Francis

List of Publications by Year in descending order

33 papers	3,922 citations	257101 24 h-index	395343 33 g-index
34 all docs	34 docs citations	34 times ranked	4339 citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	The Whole Atmosphere Community Climate Model Version 6 (WACCM6). Journal of Geophysical Research D: Atmospheres, 2019, 124, 12380-12403.	1.2	261
5	Development and Validation of the Whole Atmosphere Community Climate Model With Thermosphere and Ionosphere Extension (WACCMâ€X 2.0). Journal of Advances in Modeling Earth Systems, 2018, 10, 381-402.	1.3	213
6	Description and evaluation of tropospheric chemistry and aerosols in the Community Earth System Model (CESM1.2). Geoscientific Model Development, 2015, 8, 1395-1426.	1.3	159
7	Short- and medium-term atmospheric constituent effects of very large solar proton events. Atmospheric Chemistry and Physics, 2008, 8, 765-785.	1.9	156
8	Radiative and Chemical Response to Interactive Stratospheric Sulfate Aerosols in Fully Coupled CESM1(WACCM). Journal of Geophysical Research D: Atmospheres, 2017, 122, 13,061.	1.2	128
9	Representation of the Community Earth System Model (CESM1) CAM4-chem within the Chemistry-Climate Model Initiative (CCMI). Geoscientific Model Development, 2016, 9, 1853-1890.	1.3	122
10	First Simulations of Designing Stratospheric Sulfate Aerosol Geoengineering to Meet Multiple Simultaneous Climate Objectives. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,616.	1.2	114
11	Longâ€term middle atmospheric influence of very large solar proton events. Journal of Geophysical Research, 2009, 114, .	3.3	103
12	The Climate Response to Stratospheric Aerosol Geoengineering Can Be Tailored Using Multiple Injection Locations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,574.	1.2	95
13	Climate Forcing and Trends of Organic Aerosols in the Community Earth System Model (CESM2). Journal of Advances in Modeling Earth Systems, 2019, 11, 4323-4351.	1.3	87
14	Sensitivity of Aerosol Distribution and Climate Response to Stratospheric SO₂ Injection Locations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,591.	1.2	79
15	Stratospheric Dynamical Response and Ozone Feedbacks in the Presence of SO₂ Injections. Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,557.	1.2	69
16	Whole Atmosphere Simulation of Anthropogenic Climate Change. Geophysical Research Letters, 2018, 45, 1567-1576.	1.5	60
17	Effects of Different Stratospheric SO₂ Injection Altitudes on Stratospheric Chemistry and Dynamics. Journal of Geophysical Research D: Atmospheres, 2018, 123, 4654-4673.	1.2	58
18	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

#	Article	IF	Citations
19	Comparing Surface and Stratospheric Impacts of Geoengineering With Different SO₂ Injection Strategies. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7900-7918.	1.2	56
20	Chemical Feedback From Decreasing Carbon Monoxide Emissions. Geophysical Research Letters, 2017, 44, 9985-9995.	1.5	49
21	Atmospheric Acetaldehyde: Importance of Airâ€Sea Exchange and a Missing Source in the Remote Troposphere. Geophysical Research Letters, 2019, 46, 5601-5613.	1.5	41
22	Toward a chemical reanalysis in a coupled chemistryâ€climate model: An evaluation of MOPITT CO assimilation and its impact on tropospheric composition. Journal of Geophysical Research D: Atmospheres, 2016, 121, 7310-7343.	1.2	37
23	Whole Atmosphere Climate Change: Dependence on Solar Activity. Journal of Geophysical Research: Space Physics, 2019, 124, 3799-3809.	0.8	35
24	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
25	Evaluating the Impact of Chemical Complexity and Horizontal Resolution on Tropospheric Ozone Over the Conterminous US With a Global Variable Resolution Chemistry Model. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	20
26	Temporal Variability of Atomic Hydrogen From the Mesopause to the Upper Thermosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 1006-1017.	0.8	19
27	Stratospheric Response in the First Geoengineering Simulation Meeting Multiple Surface Climate Objectives. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5762-5782.	1.2	17
28	Development and Evaluation of Chemistryâ€Aerosolâ€Climate Model CAM5â€Chemâ€MAM7â€MOSAIC: Global Atmospheric Distribution and Radiative Effects of Nitrate Aerosol. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002346.	1.3	17
29	Estimating the Impacts of Radiation Belt Electrons on Atmospheric Chemistry Using FIREBIRD II and Van Allen Probes Observations. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033098.	1.2	14
30	Radiative Forcing of Nitrate Aerosols From 1975 to 2010 as Simulated by MOSAIC Module in CESM2â€MAM4. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034809.	1.2	14
31	A consistent prescription of stratospheric aerosol for both radiation and chemistry in the Community Earth System Model (CESM1). Geoscientific Model Development, 2016, 9, 2459-2470.	1.3	13
32	Extreme Ozone Loss Following Nuclear War Results in Enhanced Surface Ultraviolet Radiation. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035079.	1.2	13
33	Improvement of the prediction of surface ozone concentration over conterminous U.S. by a computationally efficient secondâ€order R osenbrock solver in CAM 4â€C hem. Journal of Advances in Modeling Earth Systems, 2017, 9, 482-500.	1.3	4