

# Jonathan Gregory

## List of Publications by Year in descending order

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226  
papers

25,822  
citations

4942

84  
h-index

7333

152  
g-index

287  
all docs

287  
docs citations

287  
times ranked

18674  
citing authors

#	ARTICLE	IF	CITATIONS
1	The simulation of SST, sea ice extents and ocean heat transports in a version of the Hadley Centre coupled model without flux adjustments. <i>Climate Dynamics</i> , 2000, 16, 147-168.	1.7	2,328
2	Investigating the Causes of the Response of the Thermohaline Circulation to Past and Future Climate Changes. <i>Journal of Climate</i> , 2006, 19, 1365-1387.	1.2	829
3	A new method for diagnosing radiative forcing and climate sensitivity. <i>Geophysical Research Letters</i> , 2004, 31, .	1.5	719
4	Climate response to increasing levels of greenhouse gases and sulphate aerosols. <i>Nature</i> , 1995, 376, 501-504.	13.7	688
5	The second Hadley Centre coupled ocean-atmosphere GCM: model description, spinup and validation. <i>Climate Dynamics</i> , 1997, 13, 103-134.	1.7	668
6	Forcing, feedbacks and climate sensitivity in CMIP5 coupled atmosphere-ocean climate models. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	570
7	Anthropogenic climate change for 1860 to 2100 simulated with the HadCM3 model under updated emissions scenarios. <i>Climate Dynamics</i> , 2003, 20, 583-612.	1.7	486
8	A model intercomparison of changes in the Atlantic thermohaline circulation in response to increasing atmospheric CO <sub>2</sub> concentration. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	1.5	472
9	The New Hadley Centre Climate Model (HadGEM1): Evaluation of Coupled Simulations. <i>Journal of Climate</i> , 2006, 19, 1327-1353.	1.2	424
10	Revisiting the Earth's sea-level and energy budgets from 1961 to 2008. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	415
11	Penetration of Human-Induced Warming into the World's Oceans. <i>Science</i> , 2005, 309, 284-287.	6.0	406
12	Land/sea warming ratio in response to climate change: IPCC AR4 model results and comparison with observations. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	339
13	A study of the general characteristics of proton-antiproton collisions at $\sqrt{s}=0.2$ to 0.9 TeV. <i>Nuclear Physics B</i> , 1990, 335, 261-287.	0.9	311
14	Evaluating adjusted forcing and model spread for historical and future scenarios in the CMIP5 generation of climate models. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 1139-1150.	1.2	304
15	Tropospheric Adjustment Induces a Cloud Component in CO <sub>2</sub> Forcing. <i>Journal of Climate</i> , 2008, 21, 58-71.	1.2	272
16	Response of the North Atlantic storm track to climate change shaped by ocean-atmosphere coupling. <i>Nature Geoscience</i> , 2012, 5, 313-317.	5.4	272
17	The Dependence of Radiative Forcing and Feedback on Evolving Patterns of Surface Temperature Change in Climate Models. <i>Journal of Climate</i> , 2015, 28, 1630-1648.	1.2	272
18	Energy budget constraints on climate response. <i>Nature Geoscience</i> , 2013, 6, 415-416.	5.4	270

