Francis Codron

List of Publications by Year
in descending order

51 papers	5,190 citations	279798 23 h-index	182427 51 g-index
56 all docs	56 docs citations	56 times ranked	7467 citing authors

#	Article	IF	Citations
1	Climate change projections using the IPSL-CM5 Earth System Model: from CMIP3 to CMIP5. Climate Dynamics, 2013, 40, 2123-2165.	3.8	1,425
2	The LMDZ4 general circulation model: climate performance and sensitivity to parametrized physics with emphasis on tropical convection. Climate Dynamics, 2006, 27, 787-813.	3.8	795
3	Presentation and Evaluation of the IPSLâ€CM6Aâ€LR Climate Model. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS002010.	3.8	541
4	Winter 2010 in Europe: A cold extreme in a warming climate. Geophysical Research Letters, 2010, 37, .	4.0	379
5	Impact of the LMDZ atmospheric grid configuration on the climate and sensitivity of the IPSL-CM5A coupled model. Climate Dynamics, 2013, 40, 2167-2192.	3.8	250
6	Key features of the IPSL ocean atmosphere model and its sensitivity to atmospheric resolution. Climate Dynamics, 2010, 34, 1-26.	3.8	235
7	The extreme physical properties of the CoRoT-7b super-Earth. Icarus, 2011, 213, 1-11.	2.5	122
8	West Antarctic surface melt triggered by atmospheric rivers. Nature Geoscience, 2019, 12, 911-916.	12.9	112
9	The PreVOCA experiment: modeling the lower troposphere in the Southeast Pacific. Atmospheric Chemistry and Physics, 2010, 10, 4757-4774.	4.9	109
10	Stratospheric ozone depletion reduces ocean carbon uptake and enhances ocean acidification. Geophysical Research Letters, 2009, 36, .	4.0	108
11	Exploring the faint young Sun problem and the possible climates of the Archean Earth with a 3â€D GCM. Journal of Geophysical Research D: Atmospheres, 2013, 118, 10,414.	3.3	106
12	Statistical downscaling of sea-surface wind over the Peruâ€“Chile upwelling region: diagnosing the impact of climate change from the IPSL-CM4 model. Climate Dynamics, 2011, 36, 1365-1378.	3.8	89
13	What dynamics drive future wind scenarios for coastal upwelling off Peru and Chile?. Climate Dynamics, 2014, 43, 1893-1914.	3.8	73
14	Southern westerlies in LGM and future (RCP4.5) climates. Climate of the Past, 2013, 9, 517-524.	3.4	64
15	Antarctic Atmospheric River Climatology and Precipitation Impacts. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033788.	3.3	60
16	<scp>P</scp>eruâ€<scp>C</scp>hile upwelling dynamics under climate change. Journal of Geophysical Research: Oceans, 2015, 120, 1152-1172.	2.6	52
17	Relation between Annular Modes and the Mean State: Southern Hemisphere Summer. Journal of Climate, 2005, 18, 320-330.	3.2	48
18	The tropical rain belts with an annual cycle and a continent model intercomparison project: TRACMIP. Journal of Advances in Modeling Earth Systems, 2016, 8, 1868-1891.	3.8	47

