Marcio Gameiro

List of Publications by Year
in descending order

27	845	567281
papers	citations	15
		h-index

552781
26
g-index

29	29	29	741
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rigorous enclosures of solutions of Neumann boundary value problems. Applied Numerical Mathematics, 2022, 180, 104-119.	2.1	0
2	Mapping parameter spaces of biological switches. PLoS Computational Biology, 2021, 17, e1008711.	3.2	10
3	Parameter estimation in systems exhibiting spatially complex solutions via persistent homology and machine learning. Mathematics and Computers in Simulation, 2021, 185, 719-732.	4.4	2
4	Rational design of complex phenotype via network models. PLoS Computational Biology, 2021, 17, e1009189.	3.2	8
5	A combinatorial marching hypercubes algorithm. Computers and Graphics, 2021, 102, 67-67.	2.5	2
6	Interaction network analysis in shear thickening suspensions. Physical Review Fluids, 2020, 5, .	2.5	32
7	Rigorous Numerics for ill-posed PDEs: Periodic Orbits in the Boussinesq Equation. Archive for Rational Mechanics and Analysis, 2018, 228, 129-157.	2.4	20
8	On Exponential Decay and the Markus–Yamabe Conjecture in Infinite Dimensions with Applications to the Cima System. Journal of Dynamics and Differential Equations, 2018, 30, 1199-1219.	1.9	2
9	A Framework for the Numerical Computation and A Posteriori Verification of Invariant Objects of Evolution Equations. SIAM Journal on Applied Dynamical Systems, 2017, 16, 1070-1088.	1.6	20
10	A Posteriori Verification of Invariant Objects of Evolution Equations: Periodic Orbits in the Kuramoto--Sivashinsky PDE. SIAM Journal on Applied Dynamical Systems, 2017, 16, 687-728.	1.6	23
11	A study of rigorous ODE integrators for multi-scale set-oriented computations. Applied Numerical Mathematics, 2016, 107, 34-47.	2.1	12
12	Continuation of point clouds via persistence diagrams. Physica D: Nonlinear Phenomena, 2016, 334, 118-132.	2.8	15
13	Computation of Smooth Manifolds Via Rigorous Multi-parameter Continuation in Infinite Dimensions. Foundations of Computational Mathematics, 2016, 16, 531-575.	2.5	15
14	Rigorous numerics for piecewise-smooth systems: A functional analytic approach based on Chebyshev series. Journal of Computational and Applied Mathematics, 2016, 292, 654-673.	2.0	8
15	A topological measurement of protein compressibility. Japan Journal of Industrial and Applied Mathematics, 2015, 32, 1-17.	0.9	129
16	Efficient Rigorous Numerics for Higher-Dimensional PDEs via One-Dimensional Estimates. SIAM Journal on Numerical Analysis, 2013, 51, 2063-2087.	2.3	21
17	Combinatorial-topological framework for the analysis of global dynamics. Chaos, 2012, 22, 047508.	2.5	40
18	Rigorous computation of smooth branches of equilibria for the three dimensional Cahn–Hilliard equation. Numerische Mathematik, 2011, 117, 753-778.	1.9	29

#	Article	IF	Citations
19	Existence of secondary bifurcations or isolas for PDEs. Nonlinear Analysis: Theory, Methods & Applications, 2011, 74, 4131-4137.	1.1	1
20	Analytic estimates and rigorous continuation for equilibria of higher-dimensional PDEs. Journal of Differential Equations, 2010, 249, 2237-2268.	2.2	53
21	Quantitative three-dimensional microstructure of a solid oxide fuel cell cathode. Electrochemistry Communications, 2009, 11, 1052-1056.	4.7	141
22	Three-Dimensional Analysis of Solid Oxide Fuel Cell Ni-YSZ Anode Interconnectivity. Microscopy and Microanalysis, 2009, 15, 71-77.	0.4	85
23	Validated continuation over large parameter ranges for equilibria of PDEs. Mathematics and Computers in Simulation, 2008, 79, 1368-1382.	4.4	26
24	Homology and symmetry breaking in Rayleigh-Bénard convection: Experiments and simulations. Physics of Fluids, 2007, 19, 117105.	4.0	27
25	Topological Horseshoes of Traveling Waves for a Fast–Slow Predator–Prey System. Journal of Dynamics and Differential Equations, 2007, 19, 623-654.	1.9	12
26	Evolution of pattern complexity in the Cahn–Hilliard theory of phase separation. Acta Materialia, 2005, 53, 693-704.	7.9	75
27	Topological characterization of spatial-temporal chaos. Physical Review E, 2004, 70, 035203.	2.1	32