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19	Mechanisms for the land/sea warming contrast exhibited by simulations of climate change. <i>Climate Dynamics</i> , 2008, 30, 455-465.	1.7	268
20	Concepts and Terminology for Sea Level: Mean, Variability and Change, Both Local and Global. <i>Surveys in Geophysics</i> , 2019, 40, 1251-1289.	2.1	262
21	Changes in daily precipitation under enhanced greenhouse conditions. <i>Climate Dynamics</i> , 1997, 13, 667-680.	1.7	261
22	Changing spatial structure of the thermohaline circulation in response to atmospheric CO2 forcing in a climate model. <i>Nature</i> , 1999, 399, 572-575.	13.7	251
23	Vertical heat transports in the ocean and their effect on time-dependent climate change. <i>Climate Dynamics</i> , 2000, 16, 501-515.	1.7	246
24	Adjustments in the Forcing-Feedback Framework for Understanding Climate Change. <i>Bulletin of the American Meteorological Society</i> , 2015, 96, 217-228.	1.7	239
25	An Observationally Based Estimate of the Climate Sensitivity. <i>Journal of Climate</i> , 2002, 15, 3117-3121.	1.2	236
26	Contributions of Different Cloud Types to Feedbacks and Rapid Adjustments in CMIP5*. <i>Journal of Climate</i> , 2013, 26, 5007-5027.	1.2	235
27	Quantifying Carbon Cycle Feedbacks. <i>Journal of Climate</i> , 2009, 22, 5232-5250.	1.2	225
28	OMIP contribution to CMIP6: experimental and diagnostic protocol for the physical component of the Ocean Model Intercomparison Project. <i>Geoscientific Model Development</i> , 2016, 9, 3231-3296.	1.3	223
29	Threatened loss of the Greenland ice-sheet. <i>Nature</i> , 2004, 428, 616-616.	13.7	220
30	A Review of Uncertainties in Global Temperature Projections over the Twenty-First Century. <i>Journal of Climate</i> , 2008, 21, 2651-2663.	1.2	209
31	A Surface Energy Perspective on Climate Change. <i>Journal of Climate</i> , 2009, 22, 2557-2570.	1.2	209
32	Projected land ice contributions to twenty-first-century sea level rise. <i>Nature</i> , 2021, 593, 74-82.	13.7	200
33	Ice Sheet Model Intercomparison Project (ISMIP6) contribution to CMIP6. <i>Geoscientific Model Development</i> , 2016, 9, 4521-4545.	1.3	199
34	Elimination of the Greenland Ice Sheet in a High CO2 Climate. <i>Journal of Climate</i> , 2005, 18, 3409-3427.	1.2	198
35	ISMIP6 Antarctica: a multi-model ensemble of the Antarctic ice sheet evolution over the 21st century. <i>Cryosphere</i> , 2020, 14, 3033-3070.	1.5	198
36	Twentieth-Century Global-Mean Sea Level Rise: Is the Whole Greater than the Sum of the Parts?. <i>Journal of Climate</i> , 2013, 26, 4476-4499.	1.2	197

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37	The Role of Climate Sensitivity and Ocean Heat Uptake on AOGCM Transient Temperature Response. <i>Journal of Climate</i> , 2002, 15, 124-130.	1.2	184
38	Global reconstruction of historical ocean heat storage and transport. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 1126-1131.	3.3	180
39	A comparison of extreme European daily precipitation simulated by a global and a regional climate model for present and future climates. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2001, 127, 1005-1015.	1.0	177
40	Transient climate response estimated from radiative forcing and observed temperature change. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	177
41	Ice-sheet contributions to future sea-level change. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2006, 364, 1709-1732.	1.6	176
42	Ocean heat uptake and its consequences for the magnitude of sea level rise and climate change. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	165
43	Mechanisms Determining the Atlantic Thermohaline Circulation Response to Greenhouse Gas Forcing in a Non-Flux-Adjusted Coupled Climate Model. <i>Journal of Climate</i> , 2001, 14, 3102-3116.	1.2	163
44	Observational Constraints on Past Attributable Warming and Predictions of Future Global Warming. <i>Journal of Climate</i> , 2006, 19, 3055-3069.	1.2	162
45	Changes in the occurrence of storm surges around the United Kingdom under a future climate scenario using a dynamic storm surge model driven by the Hadley Centre climate models. <i>Climate Dynamics</i> , 2001, 18, 179-188.	1.7	160
46	Origins of differences in climate sensitivity, forcing and feedback in climate models. <i>Climate Dynamics</i> , 2013, 40, 677-707.	1.7	159
47	Production of low transverse energy clusters in collisions at $\sqrt{s}=0.2\text{--}0.9$ TeV and their interpretation in terms of QCD jets. <i>Nuclear Physics B</i> , 1988, 309, 405-425.	0.9	155
48	Summer Drought in Northern Midlatitudes in a Time-Dependent CO <sub>2</sub> Climate Experiment. <i>Journal of Climate</i> , 1997, 10, 662-686.	1.2	153
49	The future sea-level contribution of the Greenland ice sheet: a multi-model ensemble study of ISMIP6. <i>Cryosphere</i> , 2020, 14, 3071-3096.	1.5	144
50	The Climate Sensitivity and Its Components Diagnosed from Earth Radiation Budget Data. <i>Journal of Climate</i> , 2006, 19, 39-52.	1.2	143
51	Sea-Level Rise by 2100. <i>Science</i> , 2013, 342, 1445-1445.	6.0	140
52	Variation in climate sensitivity and feedback parameters during the historical period. <i>Geophysical Research Letters</i> , 2016, 43, 3911-3920.	1.5	140
53	Comparison of results from several AOGCMs for global and regional sea-level change 1900-2100. <i>Climate Dynamics</i> , 2001, 18, 225-240.	1.7	139
54	Simulated future sea-level rise due to glacier melt based on regionally and seasonally resolved temperature changes. <i>Nature</i> , 1998, 391, 474-476.	13.7	136

