Hongchao Zhang

List of Publications by Year
in descending order

49 papers	3,040 citations	331670 21 h-index	233421 45 g-index
49 all docs	49 docs citations	49 times ranked	1467 citing authors

#	Article	IF	Citations
1	A New Conjugate Gradient Method with Guaranteed Descent and an Efficient Line Search. SIAM Journal on Optimization, 2005, 16, 170-192.	2.0	810
2	A Nonmonotone Line Search Technique and Its Application to Unconstrained Optimization. SIAM Journal on Optimization, 2004, 14, 1043-1056.	2.0	449
3	Algorithm 851. ACM Transactions on Mathematical Software, 2006, 32, 113-137.	2.9	321
4	A New Active Set Algorithm for Box Constrained Optimization. SIAM Journal on Optimization, 2006, 17, 526-557.	2.0	197
5	The cyclic Barzilai-â€“Borwein method for unconstrained optimization. IMA Journal of Numerical Analysis, 2006, 26, 604-627.	2.9	184
6	Mini-batch stochastic approximation methods for nonconvex stochastic composite optimization. Mathematical Programming, 2016, 155, 267-305.	2.4	159
7	The Limited Memory Conjugate Gradient Method. SIAM Journal on Optimization, 2013, 23, 2150-2168.	2.0	81
8	Adaptive Two-Point Stepsize Gradient Algorithm. Numerical Algorithms, 2001, 27, 377-385.	1.9	70
9	A Derivative-Free Algorithm for Least-Squares Minimization. SIAM Journal on Optimization, 2010, 20, 3555-3576.	2.0	64
10	An efficient gradient method using the Yuan steplength. Computational Optimization and Applications, 2014, 59, 541-563.	1.6	60
11	A Quadratic C^0 Interior Penalty Method for the Displacement Obstacle Problem of Clamped Kirchhoff Plates. SIAM Journal on Numerical Analysis, 2012, 50, 3329-3350.	2.3	51
12	Bregman operator splitting with variable stepsize for total variation image reconstruction. Computational Optimization and Applications, 2013, 54, 317-342.	1.6	50
13	Generalized symmetric ADMM for separable convex optimization. Computational Optimization and Applications, 2018, 70, 129-170.	1.6	44
14	A Morley finite element method for the displacement obstacle problem of clamped Kirchhoff plates. Journal of Computational and Applied Mathematics, 2013, 254, 31-42.	2.0	43
15	An affine-scaling interior-point CBB method for box-constrained optimization. Mathematical Programming, 2009, 119, 1-32.	2.4	36
16	Gradient-Based Methods for Sparse Recovery. SIAM Journal on Imaging Sciences, 2011, 4, 146-165.	2.2	36
17	On the convergence of an active-set method for â„“₁minimization. Optimization Methods and Software, 2012, 27, 1127-1146.	2.4	35
18	An inexact accelerated stochastic ADMM for separable convex optimization. Computational Optimization and Applications, 2022, 81, 479-518.	1.6	29

