Karin van der Wiel

List of Publications by Year
in descending order

45 papers	2,890 citations	218677 26 h-index	233421 45 g-index
85 all docs	85 docs citations	85 times ranked	3821 citing authors

#	Article	IF	Citations
1	EC-Earth V2.2: description and validation of a new seamless earth system prediction model. Climate Dynamics, 2012, 39, 2611-2629.	3.8	511
2	Attribution of extreme rainfall from Hurricane Harvey, August 2017. Environmental Research Letters, 2017, 12, 124009.	5.2	330
3	Minimal influence of reduced Arctic sea ice on coincident cold winters in mid-latitudes. Nature Climate Change, 2019, 9, 697-704.	18.8	199
4	Rapid attribution of theÂAugust 2016 flood-inducing extreme precipitation in south Louisiana to climate change. Hydrology and Earth System Sciences, 2017, 21, 897-921.	4.9	136
5	Contribution of climatic changes in mean and variability to monthly temperature and precipitation extremes. Communications Earth & Environment, 2021, 2, .	6.8	122
6	Tropical cyclone sensitivities to CO2 doubling: roles of atmospheric resolution, synoptic variability and background climate changes. Climate Dynamics, 2019, 53, 5999-6033.	3.8	114
7	A protocol for probabilistic extreme event attribution analyses. Advances in Statistical Climatology, Meteorology and Oceanography, 2020, 6, 177-203.	0.9	103
8	Added Value of Large Ensemble Simulations for Assessing Extreme River Discharge in a 2ÂÂ°C Warmer World. Geophysical Research Letters, 2019, 46, 2093-2102.	4.0	88
9	Pathways and pitfalls in extreme event attribution. Climatic Change, 2021, 166, 1.	3.6	86
10	Meteorological conditions leading to extreme low variable renewable energy production and extreme high energy shortfall. Renewable and Sustainable Energy Reviews, 2019, 111, 261-275.	16.4	83
11	The influence of weather regimes on European renewable energy production and demand. Environmental Research Letters, 2019, 14, 094010.	5.2	80
12	The Resolution Dependence of Contiguous U.S. Precipitation Extremes in Response to CO2 Forcing. Journal of Climate, 2016, 29, 7991-8012.	3.2	74
13	Climate change increases the probability of heavy rains in Northern England/Southern Scotland like those of storm Desmondâ€"a real-time event attribution revisited. Environmental Research Letters, 2018, 13, 024006.	5.2	73
14	Strong future increases in Arctic precipitation variability linked to poleward moisture transport. Science Advances, 2020, 6, eaax6869.	10.3	73
15	Guidelines for Studying Diverse Types of Compound Weather and Climate Events. Earth's Future, 2021, 9, e2021EF002340.	6.3	66
16	A dynamical framework for the origin of the diagonal South Pacific and South Atlantic Convergence Zones. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1997-2010.	2.7	60
17	South Pacific Convergence Zone dynamics, variability and impacts in a changing climate. Nature Reviews Earth & Environment, 2020, 1, 530-543.	29.7	49
18	Disentangling the impacts of human and environmental change on catchment response during Hurricane Harvey. Environmental Research Letters, 2019, 14, 124023.	5.2	47

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19	Ensemble climate-impact modelling: extreme impacts from moderate meteorological conditions. Environmental Research Letters, 2020, 15, 034050.	5.2	47
20	Attributing the 2017 Bangladesh floods from meteorological and hydrological perspectives. Hydrology and Earth System Sciences, 2019, 23, 1409-1429.	4.9	46
21	A globally consistent local-scale assessment of future tropical cyclone risk. Science Advances, 2022, 8, eabm8438.	10.3	41
22	Regional differentiation in climate change induced drought trends in the Netherlands. Environmental Research Letters, 2020, 15, 094081.	5.2	37
23	Why the South Pacific Convergence Zone is diagonal. Climate Dynamics, 2016, 46, 1683-1698.	3.8	34
24	Impact of precipitation and increasing temperatures on drought trends in eastern Africa. Earth System Dynamics, 2021, 12, 17-35.	7.1	32
25	Overcoming the disconnect between energy system and climate modeling. Joule, 2022, 6, 1405-1417.	24.0	31
26	Identifying meteorological drivers of extreme impacts: an application to simulated crop yields. Earth System Dynamics, 2021, 12, 151-172.	7.1	30
27	Storylines of weather-induced crop failure events under climate change. Earth System Dynamics, 2021, 12, 1503-1527.	7.1	27
28	100-Year Lower Mississippi Floods in a Global Climate Model: Characteristics and Future Changes. Journal of Hydrometeorology, 2018, 19, 1547-1563.	1.9	24
29	Physical storylines of future European drought events like 2018 based on ensemble climate modelling. Weather and Climate Extremes, 2021, 33, 100350.	4.1	23
30	Causes and Probability of Occurrence of Extreme Precipitation Events like Chennai 2015. Journal of Climate, 2018, 31, 3831-3848.	3.2	21
31	The impact of hydrological model structure on the simulation of extreme runoff events. Natural Hazards and Earth System Sciences, 2021, 21, 961-976.	3.6	21
32	Shifting patterns of mild weather in response to projected radiative forcing. Climatic Change, 2017, 140, 649-658.	3.6	18
33	Characteristics of colliding sea breeze gravity current fronts: a laboratory study. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 1434-1441.	2.7	16
34	A seven-fold rise in the probability of exceeding the observed hottest summer in India in a 2 Â°C warmer world. Environmental Research Letters, 2020, 15, 044028.	5.2	16
35	IGCM4: a fast, parallel and flexible intermediate climate model. Geoscientific Model Development, 2015, 8, 1157-1167.	3.6	14
36	Interpreting extreme climate impacts from large ensemble simulationsâ€"are they unseen or unrealistic?. Environmental Research Letters, 2022, 17, 044052.	5.2	13

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37	Subseasonal Statistical Forecasts of Eastern U.S. Hot Temperature Events. Monthly Weather Review, 2020, 148, 4799-4822.	1.4	11
38	The influence of diabatic heating in the South Pacific Convergence Zone on Rossby wave propagation and the mean flow. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 901-910.	2.7	10
39	The effects of varying drought-heat signatures on terrestrial carbon dynamics and vegetation composition. Biogeosciences, 2022, 19, 1979-1993.	3.3	10
40	Modeling and simulating spatial extremes by combining extreme value theory with generative adversarial networks. , 2022, 1, .		8
41	Improving together: better science writing through peer learning. Hydrology and Earth System Sciences, 2016, 20, 2965-2973.	4.9	7
42	A climate database with varying droughtâ€heat signatures for climate impact modelling. Geoscience Data Journal, 2022, 9, 154-166.	4.4	7
43	Quantifying the role of the large-scale circulation on European summer precipitation change. Climate Dynamics, 2022, 59, 2871-2886.	3.8	6
44	Intransitive Atmosphere Dynamics Leading to Persistent Hotâ€“Dry or Coldâ€“Wet European Summers. Journal of Climate, 2021, 34, 6303-6317.	3.2	4
45	Using large ensemble modelling to derive future changes in mountain specific climate indicators in a 2 and 3Â°C warmer world in High Mountain Asia. International Journal of Climatology, 2021, 41, E964.	3.5	3