Jonathan Gregory

List of Publications by Year in descending order

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227 papers 25,822 citations

4658 85 h-index 152 g-index

287 all docs

287 docs citations

times ranked

287

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. Climate Dynamics, 2000, 16, 147-168.	3.8	2,328
2	Investigating the Causes of the Response of the Thermohaline Circulation to Past and Future Climate Changes. Journal of Climate, 2006, 19, 1365-1387.	3.2	829
3	A new method for diagnosing radiative forcing and climate sensitivity. Geophysical Research Letters, 2004, 31, .	4.0	719
4	Climate response to increasing levels of greenhouse gases and sulphate aerosols. Nature, 1995, 376, 501-504.	27.8	688
5	The second Hadley Centre coupled ocean-atmosphere GCM: model description, spinup and validation. Climate Dynamics, 1997, 13, 103-134.	3.8	668
6	Forcing, feedbacks and climate sensitivity in CMIP5 coupled atmosphereâ€ocean climate models. Geophysical Research Letters, 2012, 39, .	4.0	570
7	Anthropogenic climate change for 1860 to 2100 simulated with the HadCM3 model under updated emissions scenarios. Climate Dynamics, 2003, 20, 583-612.	3.8	486
8	A model intercomparison of changes in the Atlantic thermohaline circulation in response to increasing atmospheric CO2concentration. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	472
9	The New Hadley Centre Climate Model (HadGEM1): Evaluation of Coupled Simulations. Journal of Climate, 2006, 19, 1327-1353.	3.2	424
10	Revisiting the Earth's sea-level and energy budgets from 1961 to 2008. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	415
11	Penetration of Human-Induced Warming into the World's Oceans. Science, 2005, 309, 284-287.	12.6	406
12	Land/sea warming ratio in response to climate change: IPCC AR4 model results and comparison with observations. Geophysical Research Letters, 2007, 34, .	4.0	339
13	A study of the general characteristics of proton-antiproton collisions at â^šs=0.2 to 0.9 TeV. Nuclear Physics B, 1990, 335, 261-287.	2.5	311
14	Evaluating adjusted forcing and model spread for historical and future scenarios in the CMIP5 generation of climate models. Journal of Geophysical Research D: Atmospheres, 2013, 118, 1139-1150.	3.3	304
15	Tropospheric Adjustment Induces a Cloud Component in CO2 Forcing. Journal of Climate, 2008, 21, 58-71.	3.2	272
16	Response of the North Atlantic storm track toÂclimate change shaped by ocean–atmosphere coupling. Nature Geoscience, 2012, 5, 313-317.	12.9	272
17	The Dependence of Radiative Forcing and Feedback on Evolving Patterns of Surface Temperature Change in Climate Models. Journal of Climate, 2015, 28, 1630-1648.	3.2	272
18	Energy budget constraints on climate response. Nature Geoscience, 2013, 6, 415-416.	12.9	270