#	Article	IF	Citations
19	Generalized Uniformly Optimal Methods for Nonlinear Programming. Journal of Scientific Computing, 2019, 79, 1854-1881.	2.3	27
20	Self-adaptive inexact proximal point methods. Computational Optimization and Applications, 2008, 39, 161-181.	1.6	26
21	A topology-preserving optimization algorithm for polycube mapping. Computers and Graphics, 2011, 35, 639-649.	2.5	25
22	On the local convergence of a derivative-free algorithm for least-squares minimization. Computational Optimization and Applications, 2012, 51, 481-507.	1.6	23
23	An Affine-Scaling Interior-Point Method for Continuous Knapsack Constraints with Application to Support Vector Machines. SIAM Journal on Optimization, 2011, 21, 361-390.	2.0	18
24	Asymptotic Convergence Analysis of a New Class of Proximal Point Methods. SIAM Journal on Control and Optimization, 2007, 46, 1683-1704.	2.1	17
25	A nonmonotone spectral projected gradient method for large-scale topology optimization problems. Numerical Algebra, Control and Optimization, 2012, 2, 395-412.	1.6	17
26	An $mathcal O(1/{k})$ Convergence Rate for the Variable Stepsize Bregman Operator Splitting Algorithm. SIAM Journal on Numerical Analysis, 2016, 54, 1535-1556.	2.3	16
27	Adaptive Regularized Self-Consistent Field Iteration with Exact Hessian for Electronic Structure Calculation. SIAM Journal of Scientific Computing, 2013, 35, A1299-A1324.	2.8	15
28	An active set algorithm for nonlinear optimization with polyhedral constraints. Science China Mathematics, 2016, 59, 1525-1542.	1.7	15
29	Inexact alternating direction methods of multipliers for separable convex optimization. Computational Optimization and Applications, 2019, 73, 201-235.	1.6	14
30	Gradient methods exploiting spectral properties. Optimization Methods and Software, 2020, 35, 681-705.	2.4	13
31	A Nonmonotone Smoothing Newton Algorithm for Weighted Complementarity Problem. Journal of Optimization Theory and Applications, 2021, 189, 679-715.	1.5	11
32	Projection onto a Polyhedron that Exploits Sparsity. SIAM Journal on Optimization, 2016, 26, 1773-1798.	2.0	9
33	A first-order inexact primal-dual algorithm for a class of convex-concave saddle point problems. Numerical Algorithms, 2021, 88, 1109-1136.	1.9	9
34	On the acceleration of the Barzilaiâ€“Borwein method. Computational Optimization and Applications, 2022, 81, 717-740.	1.6	9
35	An efficient spherical mapping algorithm and its application on spherical harmonics. Science China Information Sciences, 2013, 56, 1-10.	4.3	8
36	Inexact proximal stochastic gradient method for convex composite optimization. Computational Optimization and Applications, 2017, 68, 579-618.	1.6	8

#	ARTICLE	IF	CITATIONS
37	A new simple model trust-region method with generalized Barzilai-Borwein parameter for large-scale optimization. Science China Mathematics, 2016, 59, 2265-2280.	1.7	6
38	An affine scaling method for optimization problems with polyhedral constraints. Computational Optimization and Applications, 2014, 59, 163-183.	1.6	5
39	Convergence rates for an inexact ADMM applied to separable convex optimization. Computational Optimization and Applications, 2020, 77, 729-754.	1.6	5
40	Unified linear convergence of first-order primal-dual algorithms for saddle point problems. Optimization Letters, 2022, 16, 1675-1700.	1.6	5
41	A large scale network model to obtain interwell formation characteristics. International Journal of Oil, Gas and Coal Technology, 2017, 15, 1.	0.2	4
42	On the Asymptotic Convergence and Acceleration of Gradient Methods. Journal of Scientific Computing, 2022, 90, 1.	2.3	4
43	A Fast Suboptimal Algorithm for Detection of 16-QAM Signaling in MIMO Channels. , 2007, , .		3
44	An augmented Lagrangian affine scaling method for nonlinear programming. Optimization Methods and Software, 2015, 30, 934-964.	2.4	3
45	PACBB: A Projected Adaptive Cyclic Barzilai-Borwein Method for Box Constrained Optimization. , 2006, , 387-392.		3
46	Inexact proximal stochastic second-order methods for nonconvex composite optimization. Optimization Methods and Software, 2020, 35, 808-835.	2.4	2
47	A convexity enforcing $${C}^{{0}}$$ interior penalty method for the Mongeâ€"AmpÃ¨re equation on convex polygonal domains. Numerische Mathematik, 2021, 148, 497-524.	1.9	1
48	Assisted seismic matching: Joint inversion of seismic, rock physics, and basin modeling. , 2007, , .		0
49	A nonmonotone approximate sequence algorithm for unconstrained nonlinear optimization. Computational Optimization and Applications, 2014, 57, 27-43.	1.6	0