FranÃ§ois Massonnet

List of Publications by Year
in descending order

63	2,532	25	47
papers	citations	h-index	g-index

236925 214800

116	116	116	3687
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantifying climate feedbacks in polar regions. Nature Communications, 2018, 9, 1919.	12.8	254
2	Constraining projections of summer Arctic sea ice. Cryosphere, 2012, 6, 1383-1394.	3.9	239
3	The EC-Earth3 Earth system model for the Coupled Model Intercomparison Project 6. Geoscientific Model Development, 2022, 15, 2973-3020.	3.6	192
4	How does internal variability influence the ability of CMIP5 models to reproduce the recent trend in Southern Ocean sea ice extent?. Cryosphere, 2013, 7, 451-468.	3.9	135
5	Antarctic Sea Ice Area in CMIP6. Geophysical Research Letters, 2020, 47, e2019GL086729.	4.0	129
6	An assessment of ten ocean reanalyses in the polar regions. Climate Dynamics, 2019, 52, 1613-1650.	3.8	88
7	Projected decline in spring snow depth on Arctic sea ice caused by progressively later autumn open ocean freezeâ€up this century. Geophysical Research Letters, 2012, 39, .	4.0	85
8	The CMIP6 Sea-Ice Model Intercomparison Project (SIMIP): understanding sea ice through climate-model simulations. Geoscientific Model Development, 2016, 9, 3427-3446.	3.6	83
9	Advancements in decadal climate predictability: The role of nonoceanic drivers. Reviews of Geophysics, 2015, 53, 165-202.	23.0	81
10	A model reconstruction of the Antarctic sea ice thickness and volume changes over 1980â€"2008 using data assimilation. Ocean Modelling, 2013, 64, 67-75.	2.4	75
11	Earth System Model Evaluation Tool (ESMValTool) v2.0 â€" an extended set of large-scale diagnostics for quasi-operational and comprehensive evaluation of Earth system models in CMIP. Geoscientific Model Development, 2020, 13, 3383-3438.	3.6	69
12	Arctic sea-ice change tied to its mean state through thermodynamic processes. Nature Climate Change, 2018, 8, 599-603.	18.8	68
13	On the influence of model physics on simulations of Arctic and Antarctic sea ice. Cryosphere, 2011, 5, 687-699.	3.9	62
14	Prospects for improved seasonal Arctic sea ice predictions from multivariate data assimilation. Ocean Modelling, 2015, 88, 16-25.	2.4	52
15	Benefits of Increasing the Model Resolution for the Seasonal Forecast Quality in EC-Earth. Journal of Climate, 2016, 29, 9141-9162.	3.2	51
16	Using climate models to estimate the quality of global observational data sets. Science, 2016, 354, 452-455.	12.6	43
17	Calibration of sea ice dynamic parameters in an oceanâ€sea ice model using an ensemble Kalman filter. Journal of Geophysical Research: Oceans, 2014, 119, 4168-4184.	2.6	42
18	Impact of model resolution on Arctic sea ice and North Atlantic Ocean heat transport. Climate Dynamics, 2019, 53, 4989-5017.	3.8	42

#	Article	IF	Citations
19	An inter-comparison of the mass budget of the Arctic sea ice in CMIP6 models. Cryosphere, 2021, 15, 951-982.	3.9	42
20	Multi-model seasonal forecast of Arctic sea-ice: forecast uncertainty at pan-Arctic and regional scales. Climate Dynamics, 2017, 49, 1399-1410.	3.8	41
21	On the formulation of snow thermal conductivity in largeâ€scale sea ice models. Journal of Advances in Modeling Earth Systems, 2013, 5, 542-557.	3.8	40
22	Replicability of the EC-Earth3 Earth system model under a change in computing environment. Geoscientific Model Development, 2020, 13, 1165-1178.	3.6	37
23	Modeled Arctic sea ice evolution through 2300 in CMIP5 extended RCPs. Cryosphere, 2014, 8, 1195-1204.	3.9	29
24	An R package for climate forecast verification. Environmental Modelling and Software, 2018, 103, 29-42.	4.5	27
25	Optimising assimilation of sea ice concentration in an Earth system model with a multicategory sea ice model. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 70, 1435945.	1.7	26
26	Relationships between Arctic sea ice drift and strength modelled by NEMO-LIM3.6. Cryosphere, 2017, 11, 2829-2846.	3.9	25
27	The Year of Polar Prediction in the Southern Hemisphere (YOPP-SH). Bulletin of the American Meteorological Society, 2020, 101, E1653-E1676.	3.3	24
28	Better constraints on the sea-ice state using global sea-ice data assimilation. Geoscientific Model Development, 2012, 5, 1501-1515.	3.6	23
29	Insights on Sea Ice Data Assimilation from Perfect Model Observing System Simulation Experiments. Journal of Climate, 2018, 31, 5911-5926.	3.2	23
30	Assimilation of sea surface temperature, sea ice concentration and sea ice drift in a model of the Southern Ocean. Ocean Modelling, 2015, 93, 22-39.	2.4	22
31	The Future of Sea Ice Modeling: Where Do We Go from Here?. Bulletin of the American Meteorological Society, 2020, 101, E1304-E1311.	3.3	22
32	Arctic sea-ice-free season projected to extend into autumn. Cryosphere, 2019, 13, 79-96.	3.9	21
33	Paving the Way for the Year of Polar Prediction. Bulletin of the American Meteorological Society, 2016, 97, ES85-ES88.	3.3	20
34	Uncertainty propagation in observational references to climate modelÂscales. Remote Sensing of Environment, 2017, 203, 101-108.	11.0	18
35	What sea-ice biogeochemical modellers need from observers. Elementa, 0, 4, 000084.	3.2	17
36	The 2014 High Record of Antarctic Sea Ice Extent. Bulletin of the American Meteorological Society, 2015, 96, S163-S167.	3.3	16

