Apostolos Voulgarakis

List of Publications by Year
in descending order

79 papers	10,311 citations	94433 37 h-index	66911 78 g-index
123 all docs	123 docs citations	123 times ranked	11731 citing authors

#	Article	IF	Citations
1	Three decades of global methane sources and sinks. Nature Geoscience, 2013, 6, 813-823.	12.9	1,649
2	The Global Methane Budget 2000â€“2017. Earth System Science Data, 2020, 12, 1561-1623.	9.9	1,199
3	The global methane budget 2000â€“2012. Earth System Science Data, 2016, 8, 697-751.	9.9	824
4	Configuration and assessment of the GISS ModelE2 contributions to the CMIP5 archive. Journal of Advances in Modeling Earth Systems, 2014, 6, 141-184.	3.8	597
5	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
6	Radiative forcing in the ACCMIP historical and future climate simulations. Atmospheric Chemistry and Physics, 2013, 13, 2939-2974.	4.9	395
7	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
8	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
9	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
10	The status and challenge of global fire modelling. Biogeosciences, 2016, 13, 3359-3375.	3.3	274
11	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
12	El NiÃ±o and health risks from landscape fire emissions in southeast Asia. Nature Climate Change, 2013, 3, 131-136.	18.8	250
13	Evaluation of the new UKCA climate-composition model â€“ Part 2: The Troposphere. Geoscientific Model Development, 2014, 7, 41-91.	3.6	191
14	Fast and slow precipitation responses to individual climate forcers: A PDRMIP multimodel study. Geophysical Research Letters, 2016, 43, 2782-2791.	4.0	179
15	The Fire Modeling Intercomparison Project (FireMIP), phase 1: experimental and analytical protocols with detailed model descriptions. Geoscientific Model Development, 2017, 10, 1175-1197.	3.6	159
16	Interactive ozone and methane chemistry in GISS-E2 historical and future climate simulations. Atmospheric Chemistry and Physics, 2013, 13, 2653-2689.	4.9	150
17	CMIP5 historical simulations (1850â€“2012) with GISS ModelE2. Journal of Advances in Modeling Earth Systems, 2014, 6, 441-478.	3.8	133
18	Rapid Adjustments Cause Weak Surface Temperature Response to Increased Black Carbon Concentrations. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11462-11481.	3.3	118

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19	PDRMIP: A Precipitation Driver and Response Model Intercomparison Projectâ€"Protocol and Preliminary Results. Bulletin of the American Meteorological Society, 2017, 98, 1185-1198.	3.3	116
20	Understanding Rapid Adjustments to Diverse Forcing Agents. Geophysical Research Letters, 2018, 45, 12023-12031.	4.0	113
21	Future climate change under RCP emission scenarios with GISS <scp>M</scp>odelE2. Journal of Advances in Modeling Earth Systems, 2015, 7, 244-267.	3.8	112
22	Variability and quasi-decadal changes in the methane budget over the period 2000â€“2012. Atmospheric Chemistry and Physics, 2017, 17, 11135-11161.	4.9	85
23	A PDRMIP Multimodel Study on the Impacts of Regional Aerosol Forcings on Global and Regional Precipitation. Journal of Climate, 2018, 31, 4429-4447.	3.2	83
24	Influence of Fire on the Carbon Cycle and Climate. Current Climate Change Reports, 2019, 5, 112-123.	8.6	81
25	Precipitation response to regional radiative forcing. Atmospheric Chemistry and Physics, 2012, 12, 6969-6982.	4.9	72
26	Fire Influences on Atmospheric Composition, Air Quality and Climate. Current Pollution Reports, 2015, 1, 70-81.	6.6	71
27	Drivers of Precipitation Change: An Energetic Understanding. Journal of Climate, 2018, 31, 9641-9657.	3.2	63
28	Quantitative assessment of fire and vegetation properties in simulations with fire-enabled vegetation models from the Fire Model Intercomparison Project. Geoscientific Model Development, 2020, 13, 3299-3318.	3.6	63
29	Evaluation of ACCMIP outgoing longwave radiation from tropospheric ozone using TES satellite observations. Atmospheric Chemistry and Physics, 2013, 13, 4057-4072.	4.9	61
30	PM10 and PM2.5 Levels in the Eastern Mediterranean (Akrotiri Research Station, Crete, Greece). Water, Air, and Soil Pollution, 2008, 189, 85-101.	2.4	55
31	Efficacy of Climate Forcings in PDRMIP Models. Journal of Geophysical Research D: Atmospheres, 2019, 124, 12824-12844.	3.3	55
32	Global multi-year O₃-CO correlation patterns from models and TES satellite observations. Atmospheric Chemistry and Physics, 2011, 11, 5819-5838.	4.9	54
33	Interannual variability of tropospheric composition: the influence of changes in emissions, meteorology and clouds. Atmospheric Chemistry and Physics, 2010, 10, 2491-2506.	4.9	52
34	Using machine learning to build temperature-based ozone parameterizations for climate sensitivity simulations. Environmental Research Letters, 2018, 13, 104016.	5.2	48
35	Regional and global temperature response to anthropogenic SO₂ emissions from China in three climate models. Atmospheric Chemistry and Physics, 2016, 16, 9785-9804.	4.9	46
36	Sensible heat has significantly affected the global hydrological cycle over the historical period. Nature Communications, 2018, 9, 1922.	12.8	44

