Jochem Marotzke

List of Publications by Year
in descending order

100 papers	14,713 citations	20797 60 h-index	32815 100 g-index
114 all docs	114 docs citations	114 times ranked	11733 citing authors

#	Article	IF	Citations
1	Reconciling Conflicting Accounts of Local Radiative Feedbacks in Climate Models. Journal of Climate, 2022, 35, 3131-3146.	1.2	2
2	Earlier emergence of a temperature response to mitigation by filtering annual variability. Nature Communications, 2022, 13, 1578.	5.8	4
3	How close are we to 1.5 deg<scp>C</scp> or 2 deg<scp>C</scp> of global warming?. Weather, 2022, 77, 147-148.	0.6	2
4	The ICON Earth System Model Version 1.0. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	16
5	Airâ€Sea Interactions and Water Mass Transformation During a Katabatic Storm in the Irminger Sea. Journal of Geophysical Research: Oceans, 2022, 127, .	1.0	7
6	Climate and ocean circulation in the aftermath of a Marinoan snowball Earth. Climate of the Past, 2022, 18, 759-774.	1.3	7
7	Nonlocal and local wind forcing dependence of the Atlantic meridional overturning circulation and its depth scale. Ocean Science, 2022, 18, 979-996.	1.3	0
8	The regional MiKlip decadal prediction system for Europe: Hindcast skill for extremes and userâ€oriented variables. International Journal of Climatology, 2021, 41, E1944.	1.5	5
9	More accurate quantification of model-to-model agreement in externally forced climatic responses over the coming century. Nature Communications, 2021, 12, 788.	5.8	32
10	Optimal temperature overshoot profile found by limiting global sea level rise as a lower-cost climate target. Science Advances, 2020, 6, eaaw9490.	4.7	12
11	Coupling of the Subpolar Gyre and the Overturning Circulation During Abrupt Glacial Climate Transitions. Geophysical Research Letters, 2020, 47, e2020GL090361.	1.5	22
12	Broad Consistency Between Observed and Simulated Trends in Sea Surface Temperature Patterns. Geophysical Research Letters, 2020, 47, e2019GL086773.	1.5	34
13	Insights from Earth system model initial-condition large ensembles and future prospects. Nature Climate Change, 2020, 10, 277-286.	8.1	436
14	Dynamical and thermodynamical drivers of variability in European summer heat extremes. Climate Dynamics, 2020, 54, 4351-4366.	1.7	49
15	Hotspots of extreme heat under global warming. Climate Dynamics, 2020, 55, 429-447.	1.7	39
16	The economic interaction between climate change mitigation, climate migration and poverty. Nature Climate Change, 2020, 10, 518-525.	8.1	44
17	Quantifying the role of internal variability in the temperature we expect to observe in the coming decades. Environmental Research Letters, 2020, 15, 054014.	2.2	43
18	Inherent uncertainty disguises attribution of reduced atmospheric CO2 growth to CO2 emission reductions for up to a decade. Environmental Research Letters, 2020, 15, 114058.	2.2	10

