Kim Christensen

List of Publications by Year
in descending order

62 papers	4,559 citations	236833 25 h-index	143943 57 g-index
63 all docs	63 docs citations	63 times ranked	2700 citing authors

#	Article	IF	Citations
1	Self-organized criticality in a continuous, nonconservative cellular automaton modeling earthquakes. Physical Review Letters, 1992, 68, 1244-1247.	2.9	960
2	Unified Scaling Law for Earthquakes. Physical Review Letters, 2002, 88, 178501.	2.9	577
3	Avalanche dynamics in a pile of rice. Nature, 1996, 379, 49-52.	13.7	418
4	Complexity and Criticality. Imperial College Press Advanced Physics Text, 2005, , .	0.2	316
5	1/fnoise, distribution of lifetimes, and a pile of sand. Physical Review B, 1989, 40, 7425-7427.	1.1	184
6	Tracer Dispersion in a Self-Organized Critical System. Physical Review Letters, 1996, 77, 107-110.	2.9	178
7	Scaling, phase transitions, and nonuniversality in a self-organized critical cellular-automaton model. Physical Review A, 1992, 46, 1829-1838.	1.0	169
8	A Complexity View of Rainfall. Physical Review Letters, 2001, 88, 018701.	2.9	166
9	Self-similar correlation function in brain resting-state functional magnetic resonance imaging. Journal of the Royal Society Interface, 2011, 8, 472-479.	1.5	130
10	Variation of the Gutenbergâ€Richter b values and nontrivial temporal correlations in a Springâ€Block Model for earthquakes. Journal of Geophysical Research, 1992, 97, 8729-8735.	3.3	126
11	Tangled Nature: A Model of Evolutionary Ecology. Journal of Theoretical Biology, 2002, 216, 73-84.	0.8	126
12	Sandpile models with and without an underlying spatial structure. Physical Review E, 1993, 48, 3361-3372.	0.8	101
13	Self-organized critical forest-fire model: Mean-field theory and simulation results in 1 to 6 dimenisons. Physical Review Letters, 1993, 71, 2737-2740.	2.9	92
14	Deterministic 1/fnoise in nonconserative models of self-organized criticality. Physical Review Letters, 1992, 68, 2417-2420.	2.9	88
15	Dynamical and spatial aspects of sandpile cellular automata. Journal of Statistical Physics, 1991, 63, 653-684.	0.5	82
16	Time-dependent extinction rate and species abundance in a tangled-nature model of biological evolution. Physical Review E, 2002, 66, 011904.	0.8	76
17	Rain: Relaxations in the sky. Physical Review E, 2002, 66, 036120.	0.8	73
18	Evolution of Random Networks. Physical Review Letters, 1998, 81, 2380-2383.	2.9	65

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19	ON SELF-ORGANIZED CRITICALITY AND SYNCHRONIZATION IN LATTICE MODELS OF COUPLED DYNAMICAL SYSTEMS. International Journal of Modern Physics B, 1996, 10, 1111-1151.	1.0	52
20	Temporal correlations, universality, and multifractality in a spring-block model of earthquakes. Physical Review A, 1992, 46, R1720-R1723.	1.0	45
21	Rain viewed as relaxational events. Journal of Hydrology, 2006, 328, 46-55.	2.3	44
22	The tangled nature model as an evolving quasi-species model. Journal of Physics A, 2003, 36, 883-891.	1.6	40
23	Comment on â€œEarthquakes Descaled: On Waiting Time Distributions and Scaling Lawsâ€• Physical Review Letters, 2006, 96, 109801; author reply 109802.	2.9	37
24	Simple Model for Identifying Critical Regions in Atrial Fibrillation. Physical Review Letters, 2015, 114, 028104-28104.	2.9	33
25	Digging the optimum pit: antlions, spirals and spontaneous stratification. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20190365.	1.2	28
26	Comment on â€œSelf-Organized Criticality in the Olami-Feder-Christensen Modelâ€• Physical Review Letters, 2001, 87, 039801.	2.9	25
27	Evolving networks through deletion and duplication. New Journal of Physics, 2006, 8, 212-212.	1.2	23
28	Machine learning methods for locating re-entrant drivers from electrograms in a model of atrial fibrillation. Royal Society Open Science, 2018, 5, 172434.	1.1	23
29	Local interactions over global broadcasts for improved task allocation in self-organized multi-robot systems. Robotics and Autonomous Systems, 2014, 62, 1453-1462.	3.0	22
30	On the scaling of probability density functions with apparent power-law exponents less than unity. European Physical Journal B, 2008, 62, 331-336.	0.6	21
31	Surface Fluctuations and Correlations in a Pile of Rice. Physical Review Letters, 1999, 83, 764-767.	2.9	20
32	Ants in a Labyrinth: A Statistical Mechanics Approach to the Division of Labour. PLoS ONE, 2011, 6, e18416.	1.1	20
33	Record Dynamics in Ants. PLoS ONE, 2010, 5, e9621.	1.1	16
34	Division of labour in ant colonies in terms of attractive fields. Ecological Complexity, 2009, 6, 396-402.	1.4	15
35	Two-dimensional model of smouldering combustion using multi-layer cellular automaton: The role of ignition location and direction of airflow. Fire Safety Journal, 2017, 91, 243-251.	1.4	14
36	Myocardial architecture and patient variability in clinical patterns of atrial fibrillation. Physical Review E, 2016, 94, 042401.	0.8	13

