Susannah Burrows

List of Publications by Year
in descending order

53	6,423	186265	182427
papers	citations	28 h-index	51 g-index

79	79	79	7005
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Primary biological aerosol particles in the atmosphere: a review. Tellus, Series B: Chemical and Physical Meteorology, 2022, 64, 15598.	1.6	988
2	Contribution of cryptogamic covers to the global cycles of carbon and nitrogen. Nature Geoscience, 2012, 5, 459-462.	12.9	711
3	Bioaerosols in the Earth system: Climate, health, and ecosystem interactions. Atmospheric Research, 2016, 182, 346-376.	4.1	609
4	A marine biogenic source of atmospheric ice-nucleating particles. Nature, 2015, 525, 234-238.	27.8	475
5	Bacteria in the global atmosphere â€“ Part 1: Review and synthesis of literature data for different ecosystems. Atmospheric Chemistry and Physics, 2009, 9, 9263-9280.	4.9	471
6	The DOE E3SM Coupled Model Version 1: Overview and Evaluation at Standard Resolution. Journal of Advances in Modeling Earth Systems, 2019, 11, 2089-2129.	3.8	404
7	Bacteria in the global atmosphere â€“ Part 2: Modeling of emissions and transport between different ecosystems. Atmospheric Chemistry and Physics, 2009, 9, 9281-9297.	4.9	284
8	How important is biological ice nucleation in clouds on a global scale?. Environmental Research Letters, 2010, 5, 024009.	5.2	245
9	Ice nuclei in marine air: biogenic particles or dust?. Atmospheric Chemistry and Physics, 2013, 13, 245-267.	4.9	226
10	An Overview of the Atmospheric Component of the Energy Exascale Earth System Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 2377-2411.	3.8	168
11	Biogeography in the air: fungal diversity over land and oceans. Biogeosciences, 2012, 9, 1125-1136.	3.3	152
12	The role of jet and film drops in controlling the mixing state of submicron sea spray aerosol particles. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6978-6983.	7.1	147
13	Natural aerosols explain seasonal and spatial patterns of Southern Ocean cloud albedo. Science Advances, 2015, 1, e1500157.	10.3	144
14	Contribution of feldspar and marine organic aerosols to global ice nucleating particle concentrations. Atmospheric Chemistry and Physics, 2017, 17, 3637-3658.	4.9	144
15	The Ocean's Vital Skin: Toward an Integrated Understanding of the Sea Surface Microlayer. Frontiers in Marine Science, 2017, 4, .	2.5	137
16	A physically based framework for modeling the organic fractionation of sea spray aerosol from bubble film Langmuir equilibria. Atmospheric Chemistry and Physics, 2014, 14, 13601-13629.	4.9	124
17	Sources and composition of submicron organic mass in marine aerosol particles. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,977.	3.3	106
18	Aerosols in the E3SM Version 1: New Developments and Their Impacts on Radiative Forcing. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001851.	3.8	68

#	Article	IF	Citations
19	The DOE E3SM v1.1 Biogeochemistry Configuration: Description and Simulated Ecosystemâ€Climate Responses to Historical Changes in Forcing. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001766.	3.8	65
20	Ice nucleation by fungal spores from the classes <i>Agaricomycetes</i>, <i>Ustilaginomycetes</i>, and <i>Eurotiomycetes</i>, and the effect on the atmospheric transport of these spores. Atmospheric Chemistry and Physics, 2014, 14, 8611-8630.	4.9	57
21	Evaluating stratospheric ozone and water vapour changes in CMIP6 models from 1850 to 2100. Atmospheric Chemistry and Physics, 2021, 21, 5015-5061.	4.9	54
22	Abundance of fluorescent biological aerosol particles at temperatures conducive to the formation of mixed-phase and cirrus clouds. Atmospheric Chemistry and Physics, 2016, 16, 8205-8225.	4.9	50
23	OCEANFILMSâ€2: Representing coadsorption of saccharides in marine films and potential impacts on modeled marine aerosol chemistry. Geophysical Research Letters, 2016, 43, 8306-8313.	4.0	38
24	Numerical Representations of Marine Iceâ€Nucleating Particles in Remote Marine Environments Evaluated Against Observations. Geophysical Research Letters, 2019, 46, 7838-7847.	4.0	36
25	Effects of marine organic aerosols as sources of immersion-mode ice-nucleating particles on high-latitude mixed-phase clouds. Atmospheric Chemistry and Physics, 2021, 21, 2305-2327.	4.9	34
26	Impact of numerical choices on water conservation in the E3SM Atmosphere Model version 1 (EAMv1). Geoscientific Model Development, 2018, 11, 1971-1988.	3.6	33
27	Fungal spores as a source of sodium salt particles in the Amazon basin. Nature Communications, 2018, 9, 4793.	12.8	31
28	Prospects for simulating macromolecular surfactant chemistry at the oceanâ€“atmosphere boundary. Environmental Research Letters, 2014, 9, 064012.	5.2	30
29	Iceâ€Nucleating Particles That Impact Clouds and Climate: Observational and Modeling Research Needs. Reviews of Geophysics, 2022, 60, .	23.0	29
30	Science questions and knowledge gaps to study microbial transport and survival in Asian and African dust plumes reaching North America. Aerobiologia, 2018, 34, 425-435.	1.7	28
31	Impacts of Shifts in Phytoplankton Community on Clouds and Climate via the Sulfur Cycle. Global Biogeochemical Cycles, 2018, 32, 1005-1026.	4.9	27
32	Estimating bacteria emissions from inversion of atmospheric transport: sensitivity to modelled particle characteristics. Atmospheric Chemistry and Physics, 2013, 13, 5473-5488.	4.9	19
33	Comprehensive mapping and characteristic regimes of aerosol effects on the formation and evolution of pyro-convective clouds. Atmospheric Chemistry and Physics, 2015, 15, 10325-10348.	4.9	19
34	The Impact of Divalent Cations on the Enrichment of Soluble Saccharides in Primary Sea Spray Aerosol. Atmosphere, 2018, 9, 476.	2.3	19
35	Potential sea salt aerosol sources from frost flowers in the panâ€Arctic region. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,840.	3.3	17
36	Investigating controls on sea ice algal production using E3SMv1.1-BGC. Annals of Glaciology, 2020, 61, 51-72.	1.4	16