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19	Mechanisms for the land/sea warming contrast exhibited by simulations of climate change. Climate Dynamics, 2008, 30, 455-465.	3.8	268
20	Concepts and Terminology for Sea Level: Mean, Variability and Change, Both Local and Global. Surveys in Geophysics, 2019, 40, 1251-1289.	4.6	262
21	Changes in daily precipitation under enhanced greenhouse conditions. Climate Dynamics, 1997, 13, 667-680.	3.8	261
22	Changing spatial structure of the thermohaline circulation in response to atmospheric CO2 forcing in a climate model. Nature, 1999, 399, 572-575.	27.8	251
23	Vertical heat transports in the ocean and their effect on time-dependent climate change. Climate Dynamics, 2000, 16, 501-515.	3.8	246
24	Adjustments in the Forcing-Feedback Framework for Understanding Climate Change. Bulletin of the American Meteorological Society, 2015, 96, 217-228.	3.3	239
25	An Observationally Based Estimate of the Climate Sensitivity. Journal of Climate, 2002, 15, 3117-3121.	3.2	236
26	Contributions of Different Cloud Types to Feedbacks and Rapid Adjustments in CMIP5*. Journal of Climate, 2013, 26, 5007-5027.	3.2	235
27	Quantifying Carbon Cycle Feedbacks. Journal of Climate, 2009, 22, 5232-5250.	3.2	225
28	OMIP contribution to CMIP6: experimental and diagnostic protocol for the physical component of the Ocean Model Intercomparison Project. Geoscientific Model Development, 2016, 9, 3231-3296.	3.6	223
29	Threatened loss of the Greenland ice-sheet. Nature, 2004, 428, 616-616.	27.8	220
30	A Review of Uncertainties in Global Temperature Projections over the Twenty-First Century. Journal of Climate, 2008, 21, 2651-2663.	3.2	209
31	A Surface Energy Perspective on Climate Change. Journal of Climate, 2009, 22, 2557-2570.	3.2	209
32	Projected land ice contributions to twenty-first-century sea level rise. Nature, 2021, 593, 74-82.	27.8	200
33	Ice Sheet Model Intercomparison Project (ISMIP6) contribution to CMIP6. Geoscientific Model Development, 2016, 9, 4521-4545.	3.6	199
34	Elimination of the Greenland Ice Sheet in a High CO2 Climate. Journal of Climate, 2005, 18, 3409-3427.	3.2	198
35	ISMIP6 Antarctica: a multi-model ensemble of the Antarctic ice sheet evolution over the 21st century. Cryosphere, 2020, 14, 3033-3070.	3.9	198
36	Twentieth-Century Global-Mean Sea Level Rise: Is the Whole Greater than the Sum of the Parts?. Journal of Climate, 2013, 26, 4476-4499.	3.2	197

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37	The Role of Climate Sensitivity and Ocean Heat Uptake on AOGCM Transient Temperature Response. Journal of Climate, 2002, 15, 124-130.	3.2	184
38	Global reconstruction of historical ocean heat storage and transport. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1126-1131.	7.1	180
39	A comparison of extreme European daily precipitation simulated by a global and a regional climate model for present and future climates. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 1005-1015.	2.7	177
40	Transient climate response estimated from radiative forcing and observed temperature change. Journal of Geophysical Research, 2008, 113 , .	3.3	177
41	Ice-sheet contributions to future sea-level change. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1709-1732.	3.4	176
42	Ocean heat uptake and its consequences for the magnitude of sea level rise and climate change. Geophysical Research Letters, 2012, 39, .	4.0	165
43	Mechanisms Determining the Atlantic Thermohaline Circulation Response to Greenhouse Gas Forcing in a Non-Flux-Adjusted Coupled Climate Model. Journal of Climate, 2001, 14, 3102-3116.	3.2	163
44	Observational Constraints on Past Attributable Warming and Predictions of Future Global Warming. Journal of Climate, 2006, 19, 3055-3069.	3.2	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. Climate Dynamics, 2001, 18, 179-188.	3.8	160
46	Origins of differences in climate sensitivity, forcing and feedback in climate models. Climate Dynamics, 2013, 40, 677-707.	3.8	159
47	Production of low transverse energy clusters in collisions at â^šs=0.2–0.9 TeV and their interpretation in terms of QCD jets. Nuclear Physics B, 1988, 309, 405-425.	2.5	155
48	Summer Drought in Northern Midlatitudes in a Time-Dependent CO2Climate Experiment. Journal of Climate, 1997, 10, 662-686.	3.2	153
49	The future sea-level contribution of the Greenland ice sheet: a multi-model ensemble study of ISMIP6. Cryosphere, 2020, 14, 3071-3096.	3.9	144
50	The Climate Sensitivity and Its Components Diagnosed from Earth Radiation Budget Data. Journal of Climate, 2006, 19, 39-52.	3.2	143
51	Sea-Level Rise by 2100. Science, 2013, 342, 1445-1445.	12.6	140
52	Variation in climate sensitivity and feedback parameters during the historical period. Geophysical Research Letters, 2016, 43, 3911-3920.	4.0	140
53	Comparison of results from several AOGCMs for global and regional sea-level change 1900-2100. Climate Dynamics, 2001, 18, 225-240.	3.8	139
54	Simulated future sea-level rise due to glacier melt based on regionally and seasonally resolved temperature changes. Nature, 1998, 391, 474-476.	27.8	136