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55	Constraining climate forecasts: The role of prior assumptions. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	135
56	The climate response to CO <sub>2</sub> of the Hadley Centre coupled AOGCM with and without flux adjustment. <i>Geophysical Research Letters</i> , 1997, 24, 1943-1946.	1.5	134
57	The effects of climate change on storm surges around the United Kingdom. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2005, 363, 1313-1328.	1.6	134
58	Irreducible uncertainty in near-term climate projections. <i>Climate Dynamics</i> , 2016, 46, 3807-3819.	1.7	134
59	The Flux-Anomaly-Forced Model Intercomparison Project (FAFMIP) contribution to CMIP6: investigation of sea-level and ocean climate change in response to CO <sub>2</sub> forcing. <i>Geoscientific Model Development</i> , 2016, 9, 3993-4017.	1.3	133
60	Understanding Land-Sea Warming Contrast in Response to Increasing Greenhouse Gases. Part I: Transient Adjustment. <i>Journal of Climate</i> , 2009, 22, 3079-3097.	1.2	132
61	Modelling Antarctic and Greenland volume changes during the 20th and 21st centuries forced by GCM time slice integrations. <i>Global and Planetary Change</i> , 2004, 42, 83-105.	1.6	129
62	The inconstancy of the transient climate response parameter under increasing CO <sub>2</sub> . <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140417.	1.6	120
63	Recent and future changes in Arctic sea ice simulated by the HadCM3 AOGCM. <i>Geophysical Research Letters</i> , 2002, 29, 28-1-28-4.	1.5	118
64	Accounting for Changing Temperature Patterns Increases Historical Estimates of Climate Sensitivity. <i>Geophysical Research Letters</i> , 2018, 45, 8490-8499.	1.5	116
65	A large ozone-circulation feedback and its implications for global warming assessments. <i>Nature Climate Change</i> , 2015, 5, 41-45.	8.1	115
66	Application of Markov models to area-average daily precipitation series and interannual variability in seasonal totals. <i>Climate Dynamics</i> , 1993, 8, 299-310.	1.7	112
67	Meeting User Needs for Sea Level Rise Information: A Decision Analysis Perspective. <i>Earth's Future</i> , 2019, 7, 320-337.	2.4	112
68	Relationship of tropospheric stability to climate sensitivity and Earth's observed radiation budget. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 13126-13131.	3.3	111
69	Critical Southern Ocean climate model biases traced to atmospheric model cloud errors. <i>Nature Communications</i> , 2018, 9, 3625.	5.8	109
70	Thresholds for irreversible decline of the Greenland ice sheet. <i>Climate Dynamics</i> , 2010, 35, 1049-1057.	1.7	107
71	The impact of natural and anthropogenic forcings on climate and hydrology since 1550. <i>Climate Dynamics</i> , 2006, 28, 3-34.	1.7	106
72	Greenland ice sheet surface mass balance: evaluating simulations and making projections with regional climate models. <i>Cryosphere</i> , 2012, 6, 1275-1294.	1.5	106

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73	Understanding and Projecting Sea Level Change. <i>Oceanography</i> , 2011, 24, 130-143.	0.5	104
74	Krakatoa's signature persists in the ocean. <i>Nature</i> , 2006, 439, 675-675.	13.7	101
75	Bistability of the Atlantic overturning circulation in a global climate model and links to ocean freshwater transport. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	101
76	Studies of intermediate vector boson production and decay in UA1 at the CERN proton-antiproton collider. <i>Zeitschrift für Physik C-Particles and Fields</i> , 1989, 44, 15-61.	1.5	99
77	Beauty production at the CERN pp <sub>̄</sub> collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1991, 256, 121-128.	1.5	99
78	An AOGCM simulation of the climate response to a volcanic super-eruption. <i>Climate Dynamics</i> , 2005, 25, 725-738.	1.7	97
79	Simulated and observed decadal variability in ocean heat content. <i>Geophysical Research Letters</i> , 2004, 31, .	1.5	95
80	Anthropogenic Warming of the Oceans: Observations and Model Results. <i>Journal of Climate</i> , 2006, 19, 1873-1900.	1.2	95
81	Precipitation in Britain: An analysis of area-average data updated to 1989. <i>International Journal of Climatology</i> , 1991, 11, 331-345.	1.5	94
82	Time Variation of Effective Climate Sensitivity in GCMs. <i>Journal of Climate</i> , 2008, 21, 5076-5090.	1.2	94
83	A description of the FAMOUS (version XDBUA) climate model and control run. <i>Geoscientific Model Development</i> , 2008, 1, 53-68.	1.3	93
84	Evaluating the ability of process based models to project sea-level change. <i>Environmental Research Letters</i> , 2013, 8, 014051.	2.2	92
85	Processes Governing the Recovery of a Perturbed Thermohaline Circulation in HadCM3. <i>Journal of Climate</i> , 2002, 15, 764-780.	1.2	91
86	The Coming Climate. <i>Scientific American</i> , 1997, 276, 78-83.	1.0	90
87	Coastal and global averaged sea level rise for 1950 to 2000. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	89
88	Design and results of the ice sheet model initialisation experiments initMIP-Greenland: an ISMIP6 intercomparison. <i>Cryosphere</i> , 2018, 12, 1433-1460.	1.5	89
89	Understanding projections of sea level rise in a Hadley Centre coupled climate model. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	87
90	Volcanic Radiative Forcing From 1979 to 2015. <i>Journal of Geophysical Research D: Atmospheres</i> , 2018, 123, 12491-12508.	1.2	87