#	Article	IF	Citations
37	Effective radiative forcing of anthropogenic aerosols in E3SM version 1: historical changes, causality, decomposition, and parameterization sensitivities. Atmospheric Chemistry and Physics, 2022, 22, 9129-9160.	4.9	16
38	Global distribution and surface activity of macromolecules in offline simulations of marine organic chemistry. Biogeochemistry, 2015, 126, 25-56.	3.5	15
39	Empirical Analysis of the Subjective Impressions and Objective Measures of Domain Scientists' Visual Analytic Judgments. , 2017, , .		14
40	OCEANFILMS (Organic Compounds from Ecosystems to Aerosols: Natural Films and Interfaces via) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 climate model and impacts on clouds. Atmospheric Chemistry and Physics, 2022, 22, 5223-5251.	4.9	14
41	Highâ€latitude remote sensing of mesospheric wind speeds and carbon monoxide. Journal of Geophysical Research, 2007, 112, .	3.3	13
42	Planning the Next Decade of Coordinated Research to Better Understand and Simulate Marine Low Clouds. Bulletin of the American Meteorological Society, 2016, 97, 1699-1702.	3.3	13
43	Separating the Wheat from the Chaff: Comparative Visual Cues for Transparent Diagnostics of Competing Models. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 1043-1053.	4.4	11
44	Does Marine Surface Tension Have Global Biogeography? Addition for the OCEANFILMS Package. Atmosphere, 2018, 9, 216.	2.3	10
45	E3SMv0â€HiLAT: A Modified Climate System Model Targeted for the Study of Highâ€latitude Processes. Journal of Advances in Modeling Earth Systems, 2019, 11, 2814-2843.	3.8	9
46	A Graph Theoretical Intercomparison of Atmospheric Chemical Mechanisms. Geophysical Research Letters, 2021, 48, e2020GL090481.	4.0	9
47	A numerical framework for simulating the atmospheric variability of supermicron marine biogenic ice nucleating particles. Atmospheric Chemistry and Physics, 2022, 22, 847-859.	4.9	9
48	Development of Heterogeneous Ice Nucleation Rate Coefficient Parameterizations From Ambient Measurements. Geophysical Research Letters, 2021, 48, e2021GL095359.	4.0	8
49	Characterizing the Relative Importance Assigned to Physical Variables by Climate Scientists when Assessing Atmospheric Climate Model Fidelity. Advances in Atmospheric Sciences, 2018, 35, 1101-1113.	4.3	6
50	Empirical formulation for multiple groups of primary biological ice nucleating particles from field observations over Amazonia. Journals of the Atmospheric Sciences, 2021, , .	1.7	5
51	Simulated Dust Transport in the Convective Boundary Layer. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033429.	3.3	3
52	Diurnal Rainfall Response to the Physiological and Radiative Effects of CO₂ in Tropical Forests in the Energy Exascale Earth System Model v1. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	1
53	An Atmospheric Aerosol Short Course for Early Career Scientists. Bulletin of the American Meteorological Society, 2020, 101, E1562-E1567.	3.3	0