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19	Partitioning climate projection uncertainty with multiple large ensembles and CMIP5/6. Earth System Dynamics, 2020, 11, 491-508.	2.7	255
20	The Max Planck Institute Grand Ensemble: Enabling the Exploration of Climate System Variability. Journal of Advances in Modeling Earth Systems, 2019, 11, 2050-2069.	1.3	288
21	Developments in the MPIâ€M Earth System Model version 1.2 (MPIâ€ESM1.2) and Its Response to Increasing CO₂. Journal of Advances in Modeling Earth Systems, 2019, 11, 998-1038.	1.3	582
22	Realistic Quasiâ€Biennial Oscillation Variability in Historical and Decadal Hindcast Simulations Using CMIP6 Forcing. Geophysical Research Letters, 2019, 46, 14118-14125.	1.5	22
23	Quantifying the irreducible uncertainty in nearâ€term climate projections. Wiley Interdisciplinary Reviews: Climate Change, 2019, 10, e563.	3.6	33
24	ENSO Change in Climate Projections: Forced Response or Internal Variability?. Geophysical Research Letters, 2018, 45, 11,390.	1.5	82
25	Internal variability in European summer temperatures at 1.5â€‰Â°C and 2â€‰Â°C of global warming. Environmental Research Letters, 2018, 13, 064026.	2.2	40
26	Two AMOC States in Response to Decreasing Greenhouse Gas Concentrations in the Coupled Climate Model MPI-ESM. Journal of Climate, 2018, 31, 7969-7984.	1.2	36
27	A Higherâ€resolution Version of the Max Planck Institute Earth System Model (MPIâ€ESM1.2â€HR). Journal of Advances in Modeling Earth Systems, 2018, 10, 1383-1413.	1.3	272
28	Climate research must sharpen its view. Nature Climate Change, 2017, 7, 89-91.	8.1	80
29	The subtle origins of surface-warming hiatuses. Nature Climate Change, 2017, 7, 336-339.	8.1	57
30	Internal variability in simulated and observed tropical tropospheric temperature trends. Geophysical Research Letters, 2017, 44, 5709-5719.	1.5	28
31	The level of climate-change mitigation depends on how humans assess the risk arising from missing the 2Â°C target. Palgrave Communications, 2017, 3, .	4.7	6
32	The effect of greenhouse gas concentrations and ice sheets on the glacial AMOC in a coupled climate model. Climate of the Past, 2016, 12, 1829-1846.	1.3	38
33	Humans choose representatives who enforce cooperation in social dilemmas through extortion. Nature Communications, 2016, 7, 10915.	5.8	44
34	MiKlip: A National Research Project on Decadal Climate Prediction. Bulletin of the American Meteorological Society, 2016, 97, 2379-2394.	1.7	78
35	Transition to a Moist Greenhouse with CO2 and solar forcing. Nature Communications, 2016, 7, 10627.	5.8	71
36	Eurasian winter cooling in the warming hiatus of 1998â€“2012. Geophysical Research Letters, 2015, 42, 8131-8139.	1.5	117

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37	Forcing, feedback and internal variability in global temperature trends. Nature, 2015, 517, 565-570.	13.7	155
38	Klimamodelle und Globale ErwÃrmung. Physik in Unserer Zeit, 2014, 45, 118-125.	0.0	2
39	Deep-ocean heat uptake and equilibrium climate response. Climate Dynamics, 2013, 40, 1071-1086.	1.7	135
40	Predictability of large interannual Arctic sea-ice anomalies. Climate Dynamics, 2013, 41, 2511-2526.	1.7	43
41	Intra- and intergenerational discounting in the climate game. Nature Climate Change, 2013, 3, 1025-1028.	8.1	116
42	Energy budget constraints on climate response. Nature Geoscience, 2013, 6, 415-416.	5.4	270
43	Characteristics of the ocean simulations in the Max Planck Institute Ocean Model (MPIOM) the ocean component of the MPIâ€Earth system model. Journal of Advances in Modeling Earth Systems, 2013, 5, 422-446.	1.3	574
44	Climate and carbon cycle changes from 1850 to 2100 in MPIâ€ESM simulations for the Coupled Model Intercomparison Project phase 5. Journal of Advances in Modeling Earth Systems, 2013, 5, 572-597.	1.3	1,280
45	Arctic seaâ€ice evolution as modeled by Max Planck Institute for Meteorology's Earth system model. Journal of Advances in Modeling Earth Systems, 2013, 5, 173-194.	1.3	110
46	Assimilation of sea-ice concentration in a global climate model â€“ physical and statistical aspects. Ocean Science, 2013, 9, 19-36.	1.3	57
47	Improved forecast skill in the tropics in the new MiKlip decadal climate predictions. Geophysical Research Letters, 2013, 40, 5798-5802.	1.5	77
48	Two Tales of Initializing Decadal Climate Prediction Experiments with the ECHAM5/MPI-OM Model. Journal of Climate, 2012, 25, 8502-8523.	1.2	139
49	An Estimate of the Lorenz Energy Cycle for the World Ocean Based on the STORM/NCEP Simulation. Journal of Physical Oceanography, 2012, 42, 2185-2205.	0.7	219
50	A grip on ice-age ocean circulation. Nature, 2012, 485, 180-181.	13.7	8
51	Past, Present, and Future Changes in the Atlantic Meridional Overturning Circulation. Bulletin of the American Meteorological Society, 2012, 93, 1663-1676.	1.7	153
52	Observations reveal external driver for Arctic seaâ€ice retreat. Geophysical Research Letters, 2012, 39, .	1.5	137
53	A modelâ€“data comparison for a multi-model ensemble of early Eocene atmosphereâ€“ocean simulations: EoMIP. Climate of the Past, 2012, 8, 1717-1736.	1.3	196
54	Forecast skill of multiâ€year seasonal means in the decadal prediction system of the Max Planck Institute for Meteorology. Geophysical Research Letters, 2012, 39, .	1.5	67