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91	Aerosol-Forced AMOC Changes in CMIP6 Historical Simulations. Geophysical Research Letters, 2020, 47, e2020GL088166.	1.5	85
92	Carbon dioxide induced stomatal closure increases radiative forcing via a rapid reduction in low cloud. Geophysical Research Letters, 2009, 36, .	1.5	84
93	Equilibrium Climate Sensitivity Estimated by Equilibrating Climate Models. Geophysical Research Letters, 2020, 47, e2019GL083898.	1.5	84
94	Systematic optimisation and climate simulation of FAMOUS, a fast version of HadCM3. Climate Dynamics, 2005, 25, 189-204.	1.7	83
95	Use of an upwelling-diffusion energy balance climate model to simulate and diagnose A/OGCM results. Climate Dynamics, 2001, 17, 601-613.	1.7	81
96	Mechanisms of ocean heat uptake in a coupled climate model and the implications for tracer based predictions of ocean heat uptake. Geophysical Research Letters, 2006, 33, .	1.5	78
97	A step-response simple climate model to reconstruct and interpret AOGCM projections. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	77
98	Calibrated prediction of Pine Island Glacier retreat during the 21st and 22nd centuries with a coupled flowline model. Earth and Planetary Science Letters, 2012, 333-334, 191-199.	1.8	77
99	Krakatoa lives: The effect of volcanic eruptions on ocean heat content and thermal expansion. Geophysical Research Letters, 2006, 33, .	1.5	76
100	A model study of factors influencing projected changes in regional sea level over the twenty-first century. Climate Dynamics, 2011, 36, 2015-2033.	1.7	76
101	Measurement of the bottom quark production cross section in proton-antiproton collisions at $\sqrt{s} = 0.63$ TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 213, 405-412.	1.5	75
102	First observation of the beauty baryon $\Lambda_b$ in the decay channel $\Lambda_b \rightarrow \Lambda^0 J/\psi$ at the CERN proton-antiproton collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 273, 540-548.	1.5	73
103	Predictions of global and regional sea-level rise using AOGCMs with and without flux adjustment. Geophysical Research Letters, 2000, 27, 3069-3072.	1.5	73
104	Intermittency studies in p collisions at. Nuclear Physics B, 1990, 345, 1-21.	0.9	72
105	Climatic Impact of a Greenland Deglaciation and Its Possible Irreversibility. Journal of Climate, 2004, 17, 21-33.	1.2	72
106	Experimental protocol for sea level projections from ISMIP6 stand-alone ice sheet models. Cryosphere, 2020, 14, 2331-2368.	1.5	72
107	Analysis of the regional pattern of sea level change due to ocean dynamics and density change for 1993-2009 in observations and CMIP5 AOGCMs. Climate Dynamics, 2015, 45, 2647-2666.	1.7	71
108	Impact of an Eddy-Permitting Ocean Resolution on Control and Climate Change Simulations with a Global Coupled GCM. Journal of Climate, 2004, 17, 3-20.	1.2	70

