

# Roberto Castelli

## List of Publications by Year in descending order

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papers

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citations

1040018

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docs citations

20  
times ranked

128  
citing authors

#	ARTICLE	IF	CITATIONS
1	Parameterization of Invariant Manifolds for Periodic Orbits I: Efficient Numerics via the Floquet Normal Form. SIAM Journal on Applied Dynamical Systems, 2015, 14, 132-167.	1.6	44
2	Intersecting invariant manifolds in spatial restricted three-body problems: Design and optimization of Earth-to-halo transfers in the Sun-Earth-Moon scenario. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 832-843.	3.3	30
3	Rigorous Numerics in Floquet Theory: Computing Stable and Unstable Bundles of Periodic Orbits. SIAM Journal on Applied Dynamical Systems, 2013, 12, 204-245.	1.6	24
4	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
5	Topologically Distinct Collision-Free Periodic Solutions for the $N$ -Center Problem. Archive for Rational Mechanics and Analysis, 2017, 223, 941-975.	2.4	13
6	Regions of prevalence in the coupled restricted three-body problems approximation. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 804-816.	3.3	10
7	Efficient design of direct low-energy transfers in multi-moon systems. Celestial Mechanics and Dynamical Astronomy, 2017, 127, 429-450.	1.4	10
8	Existence and instability of steady states for a triangular cross-diffusion system: A computer-assisted proof. Journal of Differential Equations, 2018, 264, 6418-6458.	2.2	10
9	Parameterization of Invariant Manifolds for Periodic Orbits (II): A Posteriori Analysis and Computer Assisted Error Bounds. Journal of Dynamics and Differential Equations, 2018, 30, 1525-1581.	1.9	10
10	Rigorous numerics for NLS: Bound states, spectra, and controllability. Physica D: Nonlinear Phenomena, 2016, 334, 158-173.	2.8	9
11	On the regularization of the collision solutions of the one-center problem with weak forces. Discrete and Continuous Dynamical Systems, 2011, 31, 1197-1218.	0.9	9
12	Rigorous Computation of Non-uniform Patterns for the 2-Dimensional Gray-Scott Reaction-Diffusion Equation. Acta Applicandae Mathematicae, 2017, 151, 27-52.	1.0	6
13	Singular dynamics under a weak potential on a sphere. Nonlinear Differential Equations and Applications, 2013, 20, 845-872.	0.8	5
14	On the Relation Between the Bicircular Model and the Coupled Circular Restricted Three-Body Problem Approximation. , 2011, , 53-68.		5
15	A study of the apsidal angle and a proof of monotonicity in the logarithmic potential case. Journal of Mathematical Analysis and Applications, 2014, 413, 727-751.	1.0	3
16	Analytic enclosure of the fundamental matrix solution. Applications of Mathematics, 2015, 60, 617-636.	0.9	3
17	Some unexpected results on the Brillouin singular equation: Fold bifurcation of periodic solutions. Journal of Differential Equations, 2018, 265, 2502-2543.	2.2	3
18	The monotonicity of the apsidal angle in power-law potential systems. Journal of Mathematical Analysis and Applications, 2015, 428, 653-676.	1.0	2

#	ARTICLE	IF	CITATIONS
19	Low-Energy Earth-to-Halo Transfers in the Earth-Moon Scenario with Sun-Perturbation. , 2011, , 39-51.		2
20	Two-Body Approximations in the Design of Low-Energy Transfers Between Galilean Moons. Thirty Years of Astronomical Discovery With UKIRT, 2016, , 63-71.	0.3	0