Dietmar Dommenget

List of Publications by Year
in descending order

77 papers	5,712 citations	101543 36 h-index	79698 73 g-index
99 all docs	99 docs citations	99 times ranked	5343 citing authors

#	Article	IF	Citations
1	El NiÃ±oâ€“Southern Oscillation complexity. Nature, 2018, 559, 535-545.	27.8	702
2	Increased frequency of extreme LaÂNiÃ±a events under greenhouse warming. Nature Climate Change, 2015, 5, 132-137.	18.8	479
3	Pantropical climate interactions. Science, 2019, 363, .	12.6	419
4	ENSO Atmospheric Teleconnections and Their Response to Greenhouse Gas Forcing. Reviews of Geophysics, 2018, 56, 185-206.	23.0	330
5	A Cautionary Note on the Interpretation of EOFs. Journal of Climate, 2002, 15, 216-225.	3.2	317
6	Higher frequency of Central Pacific El NiÃ±o events in recent decades relative to past centuries. Nature Geoscience, 2019, 12, 450-455.	12.9	192
7	Interdecadal interactions between the tropics and midlatitudes in the Pacific Basin. Geophysical Research Letters, 1999, 26, 615-618.	4.0	190
8	Analysis of the non-linearity in the pattern and time evolution of El NiÃ±o southern oscillation. Climate Dynamics, 2013, 40, 2825-2847.	3.8	177
9	Ocean mixed layer depth: A subsurface proxy of ocean-atmosphere variability. Journal of Geophysical Research, 2006, 111, .	3.3	167
10	The eastward shift of the Walker Circulation in response to global warming and its relationship to ENSO variability. Climate Dynamics, 2014, 43, 2747-2763.	3.8	131
11	The Role of Indian Ocean Sea Surface Temperature in Forcing East African Rainfall Anomalies during Decemberâ€“January 1997/98. Journal of Climate, 1999, 12, 3497-3504.	3.2	129
12	The Impact of North Atlanticâ€“Arctic Multidecadal Variability on Northern Hemisphere Surface Air Temperature. Journal of Climate, 2010, 23, 5668-5677.	3.2	127
13	Tropical Atmosphereâ€“Ocean Interactions in a Conceptual Framework. Journal of Climate, 2009, 22, 550-567.	3.2	125
14	Interannual to Decadal Variability in the Tropical Atlantic. Journal of Climate, 2000, 13, 777-792.	3.2	115
15	Analysis of the Nonlinearity of El NiÃ±oâ€“Southern Oscillation Teleconnections*. Journal of Climate, 2014, 27, 6225-6244.	3.2	110
16	Influences of the tropical Indian and Atlantic Oceans on the predictability of ENSO. Geophysical Research Letters, 2012, 39, .	4.0	92
17	Simulated Tropical Precipitation Assessed across Three Major Phases of the Coupled Model Intercomparison Project (CMIP). Monthly Weather Review, 2020, 148, 3653-3680.	1.4	92
18	The role of ocean dynamics in producing decadal climate variability in the North Pacific. Climate Dynamics, 2001, 18, 51-70.	3.8	89