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109	A study of the sensitivity of ocean overturning circulation and climate to freshwater input in different regions of the North Atlantic. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	70
110	Evaluation of the sea ice simulation in a new coupled atmosphere-ocean climate model (HadGEM1). <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	69
111	initMIP-Antarctica: an ice sheet model initialization experiment of ISMIP6. <i>Cryosphere</i> , 2019, 13, 1441-1471.	1.5	69
112	Simulated Global-Mean Sea Level Changes over the Last Half-Millennium. <i>Journal of Climate</i> , 2006, 19, 4576-4591.	1.2	67
113	Effect of uncertainty in surface mass balanceâ€“elevation feedback on projections of the future sea level contribution of the Greenland ice sheet. <i>Cryosphere</i> , 2014, 8, 195-208.	1.5	67
114	LongRunMIP: Motivation and Design for a Large Collection of Millennial-Length AOGCM Simulations. <i>Bulletin of the American Meteorological Society</i> , 2019, 100, 2551-2570.	1.7	65
115	How accurately can the climate sensitivity to $\text{CO}_2$ be estimated from historical climate change?. <i>Climate Dynamics</i> , 2020, 54, 129-157.	1.7	63
116	The last glacial cycle: transient simulations with an AOGCM. <i>Climate Dynamics</i> , 2012, 38, 1545-1559.	1.7	62
117	Direct photon production at the CERN proton-antiproton collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1988, 209, 385-396.	1.5	61
118	On the Link between the Two Modes of the Ocean Thermohaline Circulation and the Formation of Global-Scale Water Masses. <i>Journal of Climate</i> , 2003, 16, 2797-2801.	1.2	59
119	Bose-Einstein correlations in pp interactions at $\sqrt{s}=0.2$ to 0.9 TeV. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1989, 226, 410-416.	1.5	57
120	$J/\psi$ and $\Upsilon$ production at the CERN $p\bar{p}$ collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1991, 256, 112-120.	1.5	57
121	Freshwater transports in HadCM3. <i>Climate Dynamics</i> , 2003, 21, 177-195.	1.7	57
122	A search for rare B meson decays at the CERN Sp $\bar{p}$ ,S collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1991, 262, 163-170.	1.5	55
123	Nonlinear regional warming with increasing CO <sub>2</sub> concentrations. <i>Nature Climate Change</i> , 2015, 5, 138-142.	8.1	55
124	Ocean Heat Uptake Processes: A Model Intercomparison. <i>Journal of Climate</i> , 2015, 28, 887-908.	1.2	55
125	Exploring the Drivers of Global and Local Seaâ€“Level Change Over the 21st Century and Beyond. <i>Earth's Future</i> , 2020, 8, e2019EF001413.	2.4	55
126	Two-jet mass distributions at the CERN proton-antiproton collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1988, 209, 127-134.	1.5	54



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127	Climate models without preindustrial volcanic forcing underestimate historical ocean thermal expansion. <i>Geophysical Research Letters</i> , 2013, 40, 1600-1604.	1.5	54
128	Are observed decadal changes in intermediate water masses a signature of anthropogenic climate change?. <i>Geophysical Research Letters</i> , 2000, 27, 2961-2964.	1.5	53
129	Cloud Adjustment and its Role in CO2 Radiative Forcing and Climate Sensitivity: A Review. <i>Surveys in Geophysics</i> , 2012, 33, 619-635.	2.1	53
130	Fast and Slow Components of the Extratropical Atmospheric Circulation Response to CO2 Forcing. <i>Journal of Climate</i> , 2018, 31, 1091-1105.	1.2	52
131	Simulation of daily variability of surface temperature and precipitation over Europe in the current and 2 Å— Co2 climates using the UKMO climate model. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1995, 121, 1451-1476.	1.0	49
132	The Reversibility of Sea Level Rise. <i>Journal of Climate</i> , 2013, 26, 2502-2513.	1.2	49
133	Feedbacks and mechanisms affecting the global sensitivity of glaciers to climate change. <i>Cryosphere</i> , 2014, 8, 59-71.	1.5	49
134	Sea Level Changes under Increasing Atmospheric CO2 in a Transient Coupled Ocean-Atmosphere GCM Experiment. <i>Journal of Climate</i> , 1993, 6, 2247-2262.	1.2	48
135	Small global-mean cooling due to volcanic radiative forcing. <i>Climate Dynamics</i> , 2016, 47, 3979-3991.	1.7	48
136	Projecting Global Mean Sea Level Change Using CMIP6 Models. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL092064.	1.5	48
137	Long-term effect of volcanic forcing on ocean heat content. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	47
138	Abrupt CO2 experiments as tools for predicting and understanding CMIP5 representative concentration pathway projections. <i>Climate Dynamics</i> , 2013, 40, 1041-1053.	1.7	47
139	Low mass Dimuon production at the CERN proton-antiproton collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1988, 209, 397-406.	1.5	42
140	The role of the Atlantic freshwater balance in the hysteresis of the meridional overturning circulation. <i>Climate Dynamics</i> , 2003, 21, 707-717.	1.7	42
141	Recent Progress in Understanding and Projecting Regional and Global Mean Sea Level Change. <i>Current Climate Change Reports</i> , 2015, 1, 224-246.	2.8	42
142	Measurement of the ratio $R = \sigma_{\text{FB}}(W^+ \rightarrow 1/4 1/2) / \sigma_{\text{FB}}(Z^+ \rightarrow 1/4 1/4)$ and $\Gamma_{\text{tot}}$ at the CERN proton-antiproton collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1991, 253, 503-510.	1.5	40
143	What Climate Sensitivity Index Is Most Useful for Projections?. <i>Geophysical Research Letters</i> , 2018, 45, 1559-1566.	1.5	40
144	Extending CMIP5 projections of global mean temperature change and sea level rise due to thermal expansion using a physically-based emulator. <i>Environmental Research Letters</i> , 2018, 13, 084003.	2.2	40

