Sergey Kravtsov

List of Publications by Year
in descending order

57 papers	1,387 citations	361413 20 h-index	345221 36 g-index
63 all docs	63 docs citations	63 times ranked	1414 citing authors

#	Article	IF	Citations
1	A new dynamical mechanism for major climate shifts. Geophysical Research Letters, 2007, 34, .	4.0	157
2	Atlantic Multidecadal Oscillation and Northern Hemisphereâ€™s climate variability. Climate Dynamics, 2012, 38, 929-949.	3.8	137
3	Multilevel Regression Modeling of Nonlinear Processes: Derivation and Applications to Climatic Variability. Journal of Climate, 2005, 18, 4404-4424.	3.2	121
4	A Hierarchy of Data-Based ENSO Models. Journal of Climate, 2005, 18, 4425-4444.	3.2	100
5	Connecting past and present climate variability to the water levels of Lakes Michigan and Huron. Geophysical Research Letters, 2010, 37, .	4.0	72
6	Multidecadal Climate Variability in Observed and Modeled Surface Temperatures*. Journal of Climate, 2008, 21, 1104-1121.	3.2	63
7	The Effects of Mesoscale Oceanâ€“Atmosphere Coupling on the Large-Scale Ocean Circulation. Journal of Climate, 2009, 22, 4066-4082.	3.2	55
8	Pronounced differences between observed and CMIP5â€simulated multidecadal climate variability in the twentieth century. Geophysical Research Letters, 2017, 44, 5749-5757.	4.0	50
9	Empirical Mode Reduction in a Model of Extratropical Low-Frequency Variability. Journals of the Atmospheric Sciences, 2006, 63, 1859-1877.	1.7	46
10	Ocean Eddy Dynamics in a Coupled Oceanâ€“Atmosphere Model*. Journal of Physical Oceanography, 2007, 37, 1103-1121.	1.7	40
11	Two contrasting views of multidecadal climate variability in the twentieth century. Geophysical Research Letters, 2014, 41, 6881-6888.	4.0	34
12	Global-scale multidecadal variability missing in state-of-the-art climate models. Npj Climate and Atmospheric Science, 2018, 1, .	6.8	33
13	Time scales of the European surface air temperature variability: The role of the 7â€“8 year cycle. Geophysical Research Letters, 2016, 43, 902-909.	4.0	28
14	Multiple Regimes and Low-Frequency Oscillations in the Northern Hemisphereâ€™s Zonal-Mean Flow. Journals of the Atmospheric Sciences, 2006, 63, 840-860.	1.7	26
15	Bimodal Behavior in the Zonal Mean Flow of a Baroclinic Î²-Channel Model. Journals of the Atmospheric Sciences, 2005, 62, 1746-1769.	1.7	25
16	Quasi-periodic decadal cycles in levels of lakes Michigan and Huron. Journal of Great Lakes Research, 2009, 35, 30-35.	1.9	23
17	Reduced models of atmospheric low-frequency variability: Parameter estimation and comparative performance. Physica D: Nonlinear Phenomena, 2010, 239, 145-166.	2.8	23
18	Synchronization and causality across time scales in El NiÃ±o Southern Oscillation. Npj Climate and Atmospheric Science, 2018, 1, .	6.8	23

#	ARTICLE	IF	CITATIONS
19	Dynamical Origin of Low-Frequency Variability in a Highly Nonlinear Midlatitude Coupled Model. Journal of Climate, 2006, 19, 6391-6408.	3.2	22
20	A highly nonlinear coupled mode of decadal variability in a mid-latitude oceanâ€"atmosphere model. Dynamics of Atmospheres and Oceans, 2007, 43, 123-150.	1.8	22
21	Interdecadal Variability in a Hybrid Coupled Oceanâ€"Atmosphereâ€"Sea Ice Model. Journal of Physical Oceanography, 2004, 34, 1756-1775.	1.7	21
22	Attribution of Decadal-Scale Lake-Level Trends in the Michigan-Huron System. Water (Switzerland), 2014, 6, 2278-2299.	2.7	20
23	On semiâ€empirical decomposition of multidecadal climate variability into forced and internally generated components. International Journal of Climatology, 2017, 37, 4417-4433.	3.5	19
24	Relationship between synoptic weather disturbances and particulate matter air pollution over the United States. Journal of Geophysical Research, 2010, 115, .	3.3	16
25	Stochastic Parameterization Schemes for Use in Realistic Climate Models. Journals of the Atmospheric Sciences, 2011, 68, 284-299.	1.7	16
26	Midlatitude ocean-atmosphere interaction in an idealized coupled model. Climate Dynamics, 2002, 19, 693-711.	3.8	15
27	Signatures of Nonlinear Dynamics in an Idealized Atmospheric Model. Journals of the Atmospheric Sciences, 2011, 68, 3-12.	1.7	15
28	Low-Frequency Variability in a BaroclinicÎ²Channel with Landâ€"Sea Contrast*. Journals of the Atmospheric Sciences, 2003, 60, 2267-2293.	1.7	14
29	An empirical model of decadal ENSO variability. Climate Dynamics, 2012, 39, 2377-2391.	3.8	13
30	Decadal Variations of North Atlantic Sea Surface Temperature in Observations and CMIP3 Simulations*. Journal of Climate, 2010, 23, 4619-4636.	3.2	12
31	Numerical solutions of the singular vortex problem. Physics of Fluids, 2019, 31, 066602.	4.0	11
32	Comment on â€œAtlantic and Pacific multidecadal oscillations and Northern Hemisphere temperaturesâ€. Science, 2015, 350, 1326-1326.	12.6	10
33	Multiple climate regimes in an idealized lakeâ€"iceâ€"atmosphere model. Climate Dynamics, 2018, 50, 655-676.	3.8	10
34	A mechanistic model of mid-latitude decadal climate variability. Physica D: Nonlinear Phenomena, 2008, 237, 584-599.	2.8	8
35	Kinematics of Eddyâ€"Mean Flow Interaction in an Idealized Atmospheric Model. Journals of the Atmospheric Sciences, 2013, 70, 2574-2595.	1.7	8
36	Analysis of 20th century surface air temperature using linear dynamical modes. Chaos, 2020, 30, 123110.	2.5	8

