Xu-Jia Wang

List of Publications by Year
in descending order

86 papers	3,777 citations	117625 34 h-index	128289 60 g-index
86 all docs	86 docs citations	86 times ranked	712 citing authors

#	Article	IF	Citations
1	Global $$C^{1,alpha }$$ Regularity for Mongeâ€“AmpÃ¨re Equation and Convex Envelope. Archive for Rational Mechanics and Analysis, 2022, 244, 127-155.	2.4	1
2	The Christoffel problem by the fundamental solution of the Laplace equation. Science China Mathematics, 2021, 64, 1599-1612.	1.7	2
3	A Priori Estimate for the Complex Mongeâ€“AmpÃ¨re Equation. Peking Mathematical Journal, 2021, 4, 143-157.	1.2	3
4	Global regularity for the Monge-AmpÃ¨re equation with natural boundary condition. Annals of Mathematics, 2021, 194, .	4.2	5
5	Asymptotic Convergence for a Class of Fully Nonlinear Curvature Flows. Journal of Geometric Analysis, 2020, 30, 834-860.	1.0	8
6	Moser-Trudinger inequality for the complex Monge-AmpÃ¨re equation. Journal of Functional Analysis, 2020, 279, 108765.	1.4	5
7	New proof for the regularity of Mongeâ€“AmpÃ¨re type equations. Journal of Differential Geometry, 2020, 116, .	1.1	1
8	On the four-vertex theorem for curves on locally convex surfacessurfaces. Mathematical Research Letters, 2020, 27, 1261-1279.	0.5	0
9	Continuity for the Monge Mass Transfer Problem in Two Dimensions. Archive for Rational Mechanics and Analysis, 2019, 231, 1045-1071.	2.4	0
10	Global regularity of optimal mappings in non-convex domains. Science China Mathematics, 2019, 62, 2057-2072.	1.7	2
11	Convergence Rate Estimates for Aleksandrov's Solution to the Monge--AmpÃ¨re Equation. SIAM Journal on Numerical Analysis, 2019, 57, 173-191.	2.3	8
12	Flow by Gauss curvature to the Aleksandrov and dual Minkowski problems. Journal of the European Mathematical Society, 2019, 22, 893-923.	1.4	58
13	A priori estimates and existence of solutions to the prescribed centroaffine curvature problem. Journal of Functional Analysis, 2018, 274, 826-862.	1.4	17
14	Global smoothness for a singular Mongeâ€“AmpÃ¨re equation. Journal of Differential Equations, 2017, 263, 7250-7262.	2.2	21
15	Multiple solutions of the $$L_{p}$$ L p -Minkowski problem. Calculus of Variations and Partial Differential Equations, 2016, 55, 1.	1.7	20
16	Convexity of the support of the displacement interpolation: Counterexamples. Applied Mathematics Letters, 2016, 58, 152-158.	2.7	6
17	A potential theory for the k-curvature equation. Advances in Mathematics, 2016, 288, 791-824.	1.1	1
18	Strict convexity and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi>C</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn><mml:mo>,</mml regularity of potential functions in optimal transportation under condition A3w. Journal of Differential Equations, 2016, 260, 1954-1974.	2.2	7