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145	Simulation of daily variability of surface temperature and precipitation over Europe in the current and 2 x CO <sub>2</sub> climates using the UKMO climate model. Quarterly Journal of the Royal Meteorological Society, 1995, 121, 1451-1476.	1.0	40
146	Dependence of the land-sea contrast in surface climate response on the nature of the forcing. Geophysical Research Letters, 2008, 35, .	1.5	39
147	Climate entropy budget of the HadCM3 atmosphere-ocean general circulation model and of FAMOUS, its low-resolution version. Climate Dynamics, 2011, 36, 1189-1206.	1.7	39
148	A step-response approach for predicting and understanding non-linear precipitation changes. Climate Dynamics, 2012, 39, 2789-2803.	1.7	39
149	The drivers of projected North Atlantic sea level change. Climate Dynamics, 2014, 43, 1531-1544.	1.7	39
150	Kinetic energy analysis of the response of the Atlantic meridional overturning circulation to CO <sub>2</sub> -forced climate change. Climate Dynamics, 2011, 37, 893-914.	1.7	38
151	Modelling large-scale ice-sheet-climate interactions following glacial inception. Climate of the Past, 2012, 8, 1565-1580.	1.3	38
152	Attribution of the spatial pattern of CO <sub>2</sub> -forced sea level change to ocean surface flux changes. Environmental Research Letters, 2014, 9, 034004.	2.2	38
153	A data model of the Climate and Forecast metadata conventions (CF-1.6) with a software implementation (cf-python v2.1). Geoscientific Model Development, 2017, 10, 4619-4646.	1.3	37
154	Air flow influences on local climate: observed and simulated mean relationships for the United Kingdom. Climate Research, 1999, 13, 173-191.	0.4	36
155	Changes to Indian Ocean Subantarctic Mode Water in a Coupled Climate Model as CO <sub>2</sub> Forcing Increases. Journal of Physical Oceanography, 2002, 32, 2816-2827.	0.7	35
156	On the Consistent Scaling of Terms in the Sea-Ice Dynamics Equation. Journal of Physical Oceanography, 2004, 34, 1776-1780.	0.7	35
157	The effect of windstress change on future sea level change in the Southern Ocean. Geophysical Research Letters, 2012, 39, .	1.5	35
158	Multiannual Ocean-Atmosphere Adjustments to Radiative Forcing. Journal of Climate, 2016, 29, 5643-5659.	1.2	34
159	Attribution of ocean temperature change to anthropogenic and natural forcings using the temporal, vertical and geographical structure. Climate Dynamics, 2019, 53, 5389-5413.	1.7	34
160	A process-based analysis of ocean heat uptake in an AOGCM with an eddy-permitting ocean component. Climate Dynamics, 2015, 45, 3205-3226.	1.7	33
161	A new feedback on climate change from the hydrological cycle. Geophysical Research Letters, 2007, 34, .	1.5	32
162	The sea-level conundrum: case studies from palaeo-archives. Journal of Quaternary Science, 2010, 25, 19-25.	1.1	32

