Claire Granier

List of Publications by Year
in descending order

53 papers	6,034 citations	126708 33 h-index	189595 50 g-index
54 all docs	54 docs citations	54 times ranked	5935 citing authors

#	Article	IF	Citations
1	Increase in tropospheric nitrogen dioxide over China observed from space. Nature, 2005, 437, 129-132.	13.7	1,300
2	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
3	Evolution of anthropogenic and biomass burning emissions of air pollutants at global and regional scales during the 1980â€“2010 period. Climatic Change, 2011, 109, 163-190.	1.7	740
4	Global Wildland Fire Emission Model (GWEM): Evaluating the use of global area burnt satellite data. Journal of Geophysical Research, 2004, 109, .	3.3	256
5	Forty years of improvements in European air quality: regional policy-industry interactions with global impacts. Atmospheric Chemistry and Physics, 2016, 16, 3825-3841.	1.9	255
6	Monthly CO surface sources inventory based on the 2000-2001 MOPITT satellite data. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	171
7	Impact of heterogeneous chemistry on model predictions of ozone changes. Journal of Geophysical Research, 1992, 97, 18015-18033.	3.3	134
8	Chemical characterization of air pollution in Eastern China and the Eastern United States. Atmospheric Environment, 2006, 40, 2607-2625.	1.9	134
9	Atmospheric impact of NOxemissions by subsonic aircraft: A three-dimensional model study. Journal of Geophysical Research, 1996, 101, 1423-1428.	3.3	122
10	The impact of natural and anthropogenic hydrocarbons on the tropospheric budget of carbon monoxide. Atmospheric Environment, 2000, 34, 5255-5270.	1.9	119
11	Past and future changes in global tropospheric ozone: Impact on radiative forcing. Geophysical Research Letters, 1998, 25, 3807-3810.	1.5	118
12	Future changes in stratospheric ozone and the role of heterogeneous chemistry. Nature, 1990, 348, 626-628.	13.7	113
13	Future Changes in Biogenic Isoprene Emissions: How Might They Affect Regional and Global Atmospheric Chemistry?. Earth Interactions, 2006, 10, 1-19.	0.7	110
14	Two-dimensional simulation of Pinatubo aerosol and its effect on stratospheric ozone. Journal of Geophysical Research, 1994, 99, 20545.	3.3	109
15	Impact of recent total ozone changes on tropospheric ozone photodissociation, hydroxyl radicals, and methane trends. Geophysical Research Letters, 1992, 19, 465-467.	1.5	98
16	Global tropospheric NO2column distributions: Comparing three-dimensional model calculations with GOME measurements. Journal of Geophysical Research, 2001, 106, 12643-12660.	3.3	95
17	Inverse modeling of carbon monoxide surface emissions using Climate Monitoring and Diagnostics Laboratory network observations. Journal of Geophysical Research, 2002, 107, ACH 10-1.	3.3	86
18	The chemical composition of ancient atmospheres: A model study constrained by ice core data. Journal of Geophysical Research, 1995, 100, 14291.	3.3	84