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55	Constraining climate forecasts: The role of prior assumptions. Geophysical Research Letters, 2005, 32,	4.0	135
56	The climate response to CO2of the Hadley Centre coupled AOGCM with and without flux adjustment. Geophysical Research Letters, 1997, 24, 1943-1946.	4.0	134
57	The effects of climate change on storm surges around the United Kingdom. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 1313-1328.	3.4	134
58	Irreducible uncertainty in near-term climate projections. Climate Dynamics, 2016, 46, 3807-3819.	3.8	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 ₂ forcing. Geoscientific Model Development, 2016, 9, 3993-4017.	3.6	133
60	Understanding Land–Sea Warming Contrast in Response to Increasing Greenhouse Gases. Part I: Transient Adjustment. Journal of Climate, 2009, 22, 3079-3097.	3.2	132
61	Modelling Antarctic and Greenland volume changes during the 20th and 21st centuries forced by GCM time slice integrations. Global and Planetary Change, 2004, 42, 83-105.	3.5	129
62	The inconstancy of the transient climate response parameter under increasing CO ₂ . Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140417.	3.4	120
63	Recent and future changes in Arctic sea ice simulated by the HadCM3 AOGCM. Geophysical Research Letters, 2002, 29, 28-1-28-4.	4.0	118
64	Accounting for Changing Temperature Patterns Increases Historical Estimates of Climate Sensitivity. Geophysical Research Letters, 2018, 45, 8490-8499.	4.0	116
65	A large ozone-circulation feedback and its implications for global warming assessments. Nature Climate Change, 2015, 5, 41-45.	18.8	115
66	Application of Markov models to area-average daily precipitation series and interannual variability in seasonal totals. Climate Dynamics, 1993, 8, 299-310.	3.8	112
67	Meeting User Needs for Sea Level Rise Information: A Decision Analysis Perspective. Earth's Future, 2019, 7, 320-337.	6.3	112
68	Relationship of tropospheric stability to climate sensitivity and Earth's observed radiation budget. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13126-13131.	7.1	111
69	Critical Southern Ocean climate model biases traced to atmospheric model cloud errors. Nature Communications, 2018, 9, 3625.	12.8	109
70	Thresholds for irreversible decline of the Greenland ice sheet. Climate Dynamics, 2010, 35, 1049-1057.	3.8	107
71	The impact of natural and anthropogenic forcings on climate and hydrology since 1550. Climate Dynamics, 2006, 28, 3-34.	3.8	106
72	Greenland ice sheet surface mass balance: evaluating simulations and making projections with regional climate models. Cryosphere, 2012, 6, 1275-1294.	3.9	106

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73	Understanding and Projecting Sea Level Change. Oceanography, 2011, 24, 130-143.	1.0	104
74	Krakatoa's signature persists in the ocean. Nature, 2006, 439, 675-675.	27.8	101
75	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.	4.0	101
76	Studies of intermediate vector boson production and decay in UA1 at the CERN proton-antiproton collider. Zeitschrift FÃ $\frac{1}{4}$ r Physik C-Particles and Fields, 1989, 44, 15-61.	1.5	99
77	Beauty production at the CERN ppì,, collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 256, 121-128.	4.1	99
78	An AOGCM simulation of the climate response to a volcanic super-eruption. Climate Dynamics, 2005, 25, 725-738.	3.8	97
79	Simulated and observed decadal variability in ocean heat content. Geophysical Research Letters, 2004, 31, .	4.0	95
80	Anthropogenic Warming of the Oceans: Observations and Model Results. Journal of Climate, 2006, 19, 1873-1900.	3.2	95
81	Precipitation in Britain: An analysis of areaâ€average data updated to 1989. International Journal of Climatology, 1991, 11, 331-345.	3.5	94
82	Time Variation of Effective Climate Sensitivity in GCMs. Journal of Climate, 2008, 21, 5076-5090.	3.2	94
83	A description of the FAMOUS (version XDBUA) climate model and control run. Geoscientific Model Development, 2008, 1, 53-68.	3.6	93
84	Evaluating the ability of process based models to project sea-level change. Environmental Research Letters, 2013, 8, 014051.	5.2	92
85	Processes Governing the Recovery of a Perturbed Thermohaline Circulation in HadCM3. Journal of Climate, 2002, 15, 764-780.	3.2	91
86	The Coming Climate. Scientific American, 1997, 276, 78-83.	1.0	90
87	Coastal and global averaged sea level rise for 1950 to 2000. Geophysical Research Letters, 2005, 32, .	4.0	89
88	Design and results of the ice sheet model initialisation experiments initMIP-Greenland: an ISMIP6 intercomparison. Cryosphere, 2018, 12, 1433-1460.	3.9	89
89	Understanding projections of sea level rise in a Hadley Centre coupled climate model. Journal of Geophysical Research, 2006, 111 , .	3.3	87
90	Volcanic Radiative Forcing From 1979 to 2015. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12491-12508.	3.3	87