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163	Climate Sensitivity Increases Under Higher CO <sub>2</sub> Levels Due to Feedback Temperature Dependence. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL089074.	1.5	31
164	The influence of eddy parameterizations on the transport of the Antarctic Circumpolar Current in coupled climate models. <i>Ocean Modelling</i> , 2012, 52-53, 1-8.	1.0	29
165	What causes the spread of model projections of ocean dynamic sea-level change in response to greenhouse gas forcing?. <i>Climate Dynamics</i> , 2021, 56, 155-187.	1.7	29
166	Measurement of B <sup>0</sup> mixing at the CERN Sp <sup>l</sup> S collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1991, 262, 171-178.	1.5	28
167	A sea of uncertainty. <i>Nature Climate Change</i> , 2010, 1, 42-43.	8.1	28
168	High frequency variability of the Atlantic meridional overturning circulation. <i>Ocean Science</i> , 2011, 7, 471-486.	1.3	28
169	Future Sea Level Change Under Coupled Model Intercomparison Project Phase 5 and Phase 6 Scenarios From the Greenland and Antarctic Ice Sheets. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091741.	1.5	28
170	Evaluation of the Local Sea-Level Budget at Tide Gauges Since 1958. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094502.	1.5	28
171	Search for new heavy quarks in proton-antiproton collisions at $\sqrt{s} = 0.63 \text{ TeV}$ . <i>Zeitschrift für Physik C-Particles and Fields</i> , 1990, 48, 1-12.	1.5	27
172	Distinguishing the Influence of Heat, Freshwater, and Momentum Fluxes on Ocean Circulation and Climate. <i>Journal of Climate</i> , 2002, 15, 3686-3697.	1.2	26
173	Probabilistic parameterisation of the surface mass balance-elevation feedback in regional climate model simulations of the Greenland ice sheet. <i>Cryosphere</i> , 2014, 8, 181-194.	1.5	26
174	Reliable yield of reservoirs and possible effects of climatic change. <i>Hydrological Sciences Journal</i> , 1991, 36, 579-598.	1.2	25
175	Climate System Scenario Tables. , 2014, , 1395-1446.		25
176	A refined model for the Earth's global energy balance. <i>Climate Dynamics</i> , 2019, 53, 4781-4797.	1.7	25
177	Ocean-Only FAFMIP: Understanding Regional Patterns of Ocean Heat Content and Dynamic Sea Level Change. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS002027.	1.3	24
178	Large and irreversible future decline of the Greenland ice sheet. <i>Cryosphere</i> , 2020, 14, 4299-4322.	1.5	22
179	Improved Climate Simulations through a Stochastic Parameterization of Ocean Eddies. <i>Journal of Climate</i> , 2016, 29, 8763-8781.	1.2	21
180	Impact of Mesoscale Eddy Transfer on Heat Uptake in an Eddy-Parameterizing Ocean Model. <i>Journal of Climate</i> , 2018, 31, 8589-8606.	1.2	21

#	ARTICLE	IF	CITATIONS
181	Recent Water Mass Changes Reveal Mechanisms of Ocean Warming. <i>Journal of Climate</i> , 2021, 34, 3461-3479.	1.2	21
182	The Key Role of the Western Boundary in Linking the AMOC Strength to the North-South Pressure Gradient. <i>Journal of Physical Oceanography</i> , 2012, 42, 628-643.	0.7	20
183	nonlinMIP contribution to CMIP6: model intercomparison project for non-linear mechanisms: physical basis, experimental design and analysis principles (v1.0). <i>Geoscientific Model Development</i> , 2016, 9, 4019-4028.	1.3	20
184	A parametric sensitivity study of entropy production and kinetic energy dissipation using the FAMOUS AOGCM. <i>Climate Dynamics</i> , 2012, 38, 1211-1227.	1.7	19
185	Coupling the U.K. Earth System Model to Dynamic Models of the Greenland and Antarctic Ice Sheets. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2021MS002520.	1.3	19
186	Determining and interpreting the order of a two-state Markov Chain: Application to models of daily precipitation. <i>Water Resources Research</i> , 1992, 28, 1443-1446.	1.7	18
187	Ocean angular momentum signals in a climate model and implications for Earth rotation. <i>Climate Dynamics</i> , 2002, 19, 181-190.	1.7	18
188	The Effect of a Large Freshwater Perturbation on the Glacial North Atlantic Ocean Using a Coupled General Circulation Model. <i>Journal of Climate</i> , 2006, 19, 4436-4447.	1.2	17
189	Precise Calculations of the Existence of Multiple AMOC Equilibria in Coupled Climate Models. Part I: Equilibrium States. <i>Journal of Climate</i> , 2012, 25, 282-298.	1.2	16
190	Vertical and horizontal processes in the global atmosphere and the maximum entropy production conjecture. <i>Earth System Dynamics</i> , 2012, 3, 19-32.	2.7	16
191	Limits on t-quark decay into charged Higgs from a direct search at the CERN collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1991, 257, 459-468.	1.5	15
192	The Influence of Warming Patterns on Passive Ocean Heat Uptake. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088429.	1.5	15
193	On the climate response of the low-latitude Pacific Ocean to changes in the global freshwater cycle. <i>Climate Dynamics</i> , 2006, 27, 593-611.	1.7	14
194	Contribution of Ocean Physics and Dynamics at Different Scales to Heat Uptake in Low-Resolution AOGCMs. <i>Journal of Climate</i> , 2021, 34, 2017-2035.	1.2	14
195	Uncertainty in the Evolution of Climate Feedback Traced to the Strength of the Atlantic Meridional Overturning Circulation. <i>Geophysical Research Letters</i> , 2019, 46, 12331-12339.	1.5	13
196	Separating the influence of projected changes in air temperature and wind on patterns of sea level change and ocean heat content. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 5749-5765.	1.0	12
197	A Closer Look at the IPCC Report. <i>Science</i> , 2008, 319, 409-410.	6.0	11
198	Remapping of Greenland ice sheet surface mass balance anomalies for large ensemble sea-level change projections. <i>Cryosphere</i> , 2020, 14, 1747-1762.	1.5	11

