# Valerio Lucarini

#### List of Publications by Citations

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168 3,698 36 51 h-index g-index citations papers 6.22 215 4,275 3.7 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
168	Stochastic Parameterization: Toward a New View of Weather and Climate Models. <i>Bulletin of the American Meteorological Society</i> , <b>2017</b> , 98, 565-588	6.1	176
167	Numerical Bifurcation Methods and their Application to Fluid Dynamics: Analysis beyond Simulation. <i>Communications in Computational Physics</i> , <b>2014</b> , 15, 1-45	2.4	111
166	Seasonal cycle of precipitation over major river basins in South and Southeast Asia: A review of the CMIP5 climate models data for present climate and future climate projections. <i>Atmospheric Research</i> , <b>2016</b> , 180, 42-63	5.4	93
165	2016,		84
164	Stochastic climate theory and modeling. Wiley Interdisciplinary Reviews: Climate Change, 2015, 6, 63-78	8.4	82
163	ENERGETICS OF CLIMATE MODELS: NET ENERGY BALANCE AND MERIDIONAL ENTHALPY TRANSPORT. <i>Reviews of Geophysics</i> , <b>2011</b> , 49,	23.1	81
162	Mathematical and physical ideas for climate science. <i>Reviews of Geophysics</i> , <b>2014</b> , 52, 809-859	23.1	80
161	Early 21st century snow cover state over the western river basins of the Indus River system. Hydrology and Earth System Sciences, <b>2014</b> , 18, 4077-4100	5.5	77
160	A statistical mechanical approach for the computation of the climatic response to general forcings. <i>Nonlinear Processes in Geophysics</i> , <b>2011</b> , 18, 7-28	2.9	71
159	The physics of climate variability and climate change. Reviews of Modern Physics, 2020, 92,	40.5	68
158	Intercomparison of the northern hemisphere winter mid-latitude atmospheric variability of the IPCC models. <i>Climate Dynamics</i> , <b>2007</b> , 28, 829-848	4.2	66
157	Thermodynamic analysis of snowball Earth hysteresis experiment: Efficiency, entropy production and irreversibility. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2010</b> , 136, 2-11	6.4	64
156	Prevailing climatic trends and runoff response from HindukushRarakoramHimalaya, upper Indus Basin. <i>Earth System Dynamics</i> , <b>2017</b> , 8, 337-355	4.8	60
155	A new framework for climate sensitivity and prediction: a modelling perspective. <i>Climate Dynamics</i> , <b>2016</b> , 46, 1459-1471	4.2	59
154	Predicting Climate Change Using Response Theory: Global Averages and Spatial Patterns. <i>Journal of Statistical Physics</i> , <b>2017</b> , 166, 1036-1064	1.5	58
153	Hydrological cycle over South and Southeast Asian river basins as simulated by PCMDI/CMIP3 experiments. <i>Earth System Dynamics</i> , <b>2013</b> , 4, 199-217	4.8	58
152	Multi-level Dynamical Systems: Connecting the Ruelle Response Theory and the Mori-Zwanzig Approach. <i>Journal of Statistical Physics</i> , <b>2013</b> , 151, 850-860	1.5	56

