Lantao Sun

List of Publications by Year
in descending order

43 papers	2,448 citations	257101 24 h-index	253896 43 g-index
50 all docs	50 docs citations	50 times ranked	2085 citing authors

#	Article	IF	Citations
1	Consistency and discrepancy in the atmospheric response to Arctic sea-ice loss across climate models. Nature Geoscience, 2018, 11, 155-163.	5.4	265
2	What caused the recent â€œWarm Arctic, Cold Continentsâ€•trend pattern in winter temperatures?. Geophysical Research Letters, 2016, 43, 5345-5352.	1.5	245
3	The Role of Oceanâ€“Atmosphere Coupling in the Zonal-Mean Atmospheric Response to Arctic Sea Ice Loss. Journal of Climate, 2015, 28, 2168-2186.	1.2	244
4	Mechanisms of Stratospheric and Tropospheric Circulation Response to Projected Arctic Sea Ice Loss*. Journal of Climate, 2015, 28, 7824-7845.	1.2	204
5	Does ocean coupling matter for the northern extratropical response to projected Arctic sea ice loss?. Geophysical Research Letters, 2016, 43, 2149-2157.	1.5	133
6	Evolution of the Global Coupled Climate Response to Arctic Sea Ice Loss during 1990â€“2090 and Its Contribution to Climate Change. Journal of Climate, 2018, 31, 7823-7843.	1.2	126
7	Reduced Risk of North American Cold Extremes due to Continued Arctic Sea Ice Loss. Bulletin of the American Meteorological Society, 2015, 96, 1489-1503.	1.7	108
8	The Role of Ocean Heat Transport in the Global Climate Response to Projected Arctic Sea Ice Loss. Journal of Climate, 2016, 29, 6841-6859.	1.2	103
9	Initialized Earth System prediction from subseasonal to decadal timescales. Nature Reviews Earth & Environment, 2021, 2, 340-357.	12.2	85
10	Distinguishing Stratospheric Sudden Warmings from ENSO as Key Drivers of Wintertime Climate Variability over the North Atlantic and Eurasia. Journal of Climate, 2017, 30, 1959-1969.	1.2	77
11	Tropical climate responses to projected Arctic and Antarctic sea-ice loss. Nature Geoscience, 2020, 13, 275-281.	5.4	76
12	Projected changes in regional climate extremes arising from Arctic sea ice loss. Environmental Research Letters, 2015, 10, 084006.	2.2	59
13	Sensitivities and Mechanisms of the Zonal Mean Atmospheric Circulation Response to Tropical Warming. Journals of the Atmospheric Sciences, 2013, 70, 2487-2504.	0.6	54
14	Fast Response of the Tropics to an Abrupt Loss of Arctic Sea Ice via Ocean Dynamics. Geophysical Research Letters, 2018, 45, 4264-4272.	1.5	53
15	The role of synoptic eddies in the tropospheric response to stratospheric variability. Geophysical Research Letters, 2013, 40, 4933-4937.	1.5	48
16	Effects of stratospheric variability on El NiÃ±o teleconnections. Environmental Research Letters, 2015, 10, 124021.	2.2	47
17	The Role of Subtropical Irreversible PV Mixing in the Zonal Mean Circulation Response to Global Warmingâ€“Like Thermal Forcing. Journal of Climate, 2014, 27, 2297-2316.	1.2	44
18	Contrasting the Antarctic and Arctic Atmospheric Responses to Projected Sea Ice Loss in the Late Twenty-First Century. Journal of Climate, 2018, 31, 6353-6370.	1.2	43