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55	Multiyear Prediction of Monthly Mean Atlantic Meridional Overturning Circulation at 26.5Â°N. Science, 2012, 335, 76-79.	6.0	79
56	Continuous, Array-Based Estimates of Atlantic Ocean Heat Transport at 26.5Â°N. Journal of Climate, 2011, 24, 2429-2449.	1.2	352
57	Monitoring the Atlantic meridional overturning circulation. Deep-Sea Research Part II: Topical Studies in Oceanography, 2011, 58, 1744-1753.	0.6	135
58	Initiation of a Marinoan Snowball Earth in a state-of-the-art atmosphere-ocean general circulation model. Climate of the Past, 2011, 7, 249-263.	1.3	90
59	Predicting goal error evolution from near-initial-information: A learning algorithm. Journal of Computational Physics, 2011, 230, 7284-7299.	1.9	6
60	Cooperative interaction of rich and poor can be catalyzed by intermediate climate targets. Climatic Change, 2011, 109, 807-814.	1.7	80
61	The transition from the present-day climate to a modern Snowball Earth. Climate Dynamics, 2010, 35, 887-905.	1.7	68
62	The contribution of eastern-boundary density variations to the Atlantic meridional overturning circulation at 26.5Â° N. Ocean Science, 2010, 6, 475-490.	1.3	69
63	Climate and carbon-cycle variability over the last millennium. Climate of the Past, 2010, 6, 723-737.	1.3	284
64	Present-Day Arctic Sea Ice Variability in the Coupled ECHAM5/MPI-OM Model. Journal of Climate, 2010, 23, 2520-2543.	1.2	20
65	An Earth-System Prediction Initiative for the Twenty-First Century. Bulletin of the American Meteorological Society, 2010, 91, 1377-1388.	1.7	88
66	Toward a New Generation of World Climate Research and Computing Facilities. Bulletin of the American Meteorological Society, 2010, 91, 1407-1412.	1.7	64
67	Seasonal Variability of the Atlantic Meridional Overturning Circulation at 26.5Â°N. Journal of Climate, 2010, 23, 5678-5698.	1.2	270
68	Warm Paleocene/Eocene climate as simulated in ECHAM5/MPI-OM. Climate of the Past, 2009, 5, 785-802.	1.3	95
69	Initializing Decadal Climate Predictions with the GECCO Oceanic Synthesis: Effects on the North Atlantic. Journal of Climate, 2009, 22, 3926-3938.	1.2	248
70	Strategies: Revolution in Climate Prediction is Both Necessary and Possible: A Declaration at the World Modelling Summit for Climate Prediction. Bulletin of the American Meteorological Society, 2009, 90, 175-178.	1.7	116
71	Detecting potential changes in the meridional overturning circulation at 26ËšN in the Atlantic. Climatic Change, 2008, 91, 11-27.	1.7	40
72	The collective-risk social dilemma and the prevention of simulated dangerous climate change. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2291-2294.	3.3	429