# (2016-2013)

151	Bistability of the climate around the habitable zone: A thermodynamic investigation. <i>Icarus</i> , <b>2013</b> , 226, 1724-1742	3.8	54	
150	Analysis of rainfall seasonality from observations and climate models. <i>Climate Dynamics</i> , <b>2015</b> , 44, 3281	-343201	54	
149	Climate of Earth-like planets with high obliquity and eccentric orbits: Implications for habitability conditions. <i>Planetary and Space Science</i> , <b>2015</b> , 105, 43-59	2	51	
148	Hayashi spectra of the northern hemisphere mid-latitude atmospheric variability in the NCEPNCAR and ECMWF reanalyses. <i>Climate Dynamics</i> , <b>2005</b> , 25, 639-652	4.2	51	
147	Thermodynamic efficiency and entropy production in the climate system. <i>Physical Review E</i> , <b>2009</b> , 80, 021118	2.4	49	
146	Projected changes of rainfall seasonality and dry spells in a high greenhouse gas emissions scenario. <i>Climate Dynamics</i> , <b>2016</b> , 46, 1331-1350	4.2	48	
145	Response Theory for Equilibrium and Non-Equilibrium Statistical Mechanics: Causality and Generalized Kramers-Kronig Relations. <i>Journal of Statistical Physics</i> , <b>2008</b> , 131, 543-558	1.5	48	
144	Numerical Convergence of the Block-Maxima Approach to the Generalized Extreme Value Distribution. <i>Journal of Statistical Physics</i> , <b>2011</b> , 145, 1156-1180	1.5	47	
143	Regional climate modelsSperformance in representing precipitation and temperature over selected Mediterranean areas. <i>Hydrology and Earth System Sciences</i> , <b>2013</b> , 17, 5041-5059	5.5	44	
142	Evidence of Dispersion Relations for the Nonlinear Response of the Lorenz 63 System. <i>Journal of Statistical Physics</i> , <b>2009</b> , 134, 381-400	1.5	42	
141	Edge states in the climate system: exploring global instabilities and critical transitions. <i>Nonlinearity</i> , <b>2017</b> , 30, R32-R66	1.7	41	
140	Universal Behaviour of Extreme Value Statistics for Selected Observables of Dynamical Systems. Journal of Statistical Physics, 2012, 147, 63-73	1.5	40	
139	Disentangling multi-level systems: averaging, correlations and memory. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , <b>2012</b> , 2012, P03003	1.9	38	
138	Kramers-Kronig relations and sum rules of negative refractive index media. <i>European Physical Journal B</i> , <b>2004</b> , 41, 61-65	1.2	38	
137	From Symmetry Breaking to Poisson Point Process in 2D Voronoi Tessellations: the Generic Nature of Hexagons. <i>Journal of Statistical Physics</i> , <b>2008</b> , 130, 1047-1062	1.5	37	
136	Transitions across Melancholia States in a Climate Model: Reconciling the Deterministic and Stochastic Points of View. <i>Physical Review Letters</i> , <b>2019</b> , 122, 158701	7.4	36	
135	Lessons on Climate Sensitivity From Past Climate Changes. Current Climate Change Reports, <b>2016</b> , 2, 146	89158	36	
134	Statistical and dynamical properties of covariant lyapunov vectors in a coupled atmosphere-ocean modelfhultiscale effects, geometric degeneracy, and error dynamics. <i>Journal of Physics A:</i> Mathematical and Theoretical, <b>2016</b> , 49, 224001	2	36	