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19	El NiÃ±o and La NiÃ±a amplitude asymmetry caused by atmospheric feedbacks. Geophysical Research Letters, 2010, 37, .	4.0	88
20	Impacts of the tropical Indian and Atlantic Oceans on ENSO. Geophysical Research Letters, 2006, 33, .	4.0	84
21	Mean-state dependence of ENSO atmospheric feedbacks in climate models. Climate Dynamics, 2018, 50, 3171-3194.	3.8	79
22	Origins of the midlatitude Pacific decadal variability. Geophysical Research Letters, 1999, 26, 1453-1456.	4.0	77
23	May common model biases reduce CMIP5â€™s ability to simulate the recent Pacific La NiÃ±a-like cooling?. Climate Dynamics, 2018, 50, 1335-1351.	3.8	75
24	Amplification of El NiÃ±o by cloud longwave coupling to atmospheric circulation. Nature Geoscience, 2016, 9, 106-110.	12.9	70
25	Reduced Complexity Model Intercomparison Project Phase 1: introduction and evaluation of global-mean temperature response. Geoscientific Model Development, 2020, 13, 5175-5190.	3.6	70
26	The Oceanâ€™s Role in Continental Climate Variability and Change. Journal of Climate, 2009, 22, 4939-4952.	3.2	66
27	Generation of hyper climate modes. Geophysical Research Letters, 2008, 35, .	4.0	59
28	Error compensation of ENSO atmospheric feedbacks in climate models and its influence on simulated ENSO dynamics. Climate Dynamics, 2019, 53, 155-172.	3.8	56
29	Evaluating EOF modes against a stochastic null hypothesis. Climate Dynamics, 2007, 28, 517-531.	3.8	49
30	The slab ocean El NiÃ±o. Geophysical Research Letters, 2010, 37, .	4.0	48
31	The Tropospheric Landâ€“Sea Warming Contrast as the Driver of Tropical Sea Level Pressure Changes. Journal of Climate, 2013, 26, 1387-1402.	3.2	47
32	Dynamics and Predictability of El NiÃ±oâ€“Southern Oscillation: An Australian Perspective on Progress and Challenges. Bulletin of the American Meteorological Society, 2019, 100, 403-420.	3.3	46
33	An objective analysis of the observed spatial structure of the tropical Indian Ocean SST variability. Climate Dynamics, 2011, 36, 2129-2145.	3.8	40
34	An evaluation of ENSO dynamics in CMIP simulations in the framework of the recharge oscillator model. Climate Dynamics, 2018, 51, 1753-1771.	3.8	40
35	Separating the Influences of Land Warming, the Direct CO₂ Effect, the Plant Physiological Effect, and SST Warming on Regional Precipitation Changes. Journal of Geophysical Research D: Atmospheres, 2019, 124, 624-640.	3.3	40
36	Analysis of observed and simulated SST spectra in the midlatitudes. Climate Dynamics, 2002, 19, 277-288.	3.8	39

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37	An evaluation of the CMIP3 and CMIP5 simulations in their skill of simulating the spatial structure of SST variability. Climate Dynamics, 2015, 44, 95-114.	3.8	38
38	ENSO influence on the North Atlantic European climate: a non-linear and non-stationary approach. Climate Dynamics, 2016, 47, 2071-2084.	3.8	37
39	The effects of remote SST forcings on ENSO dynamics, variability and diversity. Climate Dynamics, 2017, 49, 2605-2624.	3.8	37
40	Conceptual understanding of climate change with a globally resolved energy balance model. Climate Dynamics, 2011, 37, 2143-2165.	3.8	33
41	Analysis of the Slab Ocean El Nino atmospheric feedbacks in observed and simulated ENSO dynamics. Climate Dynamics, 2014, 42, 3187-3205.	3.8	32
42	Predictions of Indian Ocean SST Indices with a Simple Statistical Model: A Null Hypothesis. Journal of Climate, 2009, 22, 4930-4938.	3.2	30
43	The seasonally changing cloud feedbacks contribution to the ENSO seasonal phase-locking. Climate Dynamics, 2016, 47, 3661-3672.	3.8	26
44	Walker circulation controls ENSO atmospheric feedbacks in uncoupled and coupled climate model simulations. Climate Dynamics, 2020, 54, 2831-2846.	3.8	21
45	Is the Indian Ocean SST variability a homogeneous diffusion process?. Climate Dynamics, 2009, 33, 535-547.	3.8	20
46	Atmosphere-only GCM (ACCESS1.0) simulations with prescribed land surface temperatures. Geoscientific Model Development, 2016, 9, 2077-2098.	3.6	20
47	What Controls ENSOâ€Amplitude Diversity in Climate Models?. Geophysical Research Letters, 2018, 45, 1989-1996.	4.0	18
48	Assessing ENSO Simulations and Predictions Using Adjoint Ocean State Estimation. Journal of Climate, 2004, 17, 4301-4315.	3.2	17
49	Factors influencing the skill of synthesized satellite wind products in the tropical Pacific. Journal of Geophysical Research: Oceans, 2017, 122, 1072-1089.	2.6	15
50	Widespread Reemergence of Sea Surface Temperature Anomalies in the Global Oceans, Including Tropical Regions Forced by Reemerging Winds. Geophysical Research Letters, 2018, 45, 7683-7691.	4.0	15
51	Trans-basin Atlantic-Pacific connections further weakened by common model Pacific mean SST biases. Nature Communications, 2020, 11, 5677.	12.8	15
52	Comparing the spatial structure of variability in two datasets against each other on the basis of EOF-modes. Climate Dynamics, 2014, 42, 1631-1648.	3.8	13
53	Landâ€sea thermal contrast determines the trend of Walker circulation simulated in atmospheric general circulation models. Geophysical Research Letters, 2017, 44, 5854-5862.	4.0	13
54	Atmospheric response to sea surface temperature anomalies during El Nino 1997/98 as simulated by ECHAM4. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 2175-2198.	2.7	13

