TamÃ¡s TÃ©l

List of Publications by Year
in descending order

64 papers	2,270 citations	218677 26 h-index	233421 45 g-index
68 all docs	68 docs citations	68 times ranked	1283 citing authors

#	Article	IF	Citations
1	Transient Chaos. Applied Mathematical Sciences (Switzerland), 2011, , .	0.8	294
2	Chemical and biological activity in open flows: A dynamical system approach. Physics Reports, 2005, 413, 91-196.	25.6	183
3	Chaotic transients in spatially extended systems. Physics Reports, 2008, 460, 245-275.	25.6	114
4	Advection of Active Particles in Open Chaotic Flows. Physical Review Letters, 1998, 80, 500-503.	7.8	95
5	Chaotic particle dynamics in viscous flows: The three-particle Stokeslet problem. Physical Review E, 1997, 56, 2858-2868.	2.1	92
6	Probabilistic Concepts in a Changing Climate: A Snapshot Attractor Picture*. Journal of Climate, 2015, 28, 3275-3288.	3.2	79
7	The joy of transient chaos. Chaos, 2015, 25, 097619.	2.5	70
8	Chaotic advection, diffusion, and reactions in open flows. Chaos, 2000, 10, 89-98.	2.5	63
9	Annual variability in a conceptual climate model: Snapshot attractors, hysteresis in extreme events, and climate sensitivity. Chaos, 2012, 22, 023110.	2.5	57
10	Equivalence of Irreversible Entropy Production in Driven Systems: An Elementary Chaotic Map Approach. Physical Review Letters, 1997, 79, 2759-2762.	7.8	51
11	Chemical or biological activity in open chaotic flows. Physical Review E, 1999, 59, 5468-5481.	2.1	51
12	Memory Effects are Relevant for Chaotic Advection of Inertial Particles. Physical Review Letters, 2011, 107, 244501.	7.8	50
13	Entropy Production for Open Dynamical Systems. Physical Review Letters, 1996, 77, 2945-2948.	7.8	47
14	Tipping phenomena in typical dynamical systems subjected to parameter drift. Scientific Reports, 2019, 9, 8654.	3.3	45
15	Multifractal structure of chaotically advected chemical fields. Physical Review E, 2000, 61, 3857-3866.	2.1	44
16	A model for resolving the plankton paradox: coexistence in open flows. Freshwater Biology, 2000, 45, 123-132.	2.4	37
17	The theory of parallel climate realizations as a new framework for teleconnection analysis. Scientific Reports, 2017, 7, 44529.	3.3	36
18	Critical Exponent for Gap Filling at Crisis. Physical Review Letters, 1996, 77, 3102-3105.	7.8	33

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19	Entropy balance in the presence of drift and diffusion currents: An elementary chaotic map approach. Physical Review E, 1998, 58, 1672-1684.	2.1	32
20	Topological scaling and gap filling at crisis. Physical Review E, 2000, 61, 5019-5032.	2.1	31
21	Doubly Transient Chaos: Generic Form of Chaos in Autonomous Dissipative Systems. Physical Review Letters, 2013, 111, 194101.	7.8	31
22	Probabilistic Concepts in Intermediate-Complexity Climate Models: A Snapshot Attractor Picture. Journal of Climate, 2016, 29, 259-272.	3.2	31
23	Memory effects in chaotic advection of inertial particles. New Journal of Physics, 2014, 16, 073008.	2.9	30
24	NOISE-INDUCED CHAOS: A CONSEQUENCE OF LONG DETERMINISTIC TRANSIENTS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2008, 18, 509-520.	1.7	29
25	Influence of the history force on inertial particle advection: Gravitational effects and horizontal diffusion. Physical Review E, 2013, 88, 042909.	2.1	29
26	Finite-size effects on active chaotic advection. Physical Review E, 2002, 65, 026216.	2.1	26
27	Quantifying nonergodicity in nonautonomous dissipative dynamical systems: An application to climate change. Physical Review E, 2016, 94, 022214.	2.1	25
28	Reactive Particles in Random Flows. Physical Review Letters, 2004, 92, 174101.	7.8	22
29	On the importance of the convergence to climate attractors. European Physical Journal: Special Topics, 2017, 226, 2031-2038.	2.6	22
30	Fluctuation theorems for entropy production in open systems. Physical Review E, 2000, 61, R4679-R4682.	2.1	21
31	Extracting flow structures from tracer data. Ocean Dynamics, 2003, 53, 64-72.	2.2	20
32	Quasipotential approach to critical scaling in noise-induced chaos. Physical Review E, 2010, 81, 056208.	2.1	20
33	Death and revival of chaos. Physical Review E, 2016, 94, 062221.	2.1	18
34	History effects in the sedimentation of light aerosols in turbulence: The case of marine snow. Physical Review Fluids, 2016, 1, .	2.5	18
35	THE THERMODYNAMICS OF FRACTALS. Series on Directions in Condensed Matter Physics, 1988, , 194-237.	0.1	17
36	Topological Entropy: A Lagrangian Measure of the State of the Free Atmosphere. Journals of the Atmospheric Sciences, 2013, 70, 4030-4040.	1.7	17