133	Comparison of mean climate trends in the Northern Hemisphere between National Centers for Environmental Prediction and two atmosphere-ocean model forced runs. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ACL 7-1		36
132	Thermodynamics of climate change: generalized sensitivities. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 9729-9737	6.8	35
131	Fluctuations, response, and resonances in a simple atmospheric model. <i>Physica D: Nonlinear Phenomena</i> , <b>2017</b> , 349, 62-76	3.3	33
130	Extreme value theory for singular measures. <i>Chaos</i> , <b>2012</b> , 22, 023135	3.3	33
129	Earth System Model Evaluation Tool (ESMValTool) v2.0 Ian extended set of large-scale diagnostics for quasi-operational and comprehensive evaluation of Earth system models in CMIP. <i>Geoscientific Model Development</i> , <b>2020</b> , 13, 3383-3438	6.3	32
128	Seasonality of the hydrological cycle in major South and Southeast Asian river basins as simulated by PCMDI/CMIP3 experiments. <i>Earth System Dynamics</i> , <b>2014</b> , 5, 67-87	4.8	31
127	Stochastic Perturbations to Dynamical Systems: A Response Theory Approach. <i>Journal of Statistical Physics</i> , <b>2012</b> , 146, 774-786	1.5	31
126	Habitability and Multistability in Earth-like Planets. <i>Astronomische Nachrichten</i> , <b>2013</b> , 334, 576-588	0.7	31
125	Mechanisms of femtosecond laser-induced refractive index modification of poly(methyl methacrylate). <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2010</b> , 27, 107	1.7	30
124	New Results on the Thermodynamic Properties of the Climate System. <i>Journals of the Atmospheric Sciences</i> , <b>2011</b> , 68, 2438-2458	2.1	30
123	Towards a General Theory of Extremes for Observables of Chaotic Dynamical Systems. <i>Journal of Statistical Physics</i> , <b>2014</b> , 154, 723-750	1.5	28
122	Equivalence of Non-equilibrium Ensembles and Representation of Friction in Turbulent Flows: The Lorenz 96 Model. <i>Journal of Statistical Physics</i> , <b>2014</b> , 156, 1027-1065	1.5	28
121	Detection and correction of the misplacement error in terahertz spectroscopy by application of singly subtractive Kramers-Kronig relations. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	28
120	Extreme Value Statistics of the Total Energy in an Intermediate-Complexity Model of the Midlatitude Atmospheric Jet. Part I: Stationary Case. <i>Journals of the Atmospheric Sciences</i> , <b>2007</b> , 64, 213	<del>7-2</del> 15	8 <sup>27</sup>
119	Total cloud cover from satellite observations and climate models. <i>Atmospheric Research</i> , <b>2012</b> , 107, 161	-ჭ.740	26
118	Multiply subtractive KramersKrflig relations for arbitrary-order harmonic generation susceptibilities. <i>Optics Communications</i> , <b>2003</b> , 218, 409-414	2	26
117	Global instability in the GhilBellers model. Climate Dynamics, 2015, 44, 3361-3381	4.2	25
116	Three-Dimensional Random Voronoi Tessellations: From Cubic Crystal Lattices to Poisson Point Processes. <i>Journal of Statistical Physics</i> , <b>2009</b> , 134, 185-206	1.5	25

# (2013-2007)

115	Parametric smoothness and self-scaling of the statistical properties of a minimal climate model: What beyond the mean field theories?. <i>Physica D: Nonlinear Phenomena</i> , <b>2007</b> , 234, 105-123	3.3	25
114	Hydrological cycle in the Danube basin in present-day and XXII century simulations by IPCCAR4 global climate models. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		24
113	Does the Danube exist? Versions of reality given by various regional climate models and climatological data sets. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		24
112	A proof of concept for scale-adaptive parametrizations: the case of the Lorenz <b>9</b> 6 model. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2018</b> , 144, 63-75	6.4	24
111	Crisis of the chaotic attractor of a climate model: a transfer operator approach. <i>Nonlinearity</i> , <b>2018</b> , 31, 2221-2251	1.7	23
110	Extreme value statistics for dynamical systems with noise. <i>Nonlinearity</i> , <b>2013</b> , 26, 2597-2622	1.7	23
109	Extreme Value Statistics of the Total Energy in an Intermediate-Complexity Model of the Midlatitude Atmospheric Jet. Part II: Trend Detection and Assessment. <i>Journals of the Atmospheric Sciences</i> , <b>2007</b> , 64, 2159-2175	2.1	22
108	Does the subtropical jet catalyze the midlatitude atmospheric regimes?. <i>Geophysical Research Letters</i> , <b>2006</b> , 33,	4.9	22
107	Response Operators for Markov Processes in a Finite State Space: Radius of Convergence and Link to the Response Theory for Axiom A Systems. <i>Journal of Statistical Physics</i> , <b>2016</b> , 162, 312-333	1.5	21
106	Beyond the linear fluctuation-dissipation theorem: the role of causality. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , <b>2012</b> , 2012, P05013	1.9	21
105	Southern Hemisphere midlatitude atmospheric variability of the NCEP-NCAR and ECMWF reanalyses. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		20
104	Revising and Extending the Linear Response Theory for Statistical Mechanical Systems: Evaluating Observables as Predictors and Predictands. <i>Journal of Statistical Physics</i> , <b>2018</b> , 173, 1698-1721	1.5	20
103	Prevailing climatic trends and runoff response from HindukushkarakoramHimalaya, upper Indus basin <b>2015</b> ,		19
102	Covariant Lyapunov vectors of a quasi-geostrophic baroclinic model: analysis of instabilities and feedbacks. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2015</b> , 141, 3040-3055	6.4	19
101	A new mathematical framework for atmospheric blocking events. Climate Dynamics, 2020, 54, 575-598	4.2	19
100	On using extreme values to detect global stability thresholds in multi-stable systems: The case of transitional plane Couette flow. <i>Chaos, Solitons and Fractals,</i> <b>2014</b> , 64, 26-35	9.3	18
99	Bistable systems with stochastic noise: virtues and limits of effective one-dimensional Langevin equations. <i>Nonlinear Processes in Geophysics</i> , <b>2012</b> , 19, 9-22	2.9	18
98	Nambu representation of an extended Lorenz model with viscous heating. <i>Physica D: Nonlinear Phenomena</i> , <b>2013</b> , 243, 86-91	3.3	18