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19	Regularity and analyticity of solutions in a direction for elliptic equations. Pacific Journal of Mathematics, 2015, 276, 419-436.	0.5	5
20	Nonuniqueness of solutions to the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>L</mml:mi></mml:mrow><mml:mrow><mml:mi>p</mml:mi></mml:mrow></mm problem. Advances in Mathematics, 2015, 281, 845-856.	1.1	61
21	On Asymptotic Behaviour and W 2, p Regularity of Potentials in Optimal Transportation. Archive for Rational Mechanics and Analysis, 2015, 215, 867-905.	2.4	5
22	Regularity of the homogeneous Monge-AmpÃ¨re equation. Discrete and Continuous Dynamical Systems, 2015, 35, 6069-6084.	0.9	7
23	Existence of entire solutions to the Monge-AmpÃ¨re equation. American Journal of Mathematics, 2014, 136, 1093-1106.	1.1	9
24	Regularity in Monge's mass transfer problem. Journal Des Mathematiques Pures Et Appliquees, 2014, 102, 1015-1040.	1.6	12
25	Optimal boundary regularity for nonlinear singular elliptic equations. Advances in Mathematics, 2014, 251, 111-126.	1.1	16
26	Interior a priori estimates for the Monge-AmpÃ¨re equation. Journal of Differential Geometry, 2014, 19, 151-177.	1.0	4
27	Rotationally symmetric solutions to the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>L</mml:mi></mml:mrow><mml:mrow><mml:mi>p</mml:mi></mml:mrow></mml:msub></mm problem. Journal of Differential Equations, 2013, 254, 983-1005.	2.2	76
28	A Priori Estimates for Fully Nonlinear Parabolic Equations. International Mathematics Research Notices, 2013, 2013, 3857-3877.	1.0	15
29	Bernstein theorem and regularity for a class of Monge-AmpÃ¨re equations. Journal of Differential Geometry, 2013, 93, .	1.1	41
30	The mean curvature measure. Journal of the European Mathematical Society, 2012, 14, 779-800.	1.4	2
31	Convex solutions to the mean curvature flow. Annals of Mathematics, 2011, 173, 1185-1239.	4.2	109
32	On the existence and nonexistence of extremal metrics on toric KÃhler surfaces. Advances in Mathematics, 2011, 226, 4429-4455.	1.1	15
33	Moserâ€“Trudinger type inequalities for the Hessian equation. Journal of Functional Analysis, 2010, 259, 1974-2002.	1.4	23
34	Partial regularity for elliptic equations. Discrete and Continuous Dynamical Systems, 2010, 28, 899-913.	0.9	10
35	On the reflector shape design. Journal of Differential Geometry, 2010, 84, .	1.1	31
36	The Intermediate Case of the Yamabe Problem for Higher Order Curvatures. International Mathematics Research Notices, 2009, , .	1.0	12

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37	On Harnack inequalities and singularities of admissible metrics in the Yamabe problem. Calculus of Variations and Partial Differential Equations, 2009, 35, 317-338.	1.7	24
38	On Strict Convexity and Continuous Differentiability of Potential Functions in Optimal Transportation. Archive for Rational Mechanics and Analysis, 2009, 192, 403-418.	2.4	51
39	InteriorC2,Î±Regularity for Potential Functions in Optimal Transportation. Communications in Partial Differential Equations, 2009, 35, 165-184.	2.2	46
40	The k-Hessian Equation. Lecture Notes in Mathematics, 2009, , 177-252.	0.2	62
41	Quasilinear elliptic equations with signed measure. Discrete and Continuous Dynamical Systems, 2008, 23, 477-494.	0.9	22
42	Boundary regularity for the Mongeâ€“AmpÃ¨re and affine maximal surface equations. Annals of Mathematics, 2008, 167, 993-1028.	4.2	90
43	A Class of Sobolev Type Inequalities. Methods and Applications of Analysis, 2008, 15, 263-276.	0.5	18
44	The Yamabe problem for higher order curvatures. Journal of Differential Geometry, 2007, 77, 515.	1.1	80
45	Continuity Estimates for the Mongeâ€“AmpÃ¨re Equation. SIAM Journal on Mathematical Analysis, 2007, 39, 608-626.	1.9	36
46	The <mml:math altimg="si1.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	1.1	237
47	Enclosed convex hypersurfaces with maximal affine area. Mathematische Zeitschrift, 2006, 252, 497-510.	0.9	7
48	A priori Estimates and Existence for a Class of Fully Nonlinear Elliptic Equations in Conformal Geometry*. Chinese Annals of Mathematics Series B, 2006, 27, 169-178.	0.4	35
49	Schauder Estimates for Elliptic and Parabolic Equations*. Chinese Annals of Mathematics Series B, 2006, 27, 637-642.	0.4	40
50	The affine Plateau problem. Journal of the American Mathematical Society, 2005, 18, 253-289.	3.9	67
51	Regularity of Potential Functions of the Optimal Transportation Problem. Archive for Rational Mechanics and Analysis, 2005, 177, 151-183.	2.4	236
52	The Dirichlet Problem for Degenerate Hessian Equations. Communications in Partial Differential Equations, 2005, 29, 219-235.	2.2	42
53	On the design of a reflector antenna II. Calculus of Variations and Partial Differential Equations, 2004, 20, 329-341.	1.7	92
54	KÃ¤hlerâ€“Ricci solitons on toric manifolds with positive first Chern class. Advances in Mathematics, 2004, 188, 87-103.	1.1	199

