

# Timothy J Healey

## List of Publications by Year in descending order

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39  
papers

652  
citations

636246

13  
h-index

563864

25  
g-index

40  
all docs

40  
docs citations

40  
times ranked

370  
citing authors

#	ARTICLE	IF	CITATIONS
1	Wrinkling Behavior of Highly Stretched Rectangular Elastic Films via Parametric Global Bifurcation. <i>Journal of Nonlinear Science</i> , 2013, 23, 777-805.	2.2	82
2	Exact block diagonalization of large eigenvalue problems for structures with symmetry. <i>International Journal for Numerical Methods in Engineering</i> , 1991, 31, 265-285.	2.9	68
3	Global Continuation in Nonlinear Elasticity. <i>Archive for Rational Mechanics and Analysis</i> , 1998, 143, 1-28.	2.4	56
4	Stability boundaries for wrinkling in highly stretched elastic sheets. <i>Journal of the Mechanics and Physics of Solids</i> , 2016, 97, 260-274.	4.9	51
5	Injective weak solutions in second-gradient nonlinear elasticity. <i>ESAIM - Control, Optimisation and Calculus of Variations</i> , 2009, 15, 863-871.	1.4	40
6	Global Bifurcations and Continuation in the Presence of Symmetry with an Application to Solid Mechanics. <i>SIAM Journal on Mathematical Analysis</i> , 1988, 19, 824-840.	1.9	39
7	STRAIGHTFORWARD COMPUTATION OF SPATIAL EQUILIBRIA OF GEOMETRICALLY EXACT COSSERAT RODS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2005, 15, 949-965.	1.7	31
8	MULTIPLE HELICAL PERVERSIONS OF FINITE, INTRINSICALLY CURVED RODS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2005, 15, 871-890.	1.7	27
9	Bifurcation to pear-shaped equilibria of pressurized spherical membranes. <i>International Journal of Non-Linear Mechanics</i> , 1991, 26, 279-291.	2.7	26
10	Steady Axial Motions of Strings. <i>Journal of Applied Mechanics, Transactions ASME</i> , 1990, 57, 785-787.	2.3	21
11	Computation of elastic equilibria of complete Möbius bands and their stability. <i>Mathematics and Mechanics of Solids</i> , 2019, 24, 939-967.	2.4	21
12	Title is missing!. <i>Journal of Elasticity</i> , 1997, 49, 65-78.	2.0	20
13	Global Bifurcation in Nonlinear Elasticity with an Application to Barrelling States of Cylindrical Columns. <i>Journal of Elasticity</i> , 2003, 71, 33-58.	2.0	19
14	Global Continuation in Displacement Problems of Nonlinear Elastostatics via the Leray-Schauder Degree. <i>Archive for Rational Mechanics and Analysis</i> , 2000, 152, 273-282.	2.4	13
15	Two-phase equilibria in the anti-plane shear of an elastic solid with interfacial effects via global bifurcation. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2007, 463, 1117-1134.	2.1	13
16	Global Continuation via Higher-Gradient Regularization and Singular Limits in Forced One-Dimensional Phase Transitions. <i>SIAM Journal on Mathematical Analysis</i> , 2000, 31, 1307-1331.	1.9	12
17	Symmetry-Breaking Global Bifurcation in a Surface Continuum Phase-Field Model for Lipid Bilayer Vesicles. <i>SIAM Journal on Mathematical Analysis</i> , 2017, 49, 1027-1059.	1.9	11
18	Nucleation of creases and folds in hyperelastic solids is not a local bifurcation. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 160, 104749.	4.9	9

#	ARTICLE	IF	CITATIONS
19	Nonlinear Standing and Rotating Waves on the Sphere. Journal of Differential Equations, 2000, 166, 402-442.	2.2	8
20	Bifurcation with a two-dimensional kernel. Journal of Differential Equations, 2006, 220, 234-258.	2.2	8
21	Injectivity and self-contact in second-gradient nonlinear elasticity. Calculus of Variations and Partial Differential Equations, 2017, 56, 1.	1.7	8
22	The Mullins effect in the wrinkling behavior of highly stretched thin films. Journal of the Mechanics and Physics of Solids, 2018, 119, 417-427.	4.9	8
23	Stable Spatially Localized Configurations in a Simple Structure—A Global Symmetry-Breaking Approach. Journal of Elasticity, 2020, 142, 163-199.	2.0	7
24	Direct computation of two-phase icosahedral equilibria of lipid bilayer vesicles. Computer Methods in Applied Mechanics and Engineering, 2017, 314, 164-179.	6.7	6
25	Stability of axial motions of nonlinearly elastic loops. Zeitschrift Fur Angewandte Mathematik Und Physik, 1996, 47, 809-816.	1.4	5
26	On the equivalence of local and global area-constraint formulations for lipid bilayer vesicles. Zeitschrift Fur Angewandte Mathematik Und Physik, 2015, 66, 2843-2854.	1.4	5
27	Global branches of positive weak solutions of semilinear elliptic problems over nonsmooth domains. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 1994, 124, 371-388.	1.5	4
28	Free nonlinear vibrations for plate equations on the equilateral triangle. Nonlinear Analysis: Theory, Methods & Applications, 2001, 44, 575-599.	1.1	4
29	A Simple Approach to the 1:1 Resonance Bifurcation in Follower-Load Problems. Nonlinear Dynamics, 2003, 32, 143-159.	5.3	4
30	Classical Injective Solutions in the Large in Incompressible Nonlinear Elasticity. Archive for Rational Mechanics and Analysis, 2019, 232, 1207-1225.	2.4	4
31	The inverse-deformation approach to fracture. Journal of the Mechanics and Physics of Solids, 2021, 150, 104352.	4.9	4
32	On steady solutions of symmetry-preserving perturbations of the two-dimensional Couette flow problem. Physics of Fluids, 2005, 17, 094108.	3.9	3
33	Global Symmetry-Breaking Bifurcation for the van der Waals–Cahn–Hilliard Model on the Sphere $S^2$ . Journal of Dynamics and Differential Equations, 2015, 27, 705-720.	1.9	3
34	Existence of Weak Solutions for Non-Simple Elastic Surface Models. Journal of Elasticity, 2022, 151, 47-57.	2.0	1
35	STRAIGHTFORWARD COMPUTATION OF SPATIAL EQUILIBRIA OF GEOMETRICALLY EXACT COSSERAT RODS. World Scientific Series on Nonlinear Science, Series B, 2006, , 253-269.	0.0	1
36	Complex Discrete Nonlinear Dynamics: Chaos and Its Applications. Discrete Dynamics in Nature and Society, 2013, 2013, 1-2.	0.9	0

#	ARTICLE	IF	CITATIONS
37	Hidden Asymptotic Symmetry in a Long Elastic Structure. SIAM Journal on Applied Mathematics, 2020, 80, 1083-1100.	1.8	0
38	MULTIPLE HELICAL PERVERSIONS OF FINITE, INTRISTICALLY CURVED RODS. World Scientific Series on Nonlinear Science, Series B, 2006, , 175-194.	0.0	0
39	Sharp-interface limits for brittle fracture via the inverse-deformation formulation. Journal of the Mechanics and Physics of Solids, 2024, 190, 105717.	4.9	0