97	Multiply subtractive generalized Kramers Ironig relations: Application on third-harmonic generation susceptibility on polysilane. <i>Journal of Chemical Physics</i> , <b>2003</b> , 119, 11095-11098	3.9	18
96	Towards a definition of climate science. <i>International Journal of Environment and Pollution</i> , <b>2002</b> , 18, 413	0.7	18
95	Dynamical analysis of blocking events: spatial and temporal fluctuations of covariant Lyapunov vectors. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2016</b> , 142, 2143-2158	6.4	18
94	Exploring the Lyapunov instability properties of high-dimensional atmospheric and climate models. <i>Nonlinear Processes in Geophysics</i> , <b>2018</b> , 25, 387-412	2.9	18
93	Symmetry breaking, mixing, instability, and low-frequency variability in a minimal Lorenz-like system. <i>Physical Review E</i> , <b>2009</b> , 80, 026313	2.4	17
92	Linear and fractional response for the SRB measure of smooth hyperbolic attractors and discontinuous observables. <i>Nonlinearity</i> , <b>2017</b> , 30, 1204-1220	1.7	16
91	Beyond Forcing Scenarios: Predicting Climate Change through Response Operators in a Coupled General Circulation Model. <i>Scientific Reports</i> , <b>2020</b> , 10, 8668	4.9	16
90	Can we use linear response theory to assess geoengineering strategies?. <i>Chaos</i> , <b>2020</b> , 30, 023124	3.3	15
89	Elements of a unified framework for response formulae. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , <b>2014</b> , 2014, P01002	1.9	15
88	GENERALIZED EXTREME VALUE DISTRIBUTION PARAMETERS AS DYNAMICAL INDICATORS OF STABILITY. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , <b>2012</b> , 22, 1250276	2	15
87	The Forced Response of the El NiëBouthern OscillationIndian Monsoon Teleconnection in Ensembles of Earth System Models. <i>Journal of Climate</i> , <b>2020</b> , 33, 2163-2182	4.4	15
86	Vertical and horizontal processes in the global atmosphere and the maximum entropy production conjecture. <i>Earth System Dynamics</i> , <b>2012</b> , 3, 19-32	4.8	14
85	General properties of optical harmonic generation from a simple oscillator model. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics,</i> <b>1998</b> , 20, 1117-1125		14
84	Kramers-Kronig relations and sum rules in nonlinear optical spectroscopy. <i>Applied Spectroscopy</i> , <b>2004</b> , 58, 499-509	3.1	14
83	Stochastic resonance for nonequilibrium systems. <i>Physical Review E</i> , <b>2019</b> , 100, 062124	2.4	14
82	Entropy production and coarse graining of the climate fields in a general circulation model. <i>Climate Dynamics</i> , <b>2014</b> , 43, 981-1000	4.2	13
81	Symmetry-Break in Voronoi Tessellations. <i>Symmetry</i> , <b>2009</b> , 1, 21-54	2.7	13
80	Verification of generalized Kramers Kronig relations and sum rules on experimental data of third harmonic generation susceptibility on polymer. <i>Journal of Chemical Physics</i> , <b>2003</b> , 119, 620-627	3.9	13