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37	Clouds, photolysis and regional tropospheric ozone budgets. Atmospheric Chemistry and Physics, 2009, 9, 8235-8246.	4.9	42
38	Attribution of historical ozone forcing to anthropogenic emissions. Nature Climate Change, 2013, 3, 567-570.	18.8	42
39	Interannual variability of tropospheric trace gases and aerosols: The role of biomass burning emissions. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7157-7173.	3.3	41
40	Description and evaluation of the Multiscale Online Nonhydrostatic AtmospheRe CHemistry model (NMMB-MONARCH) version 1.0: gas-phase chemistry at global scale. Geoscientific Model Development, 2017, 10, 609-638.	3.6	41
41	Dynamical response of Mediterranean precipitation to greenhouse gases and aerosols. Atmospheric Chemistry and Physics, 2018, 18, 8439-8452.	4.9	40
42	Arctic Amplification Response to Individual Climate Drivers. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6698-6717.	3.3	39
43	Global sensitivity analysis of chemistryâ€“climate model budgets of tropospheric ozone and OH: exploring model diversity. Atmospheric Chemistry and Physics, 2020, 20, 4047-4058.	4.9	38
44	INFERNO: a fire and emissions scheme for the UK Met Office's Unified Model. Geoscientific Model Development, 2016, 9, 2685-2700.	3.6	37
45	Carbon Dioxide Physiological Forcing Dominates Projected Eastern Amazonian Drying. Geophysical Research Letters, 2018, 45, 2815-2825.	4.0	35
46	Weak hydrological sensitivity to temperature change over land, independent of climate forcing. Npj Climate and Atmospheric Science, 2018, 1, .	6.8	33
47	Similar spatial patterns of global climate response to aerosols from different regions. Npj Climate and Atmospheric Science, 2018, 1, .	6.8	33
48	Predicting global patterns of long-term climate change from short-term simulations using machine learning. Npj Climate and Atmospheric Science, 2020, 3, .	6.8	33
49	Upgrading photolysis in the p-TOMCAT CTM: model evaluation and assessment of the role of clouds. Geoscientific Model Development, 2009, 2, 59-72.	3.6	32
50	An agricultural biomass burning episode in eastern China: Transport, optical properties, and impacts on regional air quality. Journal of Geophysical Research D: Atmospheres, 2017, 122, 2304-2324.	3.3	31
51	Fast sensitivity analysis methods for computationally expensive models with multi-dimensional output. Geoscientific Model Development, 2018, 11, 3131-3146.	3.6	31
52	Increases in global tropospheric ozone following an El NiÃ±o event: examining stratospheric ozone variability as a potential driver. Atmospheric Science Letters, 2011, 12, 228-232.	1.9	30
53	Water vapour adjustments and responses differ between climate drivers. Atmospheric Chemistry and Physics, 2019, 19, 12887-12899.	4.9	29
54	Quantifying the Importance of Rapid Adjustments for Global Precipitation Changes. Geophysical Research Letters, 2018, 45, 11399-11405.	4.0	26