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37	An empirical stochastic model of sea-surface temperatures and surface winds over the Southern Ocean. Ocean Science, 2011, 7, 755-770.	3.4	7
38	Comment on â€œComparison of Low-Frequency Internal Climate Variability in CMIP5 Models and Observationsâ€ Journal of Climate, 2017, 30, 9763-9772.	3.2	7
39	Empirical Modeling and Stochastic Simulation of Sea Level Pressure Variability. Journal of Applied Meteorology and Climatology, 2016, 55, 1197-1219.	1.5	6
40	North Atlantic climate variability in coupled models and data. Nonlinear Processes in Geophysics, 2008, 15, 13-24.	1.3	5
41	The Relationship between Statistically Linear and Nonlinear Feedbacks and Zonal-Mean Flow Variability in an Idealized Climate Model. Journals of the Atmospheric Sciences, 2009, 66, 353-372.	1.7	5
42	Dynamics and Predictability of Hemispheric-Scale Multidecadal Climate Variability in an Observationally Constrained Mechanistic Model. Journal of Climate, 2020, 33, 4599-4620.	3.2	5
43	Predictability Associated with Nonlinear Regimes in an Atmospheric Model. Journals of the Atmospheric Sciences, 2012, 69, 1137-1154.	1.7	4
44	Origin of Non-Gaussian Regimes and Predictability in an Atmospheric Model. Journals of the Atmospheric Sciences, 2012, 69, 2587-2599.	1.7	4
45	Reconstructing Sea Level Pressure Variability via a Feature Tracking Approach. Journals of the Atmospheric Sciences, 2015, 72, 487-506.	1.7	4
46	Role of Nonlinear Dynamics in Accelerated Warming of Great Lakes. , 2018, , 279-295.		4
47	Monopoles in a uniform zonal flow on a quasi-geostrophic -plane: effects of the Galilean non-invariance of the rotating shallow-water equations. Journal of Fluid Mechanics, 2021, 909, .	3.4	4
48	Sea Ice and Climate. Part II: Model Climate Stability to Perturbations of the Hydrological Cycle. Journal of Climate, 2000, 13, 463-487.	3.2	3
49	On the role of thermohaline advection and sea ice in glacial transitions. Journal of Geophysical Research, 2003, 108, .	3.3	3
50	On the mechanisms of late 20th century seaâ€surface temperature trends over the Antarctic Circumpolar Current. Journal of Geophysical Research, 2011, 116, .	3.3	2
51	A Closer Look at Data Independence: Comment on â€œLies, Damned Lies, and Statistics (in Geology)â€ Eos, 2011, 92, 65-65.	0.1	1
52	A virtual climate library of surface temperature over North America for 1979â€“2015. Scientific Data, 2017, 4, 170155.	5.3	1
53	Lorenz-63 Model as a Metaphor for Transient Complexity in Climate. Entropy, 2021, 23, 951.	2.2	1
54	Monopoles in a zonal flow with constant shear on a quasi-geostrophic f-plane: Effects of Galilean non-invariance. Physics of Fluids, 2021, 33, 116606.	4.0	1

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55	Objective methods for thinning the frequency of reforecasts while meeting post-processing and model validation needs. Weather and Forecasting, 2022, , .	1.4	1
56	Multiple Equilibria and Transitions in a Coupled Oceanâ€“Atmosphere Box Model. Journal of Physical Oceanography, 1998, 28, 389-397.	1.7	0
57	On Time Scales of Intrinsic Oscillations in the Climate System. Entropy, 2021, 23, 459.	2.2	0