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73	Regional Dynamic and Steric Sea Level Change in Response to the IPCC-A1B Scenario. Journal of Physical Oceanography, 2007, 37, 296-312.	0.7	170
74	Reconstructing the Meridional Overturning Circulation from Boundary Densities and the Zonal Wind Stress. Journal of Physical Oceanography, 2007, 37, 743-763.	0.7	74
75	Wind-Generated Power Input to the Deep Ocean: An Estimate Using a 1/10Â° General Circulation Model. Journal of Physical Oceanography, 2007, 37, 657-672.	0.7	59
76	Temporal Variability of the Atlantic Meridional Overturning Circulation at 26.5Â°N. Science, 2007, 317, 935-938.	6.0	718
77	Observed Flow Compensation Associated with the MOC at 26.5Â°N in the Atlantic. Science, 2007, 317, 938-941.	6.0	205
78	Presentâ€day and iceâ€covered equilibrium states in a comprehensive climate model. Geophysical Research Letters, 2007, 34, .	1.5	32
79	Ocean Circulation and Tropical Variability in the Coupled Model ECHAM5/MPI-OM. Journal of Climate, 2006, 19, 3952-3972.	1.2	788
80	Stabilizing the Earth's climate is not a losing game: Supporting evidence from public goods experiments. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3994-3998.	3.3	304
81	Monitoring the meridional overturning circulation in the North Atlantic: A model-based array design study. Journal of Marine Research, 2004, 62, 283-312.	0.3	79
82	Abrupt Climate Change. Science, 2003, 299, 2005-2010.	6.0	1,017
83	The Location of Diapycnal Mixing and the Meridional Overturning Circulation. Journal of Physical Oceanography, 2002, 32, 3578-3595.	0.7	69
84	The Oceanic Eddy Heat Transport*. Journal of Physical Oceanography, 2002, 32, 3328-3345.	0.7	210
85	Impact of geothermal heating on the global ocean circulation. Geophysical Research Letters, 2001, 28, 1735-1738.	1.5	83
86	The dynamics of ocean heat transport variability. Reviews of Geophysics, 2001, 39, 385-411.	9.0	171
87	The Dynamics of Equatorially Asymmetric Thermohaline Circulations. Journal of Physical Oceanography, 2000, 30, 955-970.	0.7	47
88	Abrupt climate change and thermohaline circulation: Mechanisms and predictability. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 1347-1350.	3.3	162
89	Meridional Heat Transport by the Subtropical Cell. Journal of Physical Oceanography, 2000, 30, 696-705.	0.7	68
90	The importance of open-boundary estimation for an Indian Ocean GCM-data synthesis. Journal of Marine Research, 1999, 57, 305-334.	0.3	44

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91	Behavior of Double-Hemisphere Thermohaline Flows in a Single Basin. Journal of Physical Oceanography, 1999, 29, 382-399.	0.7	54
92	Interhemispheric Thermohaline Circulation in a Coupled Box Model. Journal of Physical Oceanography, 1999, 29, 351-365.	0.7	64
93	Convective Mixing and the Thermohaline Circulation. Journal of Physical Oceanography, 1999, 29, 2962-2970.	0.7	95
94	Seasonal Cycles of Meridional Overturning and Heat Transport of the Indian Ocean. Journal of Physical Oceanography, 1998, 28, 923-943.	0.7	116
95	Boundary Mixing and the Dynamics of Three-Dimensional Thermohaline Circulations. Journal of Physical Oceanography, 1997, 27, 1713-1728.	0.7	146
96	Atmospheric Transports, the Thermohaline Circulation, and Flux Adjustments in a Simple Coupled Model. Journal of Physical Oceanography, 1995, 25, 1350-1364.	0.7	121
97	Destabilization of the Thermohaline Circulation by Atmospheric Eddy Transports. Journal of Climate, 1994, 7, 1870-1882.	1.2	115
98	Stability and Variability of the Thermohaline Circulation. Journal of Physical Oceanography, 1993, 23, 39-60.	0.7	197
99	Multiple Equilibria of the Global Thermohaline Circulation. Journal of Physical Oceanography, 1991, 21, 1372-1385.	0.7	224
100	Influence of Convective Adjustment on the Stability of the Thermohaline Circulation. Journal of Physical Oceanography, 1991, 21, 903-907.	0.7	78