Brittany D Froese

List of Publications by Year
in descending order

28	1,023	687363	552781
papers	**citations**	**13**	**26**
		h-index	**g-index**

28	28	28	432
all docs	**docs citations**	**times ranked**	**citing authors**

#	Article	IF	Citations
1	Application of optimal transport and the quadratic Wasserstein metric to full-waveform inversion. Geophysics, 2018, 83, R43-R62.	2.6	166
2	Application of the Wasserstein metric to seismic signals. Communications in Mathematical Sciences, 2014, 12, 979-988.	1.0	136
3	Numerical solution of the Optimal Transportation problem using the Monge–Ampère equation. Journal of Computational Physics, 2014, 260, 107-126.	3.8	132
4	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
5	Two Numerical Methods for the elliptic Monge-Ampère equation. ESAIM: Mathematical Modelling and Numerical Analysis, 2010, 44, 737-758.	1.9	79
6	Convergent Filtered Schemes for the Monge--Ampère Partial Differential Equation. SIAM Journal on Numerical Analysis, 2013, 51, 423-444.	2.3	66
7	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
8	Freeform illumination optics construction following an optimal transport map. Applied Optics, 2016, 55, 4301.	2.1	60
9	Fast finite difference solvers for singular solutions of the elliptic Monge–Ampère equation. Journal of Computational Physics, 2011, 230, 818-834.	3.8	48
10	Simplified freeform optics design for complicated laser beam shaping. Applied Optics, 2017, 56, 9308.	1.8	40
11	Creating unconventional geometric beams with large depth of field using double freeform-surface optics. Applied Optics, 2015, 54, 6277.	2.1	28
12	Composite method for precise freeform optical beam shaping. Applied Optics, 2015, 54, 9364.	2.1	19
13	Meshfree finite difference approximations for functions of the eigenvalues of the Hessian. Numerische Mathematik, 2018, 138, 75-99.	1.9	18
14	Fast sweeping methods for hyperbolic systems of conservation laws at steady state. Journal of Computational Physics, 2013, 255, 316-338.	3.8	12
15	Higher-Order Adaptive Finite Difference Methods for Fully Nonlinear Elliptic Equations. Journal of Scientific Computing, 2018, 75, 1282-1306.	2.3	12
16	Convergence Framework for the Second Boundary Value Problem for the Monge--Ampère Equation. SIAM Journal on Numerical Analysis, 2019, 57, 945-971.	2.3	11
17	Fast sweeping methods for hyperbolic systems of conservation laws at steady state II. Journal of Computational Physics, 2015, 286, 70-86.	3.8	10
18	Convergent approximation of non-continuous surfaces of prescribed Gaussian curvature. Communications on Pure and Applied Analysis, 2018, 17, 671-707.	0.8	7

#	Article	IF	Citations
19	Numerical averaging of non-divergence structure elliptic operators. Communications in Mathematical Sciences, 2009, 7, 785-804.	1.0	7
20	A multigrid scheme for 3D Monge–Ampère equations. International Journal of Computer Mathematics, 2017, 94, 1850-1866.	1.8	6
21	A convergent finite difference method for optimal transport on the sphere. Journal of Computational Physics, 2021, 445, 110621.	3.8	6
22	A convergent finite difference method for computing minimal Lagrangian graphs. Communications on Pure and Applied Analysis, 2022, 21, 393.	0.8	4
23	Convergent Finite Difference Methods for Fully Nonlinear Elliptic Equations in Three Dimensions. Journal of Scientific Computing, 2022, 90, .	2.3	4
24	Numerical methods for the 2-Hessian elliptic partial differential equation. IMA Journal of Numerical Analysis, 2017, 37, 209-236.	2.9	3
25	A convergence framework for optimal transport on the sphere. Numerische Mathematik, 2022, 151, 627-657.	1.9	3
26	8. Weak Monge–Ampère solutions of the semi-discrete optimal transportation problem. , 2017, , 175-203.		2
27	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
28	Optimal transport theory to simplify freeform design. , 2019, , .		0