#	ARTICLE	IF	CITATIONS
199	The Role of Anthropogenic Aerosol Forcing in the 1850–1985 Strengthening of the AMOC in CMIP6 Historical Simulations. <i>Journal of Climate</i> , 2022, 35, 3243-3263.	1.2	11
200	Nonlinearity of ocean heat uptake during warming and cooling in the FAMOUS climate model. <i>Geophysical Research Letters</i> , 2015, 42, 2409-2416.	1.5	10
201	A study of the $\bar{D}$ content of jets at the CERN p collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1990, 244, 566-572.	1.5	9
202	A traceable physical calibration of the vertical advection–diffusion equation for modeling ocean heat uptake. <i>Geophysical Research Letters</i> , 2015, 42, 2333-2341.	1.5	8
203	Correlations between patterns of 19th and 20th century surface temperature change and HadCM2 Climate Model ensembles. <i>Geophysical Research Letters</i> , 2001, 28, 1007-1010.	1.5	7
204	The impact of salinity perturbations on the future uptake of heat by the Atlantic Ocean. <i>Geophysical Research Letters</i> , 2014, 41, 9072-9079.	1.5	7
205	Does Model Calibration Reduce Uncertainty in Climate Projections?. <i>Journal of Climate</i> , 2022, 35, 2585-2602.	1.2	7
206	V: SEA LEVEL: Benefits of GRACE and GOCE to sea level studies. <i>Space Science Reviews</i> , 2003, 108, 307-317.	3.7	6
207	Sea Level Change. , 2019, , 493-499.		6
208	Experimental limit on the decay $W \rightarrow \mu^+ \bar{\nu}_\mu$ at the cern proton-antiproton collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1990, 241, 283-288.	1.5	5
209	The UA1 upgrade calorimeter trigger processor. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1990, 292, 401-423.	0.7	5
210	The ocean's gravitational potential energy budget in a coupled climate model. <i>Geophysical Research Letters</i> , 2013, 40, 5417-5422.	1.5	5
211	Interpreting Differences in Radiative Feedbacks From Aerosols Versus Greenhouse Gases. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	5
212	Comment on “Expert assessment of sea-level rise by AD 2100 and AD 2300”, by Horton et al. (2014). <i>Quaternary Science Reviews</i> , 2014, 97, 193-194.	1.4	4
213	Evolving patterns of steric sea-level rise under mitigation scenarios and insights from linear system theory. <i>Climate Dynamics</i> , 2021, 57, 635-656.	1.7	4
214	UA1 upgrade first-level calorimeter trigger processor. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1989, 279, 297-304.	0.7	3
215	Understanding processes contributing to regional sea level change. <i>Eos</i> , 2011, 92, 328-328.	0.1	3
216	FAMOUS version xotzt (FAMOUS-ice): a general circulation model (GCM) capable of energy- and water-conserving coupling to an ice sheet model. <i>Geoscientific Model Development</i> , 2021, 14, 5769-5787.	1.3	3

#	ARTICLE	IF	CITATIONS
217	Correction to "Bistability of the Atlantic overturning circulation in a global climate model and links to ocean freshwater transport". Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	2
218	Fast two dimensional cluster finding in particle physics. IEEE Transactions on Nuclear Science, 1989, 36, 370-374.	1.2	1
219	The new UA1 calorimeter trigger processor. IEEE Transactions on Nuclear Science, 1989, 36, 364-369.	1.2	1
220	The Sverdrup Relation Generalized to Include Bottom Topography and Friction" A New Derivation and Correction to Fofonoff. Journal of Physical Oceanography, 1993, 23, 1867-1869.	0.7	1
221	Interpreting the Dependence of Cloud Radiative Adjustment on Forcing Agent. Geophysical Research Letters, 2021, 48, e2021GL093616.	1.5	1
222	Benefits of GRACE and GOCE to Sea Level Studies. Space Sciences Series of ISSI, 2003, , 307-317.	0.0	1
223	Mechanisms of Ocean Heat Uptake along and across Isopycnals. Journal of Climate, 2022, 35, 4885-4904.	1.2	1
224	Technical Summary. , 0, , 27-158.		0
225	Camelot " a database for climate model output. Meteorological Applications, 2000, 7, 83-90.	0.9	0
226	Cloud Adjustment and its Role in CO2 Radiative Forcing and Climate Sensitivity: A Review. Space Sciences Series of ISSI, 2011, , 287-303.	0.0	0