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91	Aerosolâ€Forced AMOC Changes in CMIP6 Historical Simulations. Geophysical Research Letters, 2020, 47, e2020GL088166.	4.0	85
92	Carbon dioxide induced stomatal closure increases radiative forcing via a rapid reduction in low cloud. Geophysical Research Letters, 2009, 36, .	4.0	84
93	Equilibrium Climate Sensitivity Estimated by Equilibrating Climate Models. Geophysical Research Letters, 2020, 47, e2019GL083898.	4.0	84
94	Systematic optimisation and climate simulation of FAMOUS, a fast version of HadCM3. Climate Dynamics, 2005, 25, 189-204.	3.8	83
95	Use of an upwelling-diffusion energy balance climate model to simulate and diagnose A/OGCM results. Climate Dynamics, 2001, 17, 601-613.	3.8	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, .	4.0	78
97	A step-response simple climate model to reconstruct and interpret AOGCM projections. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	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.	4.4	77
99	Krakatoa lives: The effect of volcanic eruptions on ocean heat content and thermal expansion. Geophysical Research Letters, 2006, 33, .	4.0	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.	3.8	76
101	Measurement of the bottom quark production cross section in proton-antiproton collisions at â^šs = 0.63 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 213, 405-412.	4.1	75
102	First observation of the beauty baryon îb in the decay channel îbâ†']/ îîb at the CERN proton-antiproton collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 273, 540-548.	4.1	73
103	Predictions of global and regional sea-level rise using AOGCMs with and without flux adjustment. Geophysical Research Letters, 2000, 27, 3069-3072.	4.0	73
104	Intermittency studies in p collisions at. Nuclear Physics B, 1990, 345, 1-21.	2.5	72
105	Climatic Impact of a Greenland Deglaciation and Its Possible Irreversibility. Journal of Climate, 2004, 17, 21-33.	3.2	72
106	Experimental protocol for sea level projections from ISMIP6 stand-alone ice sheet models. Cryosphere, 2020, 14, 2331-2368.	3.9	72
107	Analysis of the regional pattern of sea level change due to ocean dynamics and density change for 1993–2099 in observations and CMIP5 AOGCMs. Climate Dynamics, 2015, 45, 2647-2666.	3.8	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.	3.2	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. Geophysical Research Letters, 2009, 36, .	4.0	70
110	Evaluation of the sea ice simulation in a new coupled atmosphere-ocean climate model (HadGEM1). Journal of Geophysical Research, 2006, 111 , .	3.3	69
111	initMIP-Antarctica: an ice sheet model initialization experiment of ISMIP6. Cryosphere, 2019, 13, 1441-1471.	3.9	69
112	Simulated Global-Mean Sea Level Changes over the Last Half-Millennium. Journal of Climate, 2006, 19, 4576-4591.	3.2	67
113	Effect of uncertainty in surface mass balance–elevation feedback on projections of the future sea level contribution of the Greenland ice sheet. Cryosphere, 2014, 8, 195-208.	3.9	67
114	LongRunMIP: Motivation and Design for a Large Collection of Millennial-Length AOGCM Simulations. Bulletin of the American Meteorological Society, 2019, 100, 2551-2570.	3.3	65
115	How accurately can the climate sensitivity to \$\$hbox {CO}_{2}\$\$ be estimated from historical climate change?. Climate Dynamics, 2020, 54, 129-157.	3.8	63
116	The last glacial cycle: transient simulations with an AOGCM. Climate Dynamics, 2012, 38, 1545-1559.	3.8	62
117	Direct photon production at the CERN proton-antiproton collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 209, 385-396.	4.1	61
118	On the Link between the Two Modes of the Ocean Thermohaline Circulation and the Formation of Global-Scale Water Masses. Journal of Climate, 2003, 16, 2797-2801.	3.2	59
119	Bose-Einstein correlations in pp interactions at â´šs=0.2 to 0.9 TeV. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 226, 410-416.	4.1	57
120	J/l̇̃ and l̈′ production at the CERN pl̇,p collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 256, 112-120.	4.1	57
121	Freshwater transports in HadCM3. Climate Dynamics, 2003, 21, 177-195.	3.8	57
122	A search for rare B meson decays at the CERN Sppì, S collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 262, 163-170.	4.1	55
123	Nonlinear regional warming with increasing CO2Âconcentrations. Nature Climate Change, 2015, 5, 138-142.	18.8	55
124	Ocean Heat Uptake Processes: A Model Intercomparison. Journal of Climate, 2015, 28, 887-908.	3.2	55
125	Exploring the Drivers of Global and Local Seaâ€Level Change Over the 21st Century and Beyond. Earth's Future, 2020, 8, e2019EF001413.	6.3	55
126	Two-jet mass distributions at the CERN proton-antiproton collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 209, 127-134.	4.1	54