#### (2020-2005)

79	Thermohaline Circulation Stability: A Box Model Study. Part I: Uncoupled Model. <i>Journal of Climate</i> , <b>2005</b> , 18, 501-513	4.4	13
78	Asymptotic behaviour and general properties of harmonic generation susceptibilities. <i>European Physical Journal B</i> , <b>2000</b> , 17, 567-573	1.2	13
77	Parameterization of stochastic multiscale triads. Nonlinear Processes in Geophysics, 2016, 23, 435-445	2.9	13
76	Resonances in a Chaotic Attractor Crisis of the Lorenz Flow. <i>Journal of Statistical Physics</i> , <b>2018</b> , 170, 584	1-6.36	12
75	Return levels of temperature extremes in southern Pakistan. Earth System Dynamics, 2017, 8, 1263-127	<b>8</b> 4.8	12
74	Thermohaline Circulation Stability: A Box Model Study. Part II: Coupled Atmosphere©cean Model. Journal of Climate, <b>2005</b> , 18, 514-529	4.4	12
73	Destabilization of the thermohaline circulation by transient changes in the hydrological cycle. <i>Climate Dynamics</i> , <b>2005</b> , 24, 253-262	4.2	12
72	TheDiaTo (v1.0) I new diagnostic tool for water, energy and entropy budgets in climate models. <i>Geoscientific Model Development</i> , <b>2019</b> , 12, 3805-3834	6.3	11
71	Testing the validity of terahertz reflection spectra by dispersion relations. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	11
70	Pump and probe nonlinear processes: new modified sum rules from a simple oscillator model. <i>European Physical Journal B</i> , <b>1999</b> , 12, 323-330	1.2	11
69	Nonequilibrium thermodynamics of circulation regimes in optically thin, dry atmospheres. <i>Planetary and Space Science</i> , <b>2013</b> , 84, 48-65	2	10
68	The impact of oceanic heat transport on the atmospheric circulation. <i>Earth System Dynamics</i> , <b>2015</b> , 6, 591-615	4.8	10
67	. Tellus, Series A: Dynamic Meteorology and Oceanography, 2009, 61, 35-49	2	10
66	Climate sensitivity to ozone and its relevance on the habitability of Earth-like planets. <i>Icarus</i> , <b>2019</b> , 321, 608-618	3.8	10
65	A large deviation theory-based analysis of heat waves and cold spells in a simplified model of the general circulation of the atmosphere. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , <b>2019</b> , 2019, 033404	1.9	9
64	Convergence of Extreme Value Statistics in a Two-Layer Quasi-Geostrophic Atmospheric Model. <i>Complexity</i> , <b>2017</b> , 2017, 1-20	1.6	9
63	Response formulae forn-point correlations in statistical mechanical systems and application to a problem of coarse graining. <i>Journal of Physics A: Mathematical and Theoretical</i> , <b>2017</b> , 50, 355003	2	9
62	Global stability properties of the climate: Melancholia states, invariant measures, and phase transitions. <i>Nonlinearity</i> , <b>2020</b> , 33, R59-R92	1.7	9