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19	Intense atmospheric rivers can weaken ice shelf stability at the Antarctic Peninsula. Communications Earth & Environment, 2022, 3, .	6.8	46
20	Relations between Annular Modes and the Mean State: Southern Hemisphere Winter. Journals of the Atmospheric Sciences, 2007, 64, 3328-3339.	1.7	40
21	Atmospheric Circulations Induced by a Midlatitude SST Front: A GCM Study. Journal of Climate, 2012, 25, 1847-1853.	3.2	39
22	Separation of a Coastal Current at a Strait Level: Case of the Strait of Sicily. Journal of Physical Oceanography, 1998, 28, 1346-1362.	1.7	31
23	Thermal light curves of Earth-like planets: 1. Varying surface and rotation on planets in a terrestrial orbit. Icarus, 2016, 269, 98-110.	2.5	29
24	Multicentennial Variability Driven by Salinity Exchanges Between the Atlantic and the Arctic Ocean in a Coupled Climate Model. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002366.	3.8	28
25	Acceleration of western Arctic sea ice loss linked to the Pacific North American pattern. Nature Communications, 2021, 12, 1519.	12.8	27
26	Ekman heat transport for slab oceans. Climate Dynamics, 2012, 38, 379-389.	3.8	23
27	Southern Hemisphere Jet Variability in the IPSL GCM at Varying Resolutions. Journals of the Atmospheric Sciences, 2012, 69, 3788-3799.	1.7	22
28	The Southern Ocean Sea Surface Temperature Response to Ozone Depletion: A Multimodel Comparison. Journal of Climate, 2019, 32, 5107-5121.	3.2	22
29	North-Atlantic dynamics and European temperature extremes in the IPSL model: sensitivity to atmospheric resolution. Climate Dynamics, 2013, 40, 2293-2310.	3.8	21
30	Differing Impacts of Resolution Changes in Latitude and Longitude on the Midlatitudes in the LMDZ Atmospheric GCM. Journal of Climate, 2011, 24, 5831-5849.	3.2	18
31	Relationship Between Weather Regimes and Atmospheric Rivers in East Antarctica. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035294.	3.3	18
32	Mechanisms Determining the Winter Atmospheric Response to the Atlantic Overturning Circulation. Journal of Climate, 2016, 29, 3767-3785.	3.2	16
33	Influence of Mean State Changes on the Structure of ENSO in a Tropical Coupled GCM. Journal of Climate, 2001, 14, 730-742.	3.2	14
34	Impact of Anomalous Northward Oceanic Heat Transport on Global Climate in a Slab Ocean Setting. Journal of Climate, 2015, 28, 2650-2664.	3.2	14
35	Positive and Negative Eddy Feedbacks Acting on Midlatitude Jet Variability in a Three-Level Quasigeostrophic Model. Journals of the Atmospheric Sciences, 2017, 74, 1635-1649.	1.7	14
36	The partitioning of poleward energy transport response between the atmosphere and Ekman flux to prescribed surface forcing in a simplified GCM. Geoscience Letters, 2018, 5, .	3.3	12

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37	Saturation limiters for water vapour advection schemes: impact on orographic precipitation. Tellus, Series A: Dynamic Meteorology and Oceanography, 2002, 54, 338-349.	1.7	11
38	Relation between Large-Scale Circulation and European Winter Temperature: Does It Hold under Warmer Climate?. Journal of Climate, 2010, 23, 3752-3760.	3.2	11
39	Understanding the <scp>W</scp>est <scp>A</scp>frican <scp>M</scp>onsoon from the analysis of diabatic heating distributions as simulated by climate models. Journal of Advances in Modeling Earth Systems, 2017, 9, 239-270.	3.8	10
40	Historically-based run-time bias corrections substantially improve model projections of 100 years of future climate change. Communications Earth & Environment, 2020, 1, .	6.8	10
41	Transient Climate Response to Arctic Sea Ice Loss with Two Ice-Constraining Methods. Journal of Climate, 2021, 34, 3295-3310.	3.2	10
42	Three variables are better than one: detection of european winter windstorms causing important damages. Natural Hazards and Earth System Sciences, 2014, 14, 981-993.	3.6	8
43	AMOC and summer sea ice as key drivers of the spread in mid-holocene winter temperature patterns over Europe in PMIP3 models. Global and Planetary Change, 2020, 184, 103055.	3.5	8
44	A Short-Term Negative Eddy Feedback on Midlatitude Jet Variability due to Planetary Wave Reflection. Journals of the Atmospheric Sciences, 2016, 73, 4311-4328.	1.7	7
45	Saturation limiters for water vapour advection schemes: impact on orographic precipitation. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 54, 338.	1.7	6
46	Examining the <scp>W</scp>est <scp>A</scp>frican <scp>M</scp>onsoon circulation response to atmospheric heating in a <scp>GCM</scp> dynamical core. Journal of Advances in Modeling Earth Systems, 2017, 9, 149-167.	3.8	6
47	Sensitivity of the tropical Pacific to a change of orbital forcing in two versions of a coupled GCM. Climate Dynamics, 2001, 17, 187-203.	3.8	5
48	An Improved Scheme for Interpolating between an Atmospheric Model and Underlying Surface Grids near Orography and Ocean Boundaries. Monthly Weather Review, 2000, 128, 1177-1186.	1.4	2
49	Influence of the Atlantic Meridional Overturning Circulation on the Tropical Climate Response to CO 2 Forcing. Geophysical Research Letters, 2018, 45, 8519-8528.	4.0	2
50	Effect of Upper- and Lower-Level Baroclinicity on the Persistence of the Leading Mode of Midlatitude Jet Variability. Journals of the Atmospheric Sciences, 2019, 76, 155-169.	1.7	2
51	Comment on â€œCharacteristic Time Scales of Decadal to Centennial Changes in Global Surface Temperatures Over the Past 150 Yearsâ€•by J. L. Le MouÃ«l, F. Lopes, and V. Courtillot. Earth and Space Science, 2021, 8, e2020EA001298.	2.6	1