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127	Climate models without preindustrial volcanic forcing underestimate historical ocean thermal expansion. Geophysical Research Letters, 2013, 40, 1600-1604.	4.0	54
128	Are observed decadal changes in intermediate water masses a signature of anthropogenic climate change?. Geophysical Research Letters, 2000, 27, 2961-2964.	4.0	53
129	Cloud Adjustment and its Role in CO2 Radiative Forcing and Climate Sensitivity: A Review. Surveys in Geophysics, 2012, 33, 619-635.	4.6	53
130	Fast and Slow Components of the Extratropical Atmospheric Circulation Response to CO2 Forcing. Journal of Climate, 2018, 31, 1091-1105.	3.2	52
131	Simulation of daily variability of surface temperature and precipitation over europe in the current and 2 × Co2 climates using the UKMO climate model. Quarterly Journal of the Royal Meteorological Society, 1995, 121, 1451-1476.	2.7	49
132	The Reversibility of Sea Level Rise. Journal of Climate, 2013, 26, 2502-2513.	3.2	49
133	Feedbacks and mechanisms affecting the global sensitivity of glaciers to climate change. Cryosphere, 2014, 8, 59-71.	3.9	49
134	Sea Level Changes under Increasing Atmospheric CO2in a Transient Coupled Ocean-Atmosphere GCM Experiment. Journal of Climate, 1993, 6, 2247-2262.	3.2	48
135	Small global-mean cooling due to volcanic radiative forcing. Climate Dynamics, 2016, 47, 3979-3991.	3.8	48
136	Projecting Global Mean Sea‣evel Change Using CMIP6 Models. Geophysical Research Letters, 2021, 48, e2020GL092064.	4.0	48
137	Longâ€ŧerm effect of volcanic forcing on ocean heat content. Geophysical Research Letters, 2010, 37, .	4.0	47
138	Abrupt CO2 experiments as tools for predicting and understanding CMIP5 representative concentration pathway projections. Climate Dynamics, 2013, 40, 1041-1053.	3.8	47
139	Low mass Dimuon production at the CERN proton-antiproton collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 209, 397-406.	4.1	42
140	The role of the Atlantic freshwater balance in the hysteresis of the meridional overturning circulation. Climate Dynamics, 2003, 21, 707-717.	3.8	42
141	Recent Progress in Understanding and Projecting Regional and Global Mean Sea Level Change. Current Climate Change Reports, 2015, 1, 224-246.	8.6	42
142	Measurement of the ratio R≡ÏfWBr(Wâ†'μν)/ĬfzBr(Zâ†'μμ) and ΓWtot at the CERN proton-antiproton Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 253, 503-510.	collider. P	hysics 40
143	What Climate Sensitivity Index Is Most Useful for Projections?. Geophysical Research Letters, 2018, 45, 1559-1566.	4.0	40
144	Extending CMIP5 projections of global mean temperature change and sea level rise due to thermal expansion using a physically-based emulator. Environmental Research Letters, 2018, 13, 084003.	5.2	40