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55	The influence of global sea surface temperature variability on the large-scale land surface temperature. Climate Dynamics, 2015, 44, 2159-2176.	3.8	12
56	An ensemble of AMIP simulations with prescribed land surface temperatures. Geoscientific Model Development, 2018, 11, 3865-3881.	3.6	12
57	Simulated future changes in ENSO dynamics in the framework of the linear recharge oscillator model. Climate Dynamics, 2019, 53, 4233-4248.	3.8	12
58	ENSO dynamics and diversity resulting from the recharge oscillator interacting with the slab ocean. Climate Dynamics, 2016, 46, 1665-1682.	3.8	11
59	The leading modes of decadal SST variability in the Southern Ocean in CMIP5 simulations. Climate Dynamics, 2016, 47, 1775-1792.	3.8	11
60	The role of local atmospheric forcing on the modulation of the ocean mixed layer depth in reanalyses and a coupled single column ocean model. Climate Dynamics, 2016, 47, 2991-3010.	3.8	11
61	A hydrological cycle model for the Globally Resolved Energy Balance (GREB) model v1.0. Geoscientific Model Development, 2019, 12, 425-440.	3.6	11
62	A simple model perturbed physics study of the simulated climate sensitivity uncertainty and its relation to control climate biases. Climate Dynamics, 2016, 46, 427-447.	3.8	10
63	A Caveat Note on Tuning in the Development of Coupled Climate Models. Journal of Advances in Modeling Earth Systems, 2018, 10, 78-97.	3.8	10
64	The Annual Peak in the SST Anomaly Spectrum. Journal of Climate, 2008, 21, 2810-2823.	3.2	9
65	Analysis of the Model Climate Sensitivity Spread Forced by Mean Sea Surface Temperature Biases. Journal of Climate, 2012, 25, 7147-7162.	3.2	8
66	MEETING SUMMARIES. Bulletin of the American Meteorological Society, 2015, 96, 1969-1972.	3.3	8
67	The Monash Simple Climate Model experiments (MSCM-DB v1.0): an interactive database of mean climate, climate change, and scenario simulations. Geoscientific Model Development, 2019, 12, 2155-2179.	3.6	6
68	Wind Spatial Structure Triggers ENSOâ€™s Oceanic Warm Water Volume Changes. Journal of Climate, 2021, 34, 1985-1999.	3.2	6
69	Comments on â€œThe Relationship between Landâ€“Ocean Surface Temperature Contrast and Radiative Forcingâ€• Journal of Climate, 2012, 25, 3437-3440.	3.2	3
70	A diagnostic model for the large-scale tropical circulation based on moist static energy balance. Climate Dynamics, 2021, 57, 3159-3181.	3.8	3
71	Basin Interactions and Predictability. , 2020, , 258-292.		3
72	Multidecadal variability of ENSO in a recharge oscillator framework. Environmental Research Letters, 2022, 17, 074008.	5.2	3

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73	Atmospheric response to sea surface temperature anomalies during El NiÃ±o 1997/98 as simulated by ECHAM4. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 2175-2198.	2.7	2
74	Conceptual deconstruction of the simulated precipitation response to climate change. Climate Dynamics, 2020, 55, 613-630.	3.8	2
75	Distinct Off-Equatorial Zonal Wind Stress and Oceanic Responses for EP- and CP-Type ENSO Events. Journal of Climate, 2022, 35, 1423-1440.	3.2	2
76	The fingerprint of global warming in the Tropical Pacific. Advances in Atmospheric Sciences, 2016, 33, 533-534.	4.3	0
77	GREB-ISM v1.0: A coupled ice sheet model for the Globally Resolved Energy Balance model for global simulations on timescales of 100â€‰kyr. Geoscientific Model Development, 2022, 15, 3691-3719.	3.6	0