#	Article	IF	Citations
19	Delineating the Eddyâ€"Zonal Flow Interaction in the Atmospheric Circulation Response to Climate Forcing: Uniform SST Warming in an Idealized Aquaplanet Model. Journals of the Atmospheric Sciences, 2013, 70, 2214-2233.	0.6	32
20	The Role of Stratospheric Polar Vortex Breakdown in Southern Hemisphere Climate Trends. Journals of the Atmospheric Sciences, 2014, 71, 2335-2353.	0.6	32
21	Mechanisms of the Tropical Upwelling Branch of the Brewerâ€"Dobson Circulation: The Role of Extratropical Waves. Journals of the Atmospheric Sciences, 2011, 68, 2878-2892.	0.6	31
22	Downward influence of stratospheric final warming events in an idealized model. Geophysical Research Letters, 2009, 36, .	1.5	28
23	Robust winter warming over Eurasia under stratospheric sulfate geoengineering â€" the role of stratospheric dynamics. Atmospheric Chemistry and Physics, 2021, 21, 6985-6997.	1.9	28
24	The Predictability of Stratospheric Warming Events: More from the Troposphere or the Stratosphere?. Journals of the Atmospheric Sciences, 2012, 69, 768-783.	0.6	27
25	Local increase of anticyclonic wave activity over northern Eurasia under amplified Arctic warming. Geophysical Research Letters, 2017, 44, 3299-3308.	1.5	23
26	Global Coupled Climate Response to Polar Sea Ice Loss: Evaluating the Effectiveness of Different Iceâ€Constraining Approaches. Geophysical Research Letters, 2020, 47, e2019GL085788.	1.5	22
27	Influence of projected Arctic sea ice loss on polar stratospheric ozone and circulation in spring. Environmental Research Letters, 2014, 9, 084016.	2.2	20
28	Is There a Tropical Response to Recent Observed Southern Ocean Cooling?. Geophysical Research Letters, 2021, 48, e2020GL091235.	1.5	20
29	Robust Arctic warming caused by projected Antarctic sea ice loss. Environmental Research Letters, 2020, 15, 104005.	2.2	20
30	Drivers of 2016 record Arctic warmth assessed using climate simulations subjected to Factual and Counterfactual forcing. Weather and Climate Extremes, 2018, 19, 1-9.	1.6	18
31	Subseasonal Earth System Prediction with CESM2. Weather and Forecasting, 2022, 37, 797-815.	0.5	18
32	The Role of Planetary Waves in the Downward Influence of Stratospheric Final Warming Events. Journals of the Atmospheric Sciences, 2011, 68, 2826-2843.	0.6	17
33	Barotropic and Baroclinic Eddy Feedbacks in the Midlatitude Jet Variability and Responses to Climate Changeâ€"Like Thermal Forcings. Journals of the Atmospheric Sciences, 2017, 74, 111-132.	0.6	14
34	Separating the Mechanisms of Transient Responses to Stratospheric Ozone Depletionâ€"Like Cooling in an Idealized Atmospheric Model. Journals of the Atmospheric Sciences, 2015, 72, 763-773.	0.6	12
35	Uncertainty in the Winter Tropospheric Response to Arctic Sea Ice Loss: The Role of Stratospheric Polar Vortex Internal Variability. Journal of Climate, 2022, 35, 3109-3130.	1.2	12
36	Opposite Responses of the Dry and Moist Eddy Heat Transport Into the Arctic in the PAMIP Experiments. Geophysical Research Letters, 2021, 48, e2020GL089990.	1.5	11

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37	Subseasonal Prediction with and without a Well-Represented Stratosphere in CESM1. Weather and Forecasting, 2020, 35, 2589-2602.	0.5	10
38	Strengthened Causal Connections Between the MJO and the North Atlantic With Climate Warming. Geophysical Research Letters, 2021, 48, e2020GL091168.	1.5	9
39	Separating the Influences of Low-Latitude Warming and Sea Ice Loss on Northern Hemisphere Climate Change. Journal of Climate, 2022, 35, 2327-2349.	1.2	9
40	Distinct North American Cooling Signatures Following the Zonally Symmetric and Asymmetric Modes of Winter Stratospheric Variability. Geophysical Research Letters, 2022, 49, .	1.5	7
41	How well do we know the surface impact of sudden stratospheric warmings?. Geophysical Research Letters, 2021, 48, e2021GL095493.	1.5	5
42	The Simulated Atmospheric Response to Western North Pacific Sea Surface Temperature Anomalies. Journal of Climate, 2022, 35, 3335-3352.	1.2	5
43	Attribution of NAO Predictive Skill Beyond 2ÂWeeks in Boreal Winter. Geophysical Research Letters, 2020, 47, e2020GL090451.	1.5	4