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145	Simulation of daily variability of surface temperature and precipitation over Europe in the current and $2 \times \text{CO} \times \text{SUB} \times 2 \times \text{JSUB} \times \text{climates}$ using the UKMO climate model. Quarterly Journal of the Royal Meteorological Society, 1995, 121, 1451-1476.	2.7	40
146	Dependence of the landâ€sea contrast in surface climate response on the nature of the forcing. Geophysical Research Letters, 2008, 35, .	4.0	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.	3.8	39
148	A step-response approach for predicting and understanding non-linear precipitation changes. Climate Dynamics, 2012, 39, 2789-2803.	3.8	39
149	The drivers of projected North Atlantic sea level change. Climate Dynamics, 2014, 43, 1531-1544.	3.8	39
150	Kinetic energy analysis of the response of the Atlantic meridional overturning circulation to CO2-forced climate change. Climate Dynamics, 2011, 37, 893-914.	3.8	38
151	Modelling large-scale ice-sheet–climate interactions following glacial inception. Climate of the Past, 2012, 8, 1565-1580.	3.4	38
152	Attribution of the spatial pattern of CO ₂ -forced sea level change to ocean surface flux changes. Environmental Research Letters, 2014, 9, 034004.	5.2	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.	3.6	37
154	Air flow influences on local climate: observed and simulated mean relationships for the United Kingdom. Climate Research, 1999, 13, 173-191.	1.1	36
155	Changes to Indian Ocean Subantarctic Mode Water in a Coupled Climate Model as CO2Forcing Increases. Journal of Physical Oceanography, 2002, 32, 2816-2827.	1.7	35
156	On the Consistent Scaling of Terms in the Sea-Ice Dynamics Equation. Journal of Physical Oceanography, 2004, 34, 1776-1780.	1.7	35
157	The effect of windstress change on future sea level change in the Southern Ocean. Geophysical Research Letters, 2012, 39, .	4.0	35
158	Multiannual Ocean–Atmosphere Adjustments to Radiative Forcing. Journal of Climate, 2016, 29, 5643-5659.	3.2	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.	3.8	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.	3.8	33
161	A new feedback on climate change from the hydrological cycle. Geophysical Research Letters, 2007, 34,	4.0	32
162	The seaâ€level conundrum: case studies from palaeoâ€archives. Journal of Quaternary Science, 2010, 25, 19-25.	2.1	32

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163	Climate Sensitivity Increases Under Higher CO ₂ Levels Due to Feedback Temperature Dependence. Geophysical Research Letters, 2021, 48, e2020GL089074.	4.0	31
164	The influence of eddy parameterizations on the transport of the Antarctic Circumpolar Current in coupled climate models. Ocean Modelling, 2012, 52-53, 1-8.	2.4	29
165	What causes the spread of model projections of ocean dynamic sea-level change in response to greenhouse gas forcing?. Climate Dynamics, 2021, 56, 155-187.	3.8	29
166	Measurement of B0â^'0 mixing at the CERN SppÌ,,S collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 262, 171-178.	4.1	28
167	A sea of uncertainty. Nature Climate Change, 2010, 1, 42-43.	18.8	28
168	High frequency variability of the Atlantic meridional overturning circulation. Ocean Science, 2011, 7, 471-486.	3.4	28
169	Future Sea Level Change Under Coupled Model Intercomparison Project Phase 5 and Phase 6 Scenarios From the Greenland and Antarctic Ice Sheets. Geophysical Research Letters, 2021, 48, e2020GL091741.	4.0	28
170	Evaluation of the Local Seaâ€Level Budget at Tide Gauges Since 1958. Geophysical Research Letters, 2021, 48, e2021GL094502.	4.0	28
171	Search for new heavy quarks in proton-antiproton collisions at \$\$sqrt s = 0.63 TeV\$\$. Zeitschrift $F\tilde{A}\frac{1}{4}r$ Physik C-Particles and Fields, 1990, 48, 1-12.	1.5	27
172	Distinguishing the Influence of Heat, Freshwater, and Momentum Fluxes on Ocean Circulation and Climate. Journal of Climate, 2002, 15, 3686-3697.	3.2	26
173	Probabilistic parameterisation of the surface mass balance–elevation feedback in regional climate model simulations of the Greenland ice sheet. Cryosphere, 2014, 8, 181-194.	3.9	26
174	Reliable yield of reservoirs and possible effects of climatic change. Hydrological Sciences Journal, 1991, 36, 579-598.	2.6	25
175	Climate System Scenario Tables. , 2014, , 1395-1446.		25
176	A refined model for the Earth's global energy balance. Climate Dynamics, 2019, 53, 4781-4797.	3.8	25
177	Oceanâ€Only FAFMIP: Understanding Regional Patterns of Ocean Heat Content and Dynamic Sea Level Change. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002027.	3.8	24
178	Large and irreversible future decline of the Greenland ice sheet. Cryosphere, 2020, 14, 4299-4322.	3.9	22
179	Improved Climate Simulations through a Stochastic Parameterization of Ocean Eddies. Journal of Climate, 2016, 29, 8763-8781.	3.2	21
180	Impact of Mesoscale Eddy Transfer on Heat Uptake in an Eddy-Parameterizing Ocean Model. Journal of Climate, 2018, 31, 8589-8606.	3.2	21

