Brittany D Froese

List of Publications by Year
in descending order

28 papers	**1,023** citations	687363 **13** h-index	552781 **26** g-index
28 all docs	**28** docs citations	**28** times ranked	**432** citing authors

#	ARTICLE	IF	CITATIONS
1	A convergent finite difference method for computing minimal Lagrangian graphs. Communications on Pure and Applied Analysis, 2022, 21, 393.	0.8	4
2	Convergent Finite Difference Methods for Fully Nonlinear Elliptic Equations in Three Dimensions. Journal of Scientific Computing, 2022, 90, .	2.3	4
3	A convergence framework for optimal transport on the sphere. Numerische Mathematik, 2022, 151, 627-657.	1.9	3
4	A convergent finite difference method for optimal transport on the sphere. Journal of Computational Physics, 2021, 445, 110621.	3.8	6
5	Convergent numerical method for the reflector antenna problem via optimal transport on the sphere. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2021, 38, 1704.	1.5	1
6	Convergence Framework for the Second Boundary Value Problem for the Monge--AmpÃ¨re Equation. SIAM Journal on Numerical Analysis, 2019, 57, 945-971.	2.3	11
7	Optimal transport theory to simplify freeform design. , 2019, , .		0
8	Meshfree finite difference approximations for functions of the eigenvalues of the Hessian. Numerische Mathematik, 2018, 138, 75-99.	1.9	18
9	Higher-Order Adaptive Finite Difference Methods for Fully Nonlinear Elliptic Equations. Journal of Scientific Computing, 2018, 75, 1282-1306.	2.3	12
10	Application of optimal transport and the quadratic Wasserstein metric to full-waveform inversion. Geophysics, 2018, 83, R43-R62.	2.6	166
11	Convergent approximation of non-continuous surfaces of prescribed Gaussian curvature. Communications on Pure and Applied Analysis, 2018, 17, 671-707.	0.8	7
12	Numerical methods for the 2-Hessian elliptic partial differential equation. IMA Journal of Numerical Analysis, 2017, 37, 209-236.	2.9	3
13	A multigrid scheme for 3D Mongeâ€"AmpÃ¨re equations. International Journal of Computer Mathematics, 2017, 94, 1850-1866.	1.8	6
14	8. Weak Mongeâ€"AmpÃ¨re solutions of the semi-discrete optimal transportation problem. , 2017, , 175-203.		2
15	Simplified freeform optics design for complicated laser beam shaping. Applied Optics, 2017, 56, 9308.	1.8	40
16	Freeform illumination optics construction following an optimal transport map. Applied Optics, 2016, 55, 4301.	2.1	60
17	Composite method for precise freeform optical beam shaping. Applied Optics, 2015, 54, 9364.	2.1	19
18	Fast sweeping methods for hyperbolic systems of conservation laws at steady state II. Journal of Computational Physics, 2015, 286, 70-86.	3.8	10

#	Article	IF	Citations
19	Creating unconventional geometric beams with large depth of field using double freeform-surface optics. Applied Optics, 2015, 54, 6277.	2.1	28
20	Numerical solution of the Optimal Transportation problem using the Monge–Ampère equation. Journal of Computational Physics, 2014, 260, 107-126.	3.8	132
21	Application of the Wasserstein metric to seismic signals. Communications in Mathematical Sciences, 2014, 12, 979-988.	1.0	136
22	Fast sweeping methods for hyperbolic systems of conservation laws at steady state. Journal of Computational Physics, 2013, 255, 316-338.	3.8	12
23	Convergent Filtered Schemes for the Monge--Ampère Partial Differential Equation. SIAM Journal on Numerical Analysis, 2013, 51, 423-444.	2.3	66
24	A Numerical Method for the Elliptic Monge--Ampère Equation with Transport Boundary Conditions. SIAM Journal of Scientific Computing, 2012, 34, A1432-A1459.	2.8	60
25	Convergent Finite Difference Solvers for Viscosity Solutions of the Elliptic Monge–Ampère Equation in Dimensions Two and Higher. SIAM Journal on Numerical Analysis, 2011, 49, 1692-1714.	2.3	83
26	Fast finite difference solvers for singular solutions of the elliptic Monge–Ampère equation. Journal of Computational Physics, 2011, 230, 818-834.	3.8	48
27	Two Numerical Methods for the elliptic Monge-Ampère equation. ESAIM: Mathematical Modelling and Numerical Analysis, 2010, 44, 737-758.	1.9	79
28	Numerical averaging of non-divergence structure elliptic operators. Communications in Mathematical Sciences, 2009, 7, 785-804.	1.0	7