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031818.	1.2	18
22	The consolidated European synthesis of CH₄ and N₂O emissions for the European Union and United Kingdom: 1990â€“2017. Earth System Science Data, 2021, 13, 2307-2362.	3.7	16
23	Exploring constraints on a wetland methane emission ensemble (WetCHARTs) using GOSAT observations. Biogeosciences, 2020, 17, 5669-5691.	1.3	16
24	Using an Inverse Model to Reconcile Differences in Simulated and Observed Global Ethane Concentrations and Trends Between 2008 and 2014. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,262.	1.2	14
25	Large and increasing methane emissions from eastern Amazonia derived from satellite data, 2010â€“2018. Atmospheric Chemistry and Physics, 2021, 21, 10643-10669.	1.9	13
26	Exploiting satellite measurements to explore uncertainties in UK bottom-up NO_{<i>x</i>} emission estimates. Atmospheric Chemistry and Physics, 2022, 22, 4323-4338.	1.9	9
27	Large Methane Emissions From the Pantanal During Rising Waterâ€Levels Revealed by Regularly Measured Lower Troposphere CH₄ Profiles. Global Biogeochemical Cycles, 2021, 35, e2021GB006964.	1.9	8
28	Impact on short-lived climate forcers (SLCFs) from a realistic land-use change scenario via changes in biogenic emissions. Faraday Discussions, 2017, 200, 101-120.	1.6	7
29	Magnitude and Uncertainty of Nitrous Oxide Emissions From North America Based on Bottomâ€Up and Topâ€Down Approaches: Informing Future Research and National Inventories. Geophysical Research Letters, 2021, 48, e2021GL095264.	1.5	7
30	How Robust Is the Apparent Breakâ€Down of Northern Highâ€Latitude Temperature Control on Spring Carbon Uptake?. Geophysical Research Letters, 2021, 48, e2020GL091601.	1.5	2