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181	Recent Water Mass Changes Reveal Mechanisms of Ocean Warming. Journal of Climate, 2021, 34, 3461-3479.	3.2	21
182	The Key Role of the Western Boundary in Linking the AMOC Strength to the North–South Pressure Gradient. Journal of Physical Oceanography, 2012, 42, 628-643.	1.7	20
183	nonlinMIP contribution to CMIP6: model intercomparison project for non-linear mechanisms: physical basis, experimental design and analysis principles (v1.0). Geoscientific Model Development, 2016, 9, $4019-4028$.	3.6	20
184	A parametric sensitivity study of entropy production and kinetic energy dissipation using the FAMOUS AOGCM. Climate Dynamics, 2012, 38, 1211-1227.	3.8	19
185	Coupling the U.K. Earth System Model to Dynamic Models of the Greenland and Antarctic Ice Sheets. Journal of Advances in Modeling Earth Systems, 2021, 13, e2021MS002520.	3.8	19
186	Determining and interpreting the order of a two-state Markov Chain: Application to models of daily precipitation. Water Resources Research, 1992, 28, 1443-1446.	4.2	18
187	Ocean angular momentum signals in a climate model and implications for Earth rotation. Climate Dynamics, 2002, 19, 181-190.	3.8	18
188	The Effect of a Large Freshwater Perturbation on the Glacial North Atlantic Ocean Using a Coupled General Circulation Model. Journal of Climate, 2006, 19, 4436-4447.	3.2	17
189	Precise Calculations of the Existence of Multiple AMOC Equilibria in Coupled Climate Models. Part I: Equilibrium States. Journal of Climate, 2012, 25, 282-298.	3.2	16
190	Vertical and horizontal processes in the global atmosphere and the maximum entropy production conjecture. Earth System Dynamics, 2012, 3, 19-32.	7.1	16
191	Limits on t-quark decay into charged Higgs from a direct search at the CERN collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 257, 459-468.	4.1	15
192	The Influence of Warming Patterns on Passive Ocean Heat Uptake. Geophysical Research Letters, 2020, 47, e2020GL088429.	4.0	15
193	On the climate response of the low-latitude Pacific Ocean to changes in the global freshwater cycle. Climate Dynamics, 2006, 27, 593-611.	3.8	14
194	Contribution of Ocean Physics and Dynamics at Different Scales to Heat Uptake in Low-Resolution AOGCMs. Journal of Climate, 2021, 34, 2017-2035.	3.2	14
195	Uncertainty in the Evolution of Climate Feedback Traced to the Strength of the Atlantic Meridional Overturning Circulation. Geophysical Research Letters, 2019, 46, 12331-12339.	4.0	13
196	Separating the influence of projected changes in air temperature and wind on patterns of sea level change and ocean heat content. Journal of Geophysical Research: Oceans, 2015, 120, 5749-5765.	2.6	12
197	A Closer Look at the IPCC Report. Science, 2008, 319, 409-410.	12.6	11
198	Remapping of Greenland ice sheet surface mass balance anomalies for large ensemble sea-level change projections. Cryosphere, 2020, 14, 1747-1762.	3.9	11

