Daniel Wilczak

List of Publications by Year
in descending order

23	501	623574 14	677027 22
papers	citations	h-index	g-index

25	25	25	226
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent advances in a rigorous computation of PoincarÃ© maps. Communications in Nonlinear Science and Numerical Simulation, 2022, 110, 106366.	1.7	7
2	CAPD::DynSys: A flexible C++ toolbox for rigorous numerical analysis of dynamical systems. Communications in Nonlinear Science and Numerical Simulation, 2021, 101, 105578.	1.7	29
3	Distribution of stable islands within chaotic areas in the non-hyperbolic and hyperbolic regimes in the HÃ©nonâ€“Heiles system. Nonlinear Dynamics, 2020, 102, 403-416.	2.7	8
4	A geometric method for infinite-dimensional chaos: Symbolic dynamics for the Kuramoto-Sivashinsky PDE on the line. Journal of Differential Equations, 2020, 269, 8509-8548.	1.1	14
5	Validated numerics for period-tupling and touch-and-go bifurcations of symmetric periodic orbits in reversible systems. Communications in Nonlinear Science and Numerical Simulation, 2019, 74, 30-54.	1.7	8
6	Systematic Computer-Assisted Proof of Branches of Stable Elliptic Periodic Orbits and Surrounding Invariant Tori. SIAM Journal on Applied Dynamical Systems, 2017, 16, 1618-1649.	0.7	5
7	An implicit algorithm for validated enclosures of the solutions to variational equations for ODEs. Applied Mathematics and Computation, 2016, 291, 303-322.	1.4	5
8	Connecting Orbits for a Singular Nonautonomous Real Ginzburg--Landau Type Equation. SIAM Journal on Applied Dynamical Systems, 2016, 15, 495-525.	0.7	3
9	Coexistence and Dynamical Connections between Hyperchaos and Chaos in the 4D RÃ¶ssler System: A Computer-Assisted Proof. SIAM Journal on Applied Dynamical Systems, 2016, 15, 356-390.	0.7	16
10	When chaos meets hyperchaos: 4D RÃ¶ssler model. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 2300-2305.	0.9	33
11	Uniformly Hyperbolic Attractor of the Smaleâ€“Williams Type for a PoincarÃ© Map in the Kuznetsov System. SIAM Journal on Applied Dynamical Systems, 2010, 9, 1263-1283.	0.7	37
12	Period Doubling in the RÃ¶ssler Systemâ€”A Computer Assisted Proof. Foundations of Computational Mathematics, 2009, 9, 611-649.	1.5	24
13	A rigorous lower bound for the stability regions of the quadratic map. Physica D: Nonlinear Phenomena, 2009, 238, 1923-1936.	1.3	19
14	Computer Assisted Proof of the Existence of Homoclinic Tangency for the HÃ©non Map and for the Forced Damped Pendulum. SIAM Journal on Applied Dynamical Systems, 2009, 8, 1632-1663.	0.7	15
15	Abundance of heteroclinic and homoclinic orbits for the hyperchaotic RÃ¶ssler system. Discrete and Continuous Dynamical Systems - Series B, 2009, 11, 1039-1055.	0.5	10
16	Rigorous verification of cocoon bifurcations in the Michelson system. Nonlinearity, 2007, 20, 2147-2174.	0.6	34
17	Topological method for symmetric periodic orbits for maps with a reversing symmetry. Discrete and Continuous Dynamical Systems, 2007, 17, 629-652.	0.5	17
18	The Existence of Shilnikov Homoclinic Orbits in the Michelson System: A Computer Assisted Proof. Foundations of Computational Mathematics, 2006, 6, 495-535.	1.5	40

#	Article	IF	Citations
19	Heteroclinic Connections Between Periodic Orbits in Planar Restricted Circular Three Body Problem. Part II. Communications in Mathematical Physics, 2005, 259, 561-576.	1.0	34
20	Symmetric Heteroclinic Connections in the Michelson System: A Computer Assisted Proof. SIAM Journal on Applied Dynamical Systems, 2005, 4, 489-514.	0.7	30
21	Heteroclinic Connections Between Periodic Orbits in Planar Restricted Circular Three-Body Problem - A Computer Assisted Proof. Communications in Mathematical Physics, 2003, 234, 37-75.	1.0	72
22	Chaos in the Kuramotoâ€“Sivashinsky equationsâ€”a computer-assisted proof. Journal of Differential Equations, 2003, 194, 433-459.	1.1	29
23	Computer assisted proof of chaotic dynamics in the RÃ¶ssler map. Topological Methods in Nonlinear Analysis, 2001, 18, 183.	0.2	0