61	Advancing Research for Seamless Earth System Prediction. <i>Bulletin of the American Meteorological Society</i> , <b>2020</b> , 101, E23-E35	6.1	9
60	Baroclinic Stationary Waves in Aquaplanet Models. <i>Journals of the Atmospheric Sciences</i> , <b>2011</b> , 68, 1023-	- <u>1</u> 040	8
59	Equivalence of nonequilibrium ensembles in turbulence models. <i>Physical Review E</i> , <b>2018</b> , 98, 012202	2.4	8
58	Lyapunov analysis of multiscale dynamics: the slow bundle of the two-scale Lorenz 96 model.  Nonlinear Processes in Geophysics, 2019, 26, 73-89	2.9	7
57	Experimental mathematics: Dependence of the stability properties of a two-dimensional model of the Atlantic ocean circulation on the boundary conditions. <i>Russian Journal of Mathematical Physics</i> , <b>2007</b> , 14, 224-231	1.4	7
56	Early 21st century climatology of snow cover for the western river basins of the Indus River System		7
55	Evaluating the Performance of Climate Models Based on Wasserstein Distance. <i>Geophysical Research Letters</i> , <b>2020</b> , 47, e2020GL089385	4.9	7
54	Interrupting vaccination policies can greatly spread SARS-CoV-2 and enhance mortality from COVID-19 disease: The AstraZeneca case for France and Italy. <i>Chaos</i> , <b>2021</b> , 31, 041105	3.3	7
53	Reduced-order models for coupled dynamical systems: Data-driven methods and the Koopman operator. <i>Chaos</i> , <b>2021</b> , 31, 053116	3.3	7
52	Avalanches, breathers, and flow reversal in a continuous Lorenz-96 model. <i>Physical Review E</i> , <b>2013</b> , 88, 013201	2.4	6
51	Modeling Complexity: The Case of Climate Science		6
50	Evaluating a stochastic parametrization for a fastilow system using the Wasserstein distance. <i>Nonlinear Processes in Geophysics</i> , <b>2018</b> , 25, 413-427	2.9	6
49	Climate Sensitivity to Carbon Dioxide and the Moist Greenhouse Threshold of Earth-like Planets under an Increasing Solar Forcing. <i>Astrophysical Journal</i> , <b>2018</b> , 869, 129	4.7	6
48	Spectral Decomposition and Extremes of Atmospheric Meridional Energy Transport in the Northern Hemisphere Midlatitudes. <i>Geophysical Research Letters</i> , <b>2019</b> , 46, 7602-7613	4.9	5
47	Thermodynamics of climate change: generalized sensitivities		5
46	Hydrological cycle over south and southeast Asian river basins as simulated by PCMDI/CMIP3 experiment	nts	5
45	Dynamical landscape and multistability of a climate model <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2021</b> , 477, 20210019	2.4	5
44	Response and Sensitivity Using Markov Chains. <i>Journal of Statistical Physics</i> , <b>2020</b> , 179, 1572-1593	1.5	4