#	Article	IF	Citations
199	The Role of Anthropogenic Aerosol Forcing in the 1850–1985 Strengthening of the AMOC in CMIP6 Historical Simulations. Journal of Climate, 2022, 35, 3243-3263.	3.2	11
200	Nonlinearity of ocean heat uptake during warming and cooling in the FAMOUS climate model. Geophysical Research Letters, 2015, 42, 2409-2416.	4.0	10
201	A study of the Dâ^— content of jets at the CERN p collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 244, 566-572.	4.1	9
202	A traceable physical calibration of the vertical advectionâ€diffusion equation for modeling ocean heat uptake. Geophysical Research Letters, 2015, 42, 2333-2341.	4.0	8
203	Correlations between patterns of 19th and 20th century surface temperature change and HadCM2 Climate Model ensembles. Geophysical Research Letters, 2001, 28, 1007-1010.	4.0	7
204	The impact of salinity perturbations on the future uptake of heat by the Atlantic Ocean. Geophysical Research Letters, 2014, 41, 9072-9079.	4.0	7
205	Does Model Calibration Reduce Uncertainty in Climate Projections?. Journal of Climate, 2022, 35, 2585-2602.	3.2	7
206	V: SEA LEVEL: Benefits of GRACE and GOCE to sea level studies. Space Science Reviews, 2003, 108, 307-317.	8.1	6
207	Sea Level Change. , 2019, , 493-499.		6
208	A comparison of extreme European daily precipitation simulated by a global and a regional climate model for present and future climates. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 1005-1015.	2.7	6
209	Experimental limit on the decay W±→π±γ at the cern proton-antiproton collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 241, 283-288.	4.1	5
210	The UA1 upgrade calorimeter trigger processor. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1990, 292, 401-423.	1.6	5
211	The ocean's gravitational potential energy budget in a coupled climate model. Geophysical Research Letters, 2013, 40, 5417-5422.	4.0	5
212	Interpreting Differences in Radiative Feedbacks From Aerosols Versus Greenhouse Gases. Geophysical Research Letters, 2022, 49, .	4.0	5
213	Comment on "Expert assessment of sea-level rise by AD 2100 and AD 2300â€, by Horton etÂal. (2014). Quaternary Science Reviews, 2014, 97, 193-194.	3.0	4
214	Evolving patterns of sterodynamic sea-level rise under mitigation scenarios and insights from linear system theory. Climate Dynamics, 2021, 57, 635-656.	3.8	4
215	UA1 upgrade first-level calorimeter trigger processor. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1989, 279, 297-304.	1.6	3
216	Understanding processes contributing to regional sea level change. Eos, 2011, 92, 328-328.	0.1	3

#	Article	IF	CITATIONS
217	FAMOUS version xotzt (FAMOUS-ice): a general circulation model (GCM) capable of energy- and water-conserving coupling to an ice sheet model. Geoscientific Model Development, 2021, 14, 5769-5787.	3.6	3
218	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.	4.0	2
219	Fast two dimensional cluster finding in particle physics. IEEE Transactions on Nuclear Science, 1989, 36, 370-374.	2.0	1
220	The new UA1 calorimeter trigger processor. IEEE Transactions on Nuclear Science, 1989, 36, 364-369.	2.0	1
221	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.	1.7	1
222	Interpreting the Dependence of Cloudâ€Radiative Adjustment on Forcing Agent. Geophysical Research Letters, 2021, 48, e2021GL093616.	4.0	1
223	Benefits of GRACE and GOCE to Sea Level Studies. Space Sciences Series of ISSI, 2003, , 307-317.	0.0	1
224	Mechanisms of Ocean Heat Uptake along and across Isopycnals. Journal of Climate, 2022, 35, 4885-4904.	3.2	1
225	Technical Summary., 0,, 27-158.		O
226	Camelot — a database for climate model output. Meteorological Applications, 2000, 7, 83-90.	2.1	0
227	Cloud Adjustment and its Role in CO2 Radiative Forcing and Climate Sensitivity: A Review. Space Sciences Series of ISSI, 2011, , 287-303.	0.0	O