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55	Interior curvature bounds for a class of curvature equations. Duke Mathematical Journal, 2004, 123, 235.	1.5	31
56	Convex Hypersurfaces of Prescribed Weingarten Curvatures. Communications in Analysis and Geometry, 2004, 12, 213-232.	0.4	10
57	On locally convex hypersurfaces with boundary. Journal Fur Die Reine Und Angewandte Mathematik, 2002, 2002, .	0.9	16
58	On the weak continuity of elliptic operators and applications to potential theory. American Journal of Mathematics, 2002, 124, 369-410.	1.1	140
59	Hessian Measures III. Journal of Functional Analysis, 2002, 193, 1-23.	1.4	66
60	Affine complete locally convex hypersurfaces. Inventiones Mathematicae, 2002, 150, 45-60.	2.5	40
61	On the Monge mass transfer problem. Calculus of Variations and Partial Differential Equations, 2001, 13, 19-31.	1.7	82
62	A variational theory of the Hessian equation. Communications on Pure and Applied Mathematics, 2001, 54, 1029-1064.	3.1	158
63	A logarithmic Gauss curvature flow and the Minkowski problem. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2000, 17, 733-751.	1.4	60
64	The Bernstein problem for affine maximal hypersurfaces. Inventiones Mathematicae, 2000, 140, 399-422.	2.5	119
65	Hessian Measures II. Annals of Mathematics, 1999, 150, 579.	4.2	162
66	On the dirichlet problem for degenerate Monge-AmpÃ¨re equations. Acta Mathematica, 1999, 182, 87-104.	3.9	50
67	A PoincarÃ© type inequality for Hessian integrals. Calculus of Variations and Partial Differential Equations, 1998, 6, 315-328.	1.7	30
68	Interior gradient estimates for mean curvature equations. Mathematische Zeitschrift, 1998, 228, 73-81.	0.9	47
69	On a Monge-AmpÃ¨re equation arising in geometric optics. Journal of Differential Geometry, 1998, 48, 205.	1.1	55
70	Critical exponent in a Stefan problem with kinetic condition. European Journal of Applied Mathematics, 1997, 8, 525-532.	2.9	5
71	On the generalized Stepanov theorem. Proceedings of the American Mathematical Society, 1997, 125, 2347-2352.	0.8	2
72	Hessian measures I. Topological Methods in Nonlinear Analysis, 1997, 10, 225.	0.2	97

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73	Entire solutions of the Monge-Ampï¿½re equation. Communications on Pure and Applied Mathematics, 1996, 49, 529-539.	3.1	15
74	REGULARITY FOR MONGE-AMPERE EQUATION NEAR THE BOUNDARY. Analysis (Germany), 1996, 16, 101-108.	0.4	22
75	Existence and Blow-Up of Solutions to Two-Phase Nonequilibrium Problems. SIAM Journal on Mathematical Analysis, 1996, 27, 1038-1048.	1.9	10
76	On the design of a reflector antenna. Inverse Problems, 1996, 12, 351-375.	2.0	97
77	Entire solutions of the Mongeâ€AmpÃ¨re equation. Communications on Pure and Applied Mathematics, 1996, 49, 529-539.	3.1	2
78	Existence of convex hypersurfaces with prescribed Gauss-Kronecker curvature. Transactions of the American Mathematical Society, 1996, 348, 4501-4524.	0.9	15
79	Existence of Multiple Solutions to Nonlinear Elliptic Equations of Nondivergence Form. Journal of Mathematical Analysis and Applications, 1995, 189, 617-630.	1.0	16
80	Some Counterexamples to the Regularity of Monge-Ampere Equations. Proceedings of the American Mathematical Society, 1995, 123, 841.	0.8	34
81	Minkowski problem for complete noncompact convex hypersurfaces. Topological Methods in Nonlinear Analysis, 1995, 6, 151.	0.2	8
82	Title is missing!. Indiana University Mathematics Journal, 1994, 43, 25.	0.9	139
83	Sharp constant in a Sobolev inequality. Nonlinear Analysis: Theory, Methods & Applications, 1993, 20, 261-268.	1.1	31
84	Existence of multiple solutions to the equations of Monge-AmpÃ¨re type. Journal of Differential Equations, 1992, 100, 95-118.	2.2	19
85	Neumann problems of semilinear elliptic equations involving critical Sobolev exponents. Journal of Differential Equations, 1991, 93, 283-310.	2.2	195
86	A boundary expansion of solutions to nonlinear singular elliptic equations. Science China Mathematics, 0, , 1.	1.7	2