43	Effects of stochastic parametrization on extreme value statistics. <i>Chaos</i> , <b>2019</b> , 29, 083102	3.3	4
42	Water Pathways for the Hindu-Kush-Himalaya and an Analysis of Three Flood Events. <i>Atmosphere</i> , <b>2019</b> , 10, 489	2.7	4
41	Rough basin boundaries in high dimension: Can we classify them experimentally?. <i>Chaos</i> , <b>2020</b> , 30, 1031	0,53	4
40	Mechanics and thermodynamics of a new minimal model of the atmosphere. <i>European Physical Journal Plus</i> , <b>2020</b> , 135, 1	3.1	4
39	ESMValTool v2.0 Extended set of large-scale diagnostics for quasi-operational and comprehensive evaluation of Earth system models in CMIP <b>2019</b> ,		4
38	Fingerprinting Heatwaves and Cold Spells and Assessing Their Response to Climate Change Using Large Deviation Theory. <i>Physical Review Letters</i> , <b>2021</b> , 127, 058701	7.4	4
37	Spatial-dispersion and relativistic effects in the optical sum rules. <i>European Physical Journal B</i> , <b>2001</b> , 23, 319-323	1.2	3
36	Total cloud cover from satellite observations and climate models		3
35	TheDiaTo (v1.0) IA new diagnostic tool for water, energy and entropy budgets in climate models <b>2019</b> ,		2
34	LDy-noise versus Gaussian-noise-induced Transitions in the Ghil-Sellers Energy Balance Model		2
33	Response theory and phase transitions for the thermodynamic limit of interacting identical systems. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2020</b> , 476, 20200688	2.4	2
32	Analysis of a bistable climate toy model with physics-based machine learning methods. <i>European Physical Journal: Special Topics</i> ,1	2.3	2
31	Applications of large deviation theory in geophysical fluid dynamics and climate science. <i>Rivista Del Nuovo Cimento</i> , <b>2021</b> , 44, 291-363	3.5	2
30	Extreme Value Theory for Selected Dynamical Systems <b>2016</b> , 97-144		2
29	Self-Scaling of the Statistical Properties of a Minimal Model of the Atmospheric Circulation <b>2007</b> , 197-2	19	2
28	Decomposing the dynamics of the Lorenz 1963 model using unstable periodic orbits: Averages, transitions, and quasi-invariant sets <i>Chaos</i> , <b>2022</b> , 32, 033129	3.3	2
27	Introduction to the Special Issue on the Statistical Mechanics of Climate. <i>Journal of Statistical Physics</i> , <b>2020</b> , 179, 997-1009	1.5	1
26	Return Levels of Temperature Extremes in Southern Pakistan <b>2017</b> ,		1

25	Corridengum: Linear and fractional response for the SRB measure of smooth hyperbolic attractors and discontinuous observables (2017Nonlinearity301204). <i>Nonlinearity</i> , <b>2017</b> , 30, C4-C6	1.7	1
24	Parametrization of Cross-scale Interaction in Multiscale Systems. World Scientific Series on Asia-Pacific Weather and Climate, <b>2015</b> , 67-80		1
23	Seasonality of the hydrological cycle in major South and Southeast Asian River Basins as simulated by PCMDI/CMIP3 experiments <b>2013</b> ,		1
22	Relevance of sampling schemes in light of Ruelle's linear response theory. <i>Nonlinearity</i> , <b>2012</b> , 25, 1311-	13. <del>2</del> 7	1
21	Twenty years of nonlinear dynamics in geosciences. <i>Eos</i> , <b>2007</b> , 88, 29	1.5	1
20	Robustness of competing climatic states. <i>Journal of Climate</i> , <b>2022</b> , 1-59	4.4	1
19	Climate model validation and selection for hydrological applications in representative Mediterranean catchments		1
18	Environmental Science, Physical Principles and Applications <b>2005</b> , 146-156		1
17	Spectroscopy of phase transitions for multiagent systems. <i>Chaos</i> , <b>2021</b> , 31, 061103	3.3	1
16	LDy noise versus Gaussian-noise-induced transitions in the GhilBellers energy balance model. <i>Nonlinear Processes in Geophysics</i> , <b>2022</b> , 29, 183-205	2.9	1
15	Predictors and predictands of linear response in spatially extended systems. <i>European Physical Journal: Special Topics</i> ,1	2.3	О
14	Classical Extreme Value Theory <b>2016</b> , 23-38		
13	Appendix A: Codes <b>2016</b> , 265-272		
12	Extremes as Physical Probes <b>2016</b> , 233-248		
11	Extreme Value Theory for Randomly Perturbed Dynamical Systems <b>2016</b> , 145-166		
10	Hitting and Return Time Statistics <b>2016</b> , 75-96		
9	Eddy saturation in a reduced two-level model of the atmosphere. <i>Geophysical and Astrophysical Fluid Dynamics</i> ,1-18	1.4	
8	Statistical Properties of Mid-latitude Atmospheric Variability <b>2007</b> , 369-391		

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