#	ARTICLE	IF	CITATIONS
55	Satellite versus ground-based estimates of burned area: A comparison between MODIS based burned area and fire agency reports over North America in 2007. Infrastructure Asset Management, 2016, 3, 76-92.	1.6	22
56	The South Asian Monsoon Response to Remote Aerosols: Global and Regional Mechanisms. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,585.	3.3	21
57	Extreme wet and dry conditions affected differently by greenhouse gases and aerosols. Npj Climate and Atmospheric Science, 2019, 2, .	6.8	21
58	The Influence of Remote Aerosol Forcing from Industrialized Economies on the Future Evolution of East and West African Rainfall. Journal of Climate, 2019, 32, 8335-8354.	3.2	21
59	Comparison of Effective Radiative Forcing Calculations Using Multiple Methods, Drivers, and Models. Journal of Geophysical Research D: Atmospheres, 2019, 124, 4382-4394.	3.3	21
60	A study of the effect of aerosols on surface ozone through meteorology feedbacks over China. Atmospheric Chemistry and Physics, 2021, 21, 5705-5718.	4.9	19
61	The importance of antecedent vegetation and drought conditions as global drivers of burnt area. Biogeosciences, 2021, 18, 3861-3879.	3.3	18
62	Future climate change impact on wildfire danger over the Mediterranean: the case of Greece. Environmental Research Letters, 2022, 17, 045022.	5.2	17
63	How different would tropospheric oxidation be over an iceâ€free Arctic?. Geophysical Research Letters, 2009, 36, .	4.0	16
64	The role of temporal evolution in modeling atmospheric emissions from tropical fires. Atmospheric Environment, 2014, 89, 158-168.	4.1	16
65	Simulating the Black Saturday 2009 smoke plume with an interactive compositionâ€climate model: Sensitivity to emissions amount, timing, and injection height. Journal of Geophysical Research D: Atmospheres, 2016, 121, 4296-4316.	3.3	16
66	Longâ€Lead Prediction of the 2015 Fire and Haze Episode in Indonesia. Geophysical Research Letters, 2017, 44, 9996.	4.0	16
67	Ozone and carbon monoxide budgets over the Eastern Mediterranean. Science of the Total Environment, 2016, 563-564, 40-52.	8.0	15
68	Climate drivers of global wildfire burned area. Environmental Research Letters, 2022, 17, 045021.	5.2	14
69	A Tropospheric Emission Spectrometer HDO/H₂O retrieval simulator for climate models. Atmospheric Chemistry and Physics, 2012, 12, 10485-10504.	4.9	9
70	Constraining the Sensitivity of Regional Climate with the Use of Historical Observations. Journal of Climate, 2010, 23, 6068-6073.	3.2	8
71	The effect of rapid adjustments to halocarbons and N2O on radiative forcing. Npj Climate and Atmospheric Science, 2020, 3, .	6.8	7
72	Response of surface shortwave cloud radiative effect to greenhouse gases and aerosols and its impact on summer maximum temperature. Atmospheric Chemistry and Physics, 2020, 20, 8251-8266.	4.9	7

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73	Linkages between ozone-depleting substances, tropospheric oxidation and aerosols. Atmospheric Chemistry and Physics, 2013, 13, 4907-4916.	4.9	5
74	Coupling interactive fire with atmospheric composition and climate in the UK Earth System Model. Geoscientific Model Development, 2021, 14, 6515-6539.	3.6	5
75	Scientific data from precipitation driver response model intercomparison project. Scientific Data, 2022, 9, 123.	5.3	5
76	Sensitivity of simulated tropospheric CO to subgrid physics parameterization: A case study of Indonesian biomass burning emissions in 2006. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,743-11,759.	3.3	4
77	An unsupervised learning approach to identifying blocking events: the case of European summer. Weather and Climate Dynamics, 2021, 2, 581-608.	3.5	4
78	Distinct surface response to black carbon aerosols. Atmospheric Chemistry and Physics, 2021, 21, 13797-13809.	4.9	2
79	Fire Impacts on High-Altitude Atmospheric Com-Position. Springer Atmospheric Sciences, 2017, , 1231-1237.	0.3	0