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37	Christensen replies. Physical Review Letters, 1993, 71, 1289-1289.	2.9	12
38	Universality in ant behaviour. Journal of the Royal Society Interface, 2015, 12, 20140985.	1.5	12
39	Permeability up-scaling using Haar Wavelets. Transport in Porous Media, 2007, 67, 395-412.	1.2	11
40	Correlations and hyperuniformity in the avalanche size of the Oslo model. Europhysics Letters, 2018, 122, 50003.	0.7	11
41	Avalanche behavior in an absorbing state Oslo model. Physical Review E, 2004, 70, 067101.	0.8	10
42	On self-organised criticality in one dimension. Physica A: Statistical Mechanics and Its Applications, 2004, 340, 527-534.	1.2	10
43	On the physical relevance of extremal dynamics. Europhysics Letters, 2000, 50, 162-168.	0.7	9
44	Generalised Sandpile Dynamics on Artificial and Real-World Directed Networks. PLoS ONE, 2015, 10, e0142685.	1.1	9
45	Identifying time dependence in network growth. Physical Review Research, 2020, 2, .	1.3	9
46	Unified mechanism of local drivers in a percolation model of atrial fibrillation. Physical Review E, 2019, 100, 062406.	0.8	8
47	Multiscaling in the sequence of areas enclosed by coalescing random walkers. New Journal of Physics, 2007, 9, 149-149.	1.2	6
48	Self-Organized Criticality: Consequences for Statistics and Predictability of Earthquakes. Geophysical Monograph Series, 0, , 69-74.	0.1	5
49	Animal intermittent locomotion: A null model for the probability of moving forward in bounded space. Journal of Theoretical Biology, 2021, 510, 110533.	0.8	5
50	Identifying Potential Re-entrant Circuit Locations from Atrial Fibre Maps. , 2019, 2019, 1-4.		4
51	Universality class of one-dimensional directed sandpile models. Physical Review E, 2005, 72, 066103.	0.8	3
52	Wavelet-based upscaling of advection equations. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 4760-4770.	1.2	3
53	How the network properties of shareholders vary with investor type and country. PLoS ONE, 2019, 14, e0220965.	1.1	3
54	Simulation of fingering behavior in smoldering combustion using a cellular automaton. Physical Review E, 2019, 99, 023314.	0.8	3

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55	Understanding the transition from paroxysmal to persistent atrial fibrillation. Physical Review Research, 2020, 2, 023311.	1.3	3
56	Hierarchical coarse-graining transform. Physical Review E, 2009, 79, 036704.	0.8	2
57	Sensitivity to Initial Conditions in Self-Organized Critical Systems. Journal of Statistical Physics, 2004, 117, 891-900.	0.5	1
58	Reconstructing the Intrinsic Statistical Properties of Intermittent Locomotion Through Corrections for Boundary Effects. Bulletin of Mathematical Biology, 2021, 83, 28.	0.9	1
59	Higher-order temporal network effects through triplet evolution. Scientific Reports, 2021, 11, 15419.	1.6	1
60	Quantitative projections of a quality measure: Performance of a complex task. Physica A: Statistical Mechanics and Its Applications, 2014, 415, 503-513.	1.2	0
61	Avalanches in Piles of Rice. , 1998, , 475-480.		0
62	Identifying locations susceptible to micro-anatomical reentry using a spatial network representation of atrial fibre maps. PLoS ONE, 2022, 17, e0267166.	1.1	0