Donifan O Barahona

List of Publications by Year
in descending order

33 papers	1,221 citations	516710 16 h-index	414414 32 g-index
53 all docs	53 docs citations	53 times ranked	1610 citing authors

#	Article	IF	Citations
1	Saharan dust event impacts on cloud formation and radiation over Western Europe. Atmospheric Chemistry and Physics, 2012, 12, 4045-4063.	4.9	146
2	Parameterizing the competition between homogeneous and heterogeneous freezing in ice cloud formation â€“ polydisperse ice nuclei. Atmospheric Chemistry and Physics, 2009, 9, 5933-5948.	4.9	106
3	Comprehensively accounting for the effect of giant CCN in cloud activation parameterizations. Atmospheric Chemistry and Physics, 2010, 10, 2467-2473.	4.9	106
4	Sensitivity studies of dust ice nuclei effect on cirrus clouds with the Community Atmosphere Model CAM5. Atmospheric Chemistry and Physics, 2012, 12, 12061-12079.	4.9	83
5	Parameterization of cirrus cloud formation in largeâ€scale models: Homogeneous nucleation. Journal of Geophysical Research, 2008, 113, .	3.3	81
6	Development of two-moment cloud microphysics for liquid and ice within the NASA Goddard Earth Observing System Model (GEOS-5). Geoscientific Model Development, 2014, 7, 1733-1766.	3.6	78
7	Parameterizing the competition between homogeneous and heterogeneous freezing in cirrus cloud formation â€“ monodisperse ice nuclei. Atmospheric Chemistry and Physics, 2009, 9, 369-381.	4.9	76
8	Effect of water activity on the lipase catalyzed esterification of geraniol in ionic liquid [bmim]PF6. Biotechnology and Bioengineering, 2006, 93, 318-324.	3.3	72
9	Cirrus cloud seeding has potential to cool climate. Geophysical Research Letters, 2013, 40, 178-182.	4.0	64
10	Parameterization of cloud droplet formation in largeâ€scale models: Including effects of entrainment. Journal of Geophysical Research, 2007, 112, .	3.3	58
11	GEOSâ€S2S Version 2: The GMAO Highâ€Resolution Coupled Model and Assimilation System for Seasonal Prediction. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031767.	3.3	52
12	On the ice nucleation spectrum. Atmospheric Chemistry and Physics, 2012, 12, 3733-3752.	4.9	37
13	Dynamical states of low temperature cirrus. Atmospheric Chemistry and Physics, 2011, 11, 3757-3771.	4.9	35
14	Direct estimation of the global distribution of vertical velocity within cirrus clouds. Scientific Reports, 2017, 7, 6840.	3.3	33
15	Analysis of the effect of water activity on ice formation using a new thermodynamic framework. Atmospheric Chemistry and Physics, 2014, 14, 7665-7680.	4.9	20
16	Global distribution of cloud droplet number concentration, autoconversion rate, and aerosol indirect effect under diabatic droplet activation. Journal of Geophysical Research, 2011, 116, .	3.3	19
17	Thermodynamic derivation of the activation energy for ice nucleation. Atmospheric Chemistry and Physics, 2015, 15, 13819-13831.	4.9	16
18	Dust Impacts on the 2012 Hurricane Nadine Track during the NASA HS3 Field Campaign. Journals of the Atmospheric Sciences, 2018, 75, 2473-2489.	1.7	15

#	Article	IF	Citations
19	Performance of McRAS-AC in the GEOS-5 AGCM: aerosol-cloud-microphysics, precipitation, cloud radiative effects, and circulation. Geoscientific Model Development, 2013, 6, 57-79.	3.6	13
20	Linkage among ice crystal microphysics, mesoscale dynamics, and cloud and precipitation structures revealed by collocated microwave radiometer and multifrequency radar observations. Atmospheric Chemistry and Physics, 2020, 20, 12633-12653.	4.9	13
21	Understanding cirrus ice crystal number variability for different heterogeneous ice nucleation spectra. Atmospheric Chemistry and Physics, 2016, 16, 2611-2629.	4.9	12
22	Implementation of a comprehensive ice crystal formation parameterization for cirrus and mixed-phase clouds in the EMAC model (based on MESSy 2.53). Geoscientific Model Development, 2018, 11, 4021-4041.	3.6	12
23	Sensitivity of cirrus and mixed-phase clouds to the ice nuclei spectra in McRAS-AC: single column model simulations. Atmospheric Chemistry and Physics, 2012, 12, 10679-10692.	4.9	11
24	On the thermodynamic and kinetic aspects of immersion ice nucleation. Atmospheric Chemistry and Physics, 2018, 18, 17119-17141.	4.9	10
25	A Dusty Atmospheric River Brings Floods to the Middle East. Geophysical Research Letters, 2021, 48, e2021GL095441.	4.0	9
26	Potential Link Between Ice Nucleation and Climate Model Spread in Arctic Amplification. Geophysical Research Letters, 2022, 49, .	4.0	9
27	Effect of volcanic emissions on clouds during the 2008Âand 2018ÂKilauea degassing events. Atmospheric Chemistry and Physics, 2021, 21, 7749-7771.	4.9	8
28	Quantifying sensitivities of ice crystal number and sources of ice crystal number variability in CAM 5.1 using the adjoint of a physically based cirrus formation parameterization. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2834-2854.	3.3	6
29	The response of the Amazon ecosystem to the photosynthetically active radiation fields: integrating impacts of biomass burning aerosol and clouds in the NASA GEOS Earth system model. Atmospheric Chemistry and Physics, 2021, 21, 14177-14197.	4.9	5
30	Biasâ€Free Estimation of Ice Nucleation Efficiencies. Geophysical Research Letters, 2020, 47, e2019GL086033.	4.0	3
31	Assessing aerosol indirect effect through ice clouds in CAM5. , 2013, , .		2
32	Earth system model parameter adjustment using a Green's functions approach. Geoscientific Model Development, 2022, 15, 2309-2324.	3.6	2
33	The Impacts of Immersion Ice Nucleation Parameterizations on Arctic Mixed-Phase Stratiform Cloud Properties and the Arctic Radiation Budget in GEOS-5. Journal of Climate, 2022, 35, 4049-4070.	3.2	1