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37	Antarctica and the Southern Ocean. Bulletin of the American Meteorological Society, 2020, 101, S287-S320.	3.3	15
38	PARASO, a circum-Antarctic fully coupled ice-sheetâ€“oceanâ€“sea-iceâ€“atmosphereâ€“land model involving f.ETISh1.7, NEMO3.6, LIM3.6, COSMO5.0 and CLM4.5. Geoscientific Model Development, 2022, 15, 553-594.	3.6	15
39	On the discretization of the ice thickness distribution in the NEMO3.6-LIM3 global oceanâ€“sea ice model. Geoscientific Model Development, 2019, 12, 3745-3758.	3.6	14
40	An assessment of regional sea ice predictability in the Arctic ocean. Climate Dynamics, 2019, 53, 427-440.	3.8	12
41	The Role of Sea Ice in Sub-seasonal Predictability. , 2019, , 201-221.		12
42	Clusters of interannual sea ice variability in the northern hemisphere. Climate Dynamics, 2016, 47, 1527-1543.	3.8	11
43	Evaluation of sea-ice thickness from four reanalyses in the Antarctic Weddell Sea. Cryosphere, 2021, 15, 31-47.	3.9	10
44	December 2016: Linking the Lowest Arctic Sea-Ice Extent on Record with the Lowest European Precipitation Event on Record. Bulletin of the American Meteorological Society, 2019, 100, S43-S48.	3.3	9
45	On the timescales and length scales of the Arctic sea ice thickness anomalies: a study based on 14 reanalyses. Cryosphere, 2019, 13, 521-543.	3.9	9
46	Link Between Autumnal Arctic Sea Ice and Northern Hemisphere Winter Forecast Skill. Geophysical Research Letters, 2020, 47, e2019GL086753.	4.0	9
47	Statistical predictability of the Arctic sea ice volume anomaly: identifying predictors and optimal sampling locations. Cryosphere, 2020, 14, 2409-2428.	3.9	9
48	The Role of Arctic Sea Ice and Sea Surface Temperatures on the Cold 2015 February Over North America. Bulletin of the American Meteorological Society, 2016, 97, S36-S41.	3.3	8
49	Impact of the ice thickness distribution discretization on the sea ice concentration variability in the NEMO3.6â€“LIM3 global oceanâ€“sea ice model. Geoscientific Model Development, 2020, 13, 4773-4787.	3.6	8
50	An anatomy of Arctic sea ice forecast biases in the seasonal prediction system with EC-Earth. Climate Dynamics, 2021, 56, 1799-1813.	3.8	7
51	Benefits of sea ice initialization for the interannual-to-decadal climate prediction skill in the Arctic in EC-Earth3. Geoscientific Model Development, 2021, 14, 4283-4305.	3.6	7
52	Making Seasonal Outlooks of Arctic Sea Ice and Atlantic Hurricanes Valuableâ€"Not Just Skillful. Bulletin of the American Meteorological Society, 2020, 101, E36-E42.	3.3	7
53	The potential of numerical prediction systems to support the design of Arctic observing systems: Insights from the <scp>APPLICATE</scp> and <scp>YOPP</scp> projects. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 3863-3877.	2.7	6
54	Sensitivity of Arctic sea ice to melt pond processes and atmospheric forcing: A model study. Ocean Modelling, 2021, 167, 101872.	2.4	5

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55	Southern Ocean sea ice concentration budgets of five ocean-sea ice reanalyses. Climate Dynamics, 2022, 59, 3265-3285.	3.8	5
56	Benefits from representing snow properties and related processes in coupled oceanâ€“sea ice models. Ocean Modelling, 2015, 87, 81-85.	2.4	4
57	The 2014 High Record of Antarctic Sea Ice Extent. Bulletin of the American Meteorological Society, 2015, 96, S163-S167.	3.3	2
58	SITool (v1.0) â€“ a new evaluation tool for large-scale sea ice simulations: application to CMIP6 OMIP. Geoscientific Model Development, 2021, 14, 6331-6354.	3.6	2
59	Summertime changes in climate extremes over the peripheral Arctic regions after a sudden sea ice retreat. Weather and Climate Dynamics, 2022, 3, 555-573.	3.5	2
60	Record Low Northern Hemisphere Sea Ice Extent in March 2015. Bulletin of the American Meteorological Society, 2016, 97, S136-S140.	3.3	1
61	Climate Models as Guidance for the Design of Observing Systems: the Case of Polar Climate and Sea Ice Prediction. Current Climate Change Reports, 2019, 5, 334-344.	8.6	0
62	Valuable, Not Just Skillfull: Enhancing Seasonal Outlooks of Sea Ice and Hurricanes. Bulletin of the American Meteorological Society, 2020, 101, 48-52.	3.3	0
63	Brief communication: Arctic sea ice thickness internal variability and its changes under historical and anthropogenic forcing. Cryosphere, 2020, 14, 3479-3486.	3.9	0