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19	Impact of Climate Change on the Future Chemical Composition of the Global Troposphere. Journal of Climate, 2006, 19, 3932-3951.	1.2	81
20	Global biogenic volatile organic compound emissions in the ORCHIDEE and MEGAN models and sensitivity to key parameters. Atmospheric Chemistry and Physics, 2016, 16, 14169-14202.	1.9	80
21	Light absorbing carbon emissions from commercial shipping. Geophysical Research Letters, 2008, 35, .	1.5	71
22	Analysis of longâ€term observations of NO_x and CO in megacities and application to constraining emissions inventories. Geophysical Research Letters, 2016, 43, 9920-9930.	1.5	69
23	Ozone pollution from future ship traffic in the Arctic northern passages. Geophysical Research Letters, 2006, 33, .	1.5	66
24	Aircraft observations since the 1990s reveal increases of tropospheric ozone at multiple locations across the Northern Hemisphere. Science Advances, 2020, 6, .	4.7	64
25	Changes in global air pollutant emissions during the COVID-19 pandemic: a dataset for atmospheric modeling. Earth System Science Data, 2021, 13, 4191-4206.	3.7	57
26	Global Changes in Secondary Atmospheric Pollutants During the 2020 COVIDâ€19 Pandemic. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034213.	1.2	54
27	Evaluation of anthropogenic air pollutant emission inventories for South America at national and city scale. Atmospheric Environment, 2020, 235, 117606.	1.9	45
28	Possible causes for the 1990â€“1993 decrease in the global tropospheric co abundances: A three-dimensional sensitivity study. Atmospheric Environment, 1996, 30, 1673-1682.	1.9	44
29	Diverse response of surface ozone to COVID-19 lockdown in China. Science of the Total Environment, 2021, 789, 147739.	3.9	44
30	EURODELTA-Trends, a multi-model experiment of air quality hindcast in Europe over 1990â€“2010. Geoscientific Model Development, 2017, 10, 3255-3276.	1.3	41
31	Copernicus Atmosphere Monitoring Service TEMPOral profiles (CAMS-TEMPO): global and European emission temporal profile maps for atmospheric chemistry modelling. Earth System Science Data, 2021, 13, 367-404.	3.7	41
32	The impact of road traffic on global tropospheric ozone. Geophysical Research Letters, 2003, 30, .	1.5	38
33	Correcting model biases of CO in East Asia: impact on oxidant distributions during KORUS-AQ. Atmospheric Chemistry and Physics, 2020, 20, 14617-14647.	1.9	34
34	Ozone and other trace gases in the Arctic and Antarctic regions: Threeâ€dimensional model simulations. Journal of Geophysical Research, 1991, 96, 2995-3011.	3.3	33
35	High-resolution biogenic global emission inventory for the time period 2000â€“2019 for air quality modelling. Earth System Science Data, 2022, 14, 251-270.	3.7	32
36	Global impact of road traffic on atmospheric chemical composition and on ozone climate forcing. Journal of Geophysical Research, 2006, 111, .	3.3	26

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37	New Directions: GEIA's 2020 vision for better air emissions information. Atmospheric Environment, 2013, 81, 710-712.	1.9	25
38	The Impact of Biomass Burning on the Global Budget of Ozone and Ozone Precursors. Advances in Global Change Research, 2000, , 69-85.	1.6	25
39	Influence of anthropogenic emission inventories on simulations of air quality in China during winter and summer 2010. Atmospheric Environment, 2019, 198, 236-256.	1.9	24
40	The impact of high altitude aircraft on the ozone layer in the stratosphere. Journal of Atmospheric Chemistry, 1994, 18, 103-128.	1.4	23
41	Flaring emissions in Africa: Distribution, evolution and comparison with current inventories. Atmospheric Environment, 2019, 199, 423-434.	1.9	21
42	The Multi-Scale Infrastructure for Chemistry and Aerosols (MUSICA). Bulletin of the American Meteorological Society, 2020, 101, E1743-E1760.	1.7	21
43	African anthropogenic emissions inventory for gases and particles from 1990 to 2015. Earth System Science Data, 2021, 13, 3691-3705.	3.7	17
44	Model study of polar stratospheric clouds and their effect on stratospheric ozone: 2. Model results. Journal of Geophysical Research, 1996, 101, 12575-12584.	3.3	14
45	Atmospheric Impacts of COVID-19 on NOx and VOC Levels over China Based on TROPOMI and IASI Satellite Data and Modeling. Atmosphere, 2021, 12, 946.	1.0	13
46	Effects of interannual variation of temperature on heterogeneous reactions and stratospheric ozone. Journal of Geophysical Research, 1997, 102, 23519-23527.	3.3	10
47	Model study of polar stratospheric clouds and their effect on stratospheric ozone: 1. Model description. Journal of Geophysical Research, 1996, 101, 12567-12574.	3.3	7
48	Sensitivity of washout on HNO3/NOxratio in atmospheric chemistry transport models. Journal of Geophysical Research, 2001, 106, 3125-3132.	3.3	6
49	New Directions: Toward a community emissions approach. Atmospheric Environment, 2012, 51, 333-334.	1.9	5
50	Mitigation, Adaptation or Climate Engineering?. Theoretical Inquiries in Law, 2013, 14, 1-20.	0.1	3
51	Anthropogenic Emissions in Asia. , 2017, , 107-133.		2
52	Predicting Air Pollution in East Asia. , 2017, , 387-403.		1
53	Data Assimilation and Inverse Methods. Advances in Global Change Research, 2004, , 477-515.	1.6	0