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37	Asymptotic observability of low-dimensional powder chaos in a three-degrees-of-freedom scattering system. Physical Review E, 2014, 90, 022906.	2.1	16
38	Modeling Thermostating, Entropy Currents, and Cross Effects by Dynamical Systems. Journal of Statistical Physics, 2000, 101, 79-105.	1.2	14
39	Multibaker map for thermodynamic cross effects in dynamical systems. Physical Review E, 2000, 62, 349-365.	2.1	14
40	On the stationary distribution of self-sustained oscillators around bifurcation points. Journal of Statistical Physics, 1988, 50, 897-912.	1.2	13
41	Coagulation and fragmentation dynamics of inertial particles. Physical Review E, 2009, 80, 026311.	2.1	13
42	Thermodynamic cross effects from dynamical systems. Physical Review E, 2000, 61, R3295-R3298.	2.1	12
43	Aggregation and fragmentation dynamics of inertial particles in chaotic flows. Physical Review E, 2008, 77, 055301.	2.1	12
44	Leaking in history space: A way to analyze systems subjected to arbitrary driving. Chaos, 2018, 28, 033612.	2.5	12
45	Chaos in Hamiltonian systems subjected to parameter drift. Chaos, 2019, 29, 121105.	2.5	12
46	Universality in active chaos. Chaos, 2004, 14, 72-78.	2.5	11
47	State-dependent vulnerability of synchronization. Physical Review E, 2019, 100, 052201.	2.1	11
48	Conditions for the abrupt bifurcation to chaotic scattering. Chaos, 1993, 3, 495-503.	2.5	9
49	CROSSOVER BETWEEN THE CONTROL OF PERMANENT AND TRANSIENT CHAOS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1993, 03, 757-764.	1.7	7
50	Multibaker map for shear flow and viscous heating. Physical Review E, 2001, 64, 056106.	2.1	6
51	New features of doubly transient chaos: complexity of decay. Journal of Physics Complexity, 2021, 2, 035001.	2.2	6
52	Chaotic saddles in a gravitational field: The case of inertial particles in finite domains. Physical Review E, 2011, 83, 056203.	2.1	5
53	Climate change in mechanical systems: the snapshot view of parallel dynamical evolutions. Nonlinear Dynamics, 2021, 106, 2781-2805.	5.2	5
54	Focusing on transient chaos. Journal of Physics Complexity, 2022, 3, 010201.	2.2	5

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55	Escape-Rate Formalism, Decay to Steady States, and Divergences in the Entropy-Production Rate. Journal of Statistical Physics, 2002, 109, 875-893.	1.2	4
56	A snapshot attractor view of the advection of inertial particles in the presence of history force. European Physical Journal: Special Topics, 2017, 226, 2069-2078.	2.6	4
57	Chaos in conservative discrete-time systems subjected to parameter drift. Chaos, 2021, 31, 033142.	2.5	4
58	Climate change in a conceptual atmosphereâ€"phytoplankton model. Earth System Dynamics, 2020, 11, 603-615.	7.1	4
59	A minimal dynamical model for tidal synchronization and orbit circularization. Celestial Mechanics and Dynamical Astronomy, 2011, 109, 181-200.	1.4	3
60	Chaotic motion of light particles in an unsteady three-dimensional vortex: Experiments and simulation. Physical Review E, 2014, 90, 013002.	2.1	2
61	Chaotic or just complicated? Ball bouncing down the stairs. European Journal of Physics, 2017, 38, 055003.	0.6	2
62	Chaos physics: what to teach in three lessons?. Physics Education, 2021, 56, 045002.	0.5	2
63	Characterizing chaos in systems subjected to parameter drift. Physical Review E, 2022, 105, .	2.1	2
64	Ball bouncing down rounded edge stairs: chaotic but tricky. European Journal of Physics, 2021, 42, 035004.	0.6	1