Thomas C Sideris

List of Publications by Year
in descending order

30 papers	2,076 citations	331538 21 h-index	477173 29 g-index
30 all docs	30 docs citations	30 times ranked	498 citing authors

#	Article	IF	Citations
1	Formation of singularities in three-dimensional compressible fluids. Communications in Mathematical Physics, 1985, 101, 475-485.	1.0	391
2	Nonexistence of global solutions to semilinear wave equations in high dimensions. Journal of Differential Equations, 1984, 52, 378-406.	1.1	212
3	Long Time Behavior of Solutions to the 3D Compressible Euler Equations with Damping. Communications in Partial Differential Equations, 2003, 28, 795-816.	1.0	169
4	On almost global existence for nonrelativistic wave equations in 3D. Communications on Pure and Applied Mathematics, 1996, 49, 307-321.	1.2	134
5	Nonresonance and Global Existence of Prestressed Nonlinear Elastic Waves. Annals of Mathematics, 2000, 151, 849.	2.1	122
6	Global behavior of solutions to nonlinear wave equations in three dimensions. Communications in Partial Differential Equations, 1983, 8, 1291-1323.	1.0	85
7	Global existence for three-dimensional incompressible isotropic elastodynamics via the incompressible limit. Communications on Pure and Applied Mathematics, 2005, 58, 750-788.	1.2	80
8	Numerical computation of 3D incompressible ideal fluids with swirl. Physical Review Letters, 1991, 67, 3511-3514.	2.9	79
9	Formation of singularities in solutions to nonlinear hyperbolic equations. Archive for Rational Mechanics and Analysis, 1984, 86, 369-381.	1.1	77
10	Global Existence for Systems of Nonlinear Wave Equations in 3D with Multiple Speeds. SIAM Journal on Mathematical Analysis, 2001, 33, 477-488.	0.9	76
11	Convergence of the ghost fluid method for elliptic equations with interfaces. Mathematics of Computation, 2003, 72, 1731-1747.	1.1	76
12	Local regularity of nonlinear wave equations in three space dimensions. Communications in Partial Differential Equations, 1993, 18, 169-177.	1.0	75
13	Global existence for three‐dimensional incompressible isotropic elastodynamics. Communications on Pure and Applied Mathematics, 2007, 60, 1707-1730.	1.2	62
14	The null condition and global existence of nonlinear elastic waves. Inventiones Mathematicae, 1996, 123, 323-342.	1.3	59
15	The null condition and global existence of nonlinear elastic waves. Inventiones Mathematicae, 1996, 123, 323-342.	1.3	53
16	Delayed singularity formation in 2D compressible flow. American Journal of Mathematics, 1997, 119, 371-422.	0.5	46
17	Global existence of harmonic maps in minkowski space. Communications on Pure and Applied Mathematics, 1989, 42, 1-13.	1.2	45
18	Almost global existence for 2-D incompressible isotropic elastodynamics. Transactions of the American Mathematical Society, 2015, 367, 8175-8197.	0.5	42

#	Article	IF	Citations
19	Global Existence and Asymptotic Behavior of Affine Motion of 3D Ideal Fluids Surrounded by Vacuum. Archive for Rational Mechanics and Analysis, 2017, 225, 141-176.	1.1	35
20	Title is missing!. Indiana University Mathematics Journal, 1991, 40, 535.	0.4	30
21	Spreading of the free boundary of an ideal fluid in a vacuum. Journal of Differential Equations, 2014, 257, 1-14.	1.1	26
22	LOCAL ENERGY DECAY FOR SOLUTIONS OF MULTI-DIMENSIONAL ISOTROPIC SYMMETRIC HYPERBOLIC SYSTEMS. Journal of Hyperbolic Differential Equations, 2006, 03, 673-690.	0.3	23
23	Finite time singularities in ideal fluids with swirl. Physica D: Nonlinear Phenomena, 1995, 88, 116-132.	1.3	21
24	Stability in ?Â¹ of circular vortex patches. Proceedings of the American Mathematical Society, 2009, 137, 4199-4202.	0.4	16
25	Decay estimates for the three-dimensional inhomogeneous klein-gordon equation and applications. Communications in Partial Differential Equations, 1989, 14, 1421-1455.	1.0	14
26	Global Existence of Near-Affine Solutions to the Compressible Euler Equations. Archive for Rational Mechanics and Analysis, 2019, 234, 115-180.	1.1	13
27	On the evolution of compactly supported planar vorticity. Communications in Partial Differential Equations, 1999, 24, 159-182.	1.0	8
28	Turbulence properties and global regularity of a modified Navierâ€"Stokes equation. Physica D: Nonlinear Phenomena, 2013, 254, 18-23.	1.3	4
29	Affine Motion of 2d Incompressible Fluids Surrounded by Vacuum and Flows in $$\mathrm{SL}(2,\mathbb {R})$$. Communications in Mathematical Physics, 2020, 375, 1003-1040.	1.0	2
30	Global existence of small displacement solutions for Hookean incompressible viscoelasticity in 3D. Kinetic and Related Models, 2022, 15, 621.	0.5	1