Xiliang Lu

List of Publications by Year in descending order

50 papers	725 citations	567281 15 h-index	580821 25 g-index
50 all docs	50 docs citations	50 times ranked	562 citing authors

#	Article	IF	Citations
1	GSDAR: a fast Newton algorithm for $$ell _0$$ regularized generalized linear models with statistical guarantee. Computational Statistics, 2022, 37, 507-533.	1.5	5
2	Sparse signal recovery from phaseless measurements via hard thresholding pursuit. Applied and Computational Harmonic Analysis, 2022, 56, 367-390.	2.2	6
3	One-Step High-Quality NDVI Time-Series Reconstruction by Joint Modeling of Gradual Vegetation Change and Negatively Biased Atmospheric Contamination. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-17.	6.3	3
4	PSNA: A pathwise semismooth Newton algorithm for sparse recovery with optimal local convergence and oracle properties. Signal Processing, 2022, 194, 108432.	3.7	0
5	Finite element method for an eigenvalue optimization problem of the SchrÃ¶dinger operator. AIMS Mathematics, 2022, 7, 5049-5071.	1.6	0
6	A Rate of Convergence of Physics Informed Neural Networks for the Linear Second Order Elliptic PDEs. Communications in Computational Physics, 2022, 31, 1272-1295.	1.7	3
7	Imaging conductivity from current density magnitude using neural networks*. Inverse Problems, 2022, 38, 075003.	2.0	5
8	A data-driven line search rule for support recovery in high-dimensional data analysis. Computational Statistics and Data Analysis, 2022, 174, 107524.	1.2	0
9	Imaging Anisotropic Conductivities from Current Densities. SIAM Journal on Imaging Sciences, 2022, 15, 860-891.	2.2	2
10	Smoothing Newton method for $ ell^0 $-$ ell^2 $ regularized linear inverse problem. Inverse Problems and Imaging, 2021, .	1.1	0
11	A Unified Primal Dual Active Set Algorithm for Nonconvex Sparse Recovery. Statistical Science, 2021, 36, .	2.8	17
12	Membership Affinity Lasso for Fuzzy Clustering. IEEE Transactions on Fuzzy Systems, 2020, 28, 294-307.	9.8	30
13	Heuristic discrepancy principle for variational regularization of inverse problems. Inverse Problems, 2020, 36, 075013.	2.0	1
14	A Nonconvex Model with Minimax Concave Penalty for Image Restoration. Journal of Scientific Computing, 2019, 78, 1063-1086.	2.3	30
15	Robust Nonconvex Nonnegative Low-rank Representation. , 2019, , .		1
16	On the regularizing property of stochastic gradient descent. Inverse Problems, 2019, 35, 015004.	2.0	16
17	A Universal Destriping Framework Combining 1-D and 2-D Variational Optimization Methods. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 808-822.	6.3	43
18	Robust Decoding from 1-Bit Compressive Sampling with Ordinary and Regularized Least Squares. SIAM Journal of Scientific Computing, 2018, 40, A2062-A2086.	2.8	12

#	Article	IF	Citations
19	Group Sparse Recovery via the $ell ^0(ell ^2)$ Penalty: Theory and Algorithm. IEEE Transactions on Signal Processing, 2017, 65, 998-1012.	5.3	31
20	Preconditioned alternating direction method of multipliers for inverse problems with constraints. Inverse Problems, 2017, 33, 025004.	2.0	8
21	Computation of Time Optimal Control Problems Governed by Linear Ordinary Differential Equations. Journal of Scientific Computing, 2017, 73, 1-25.	2.3	19
22	Iterative Soft/Hard Thresholding With Homotopy Continuation for Sparse Recovery. IEEE Signal Processing Letters, 2017, 24, 784-788.	3.6	13
23	Preasymptotic convergence of randomized Kaczmarz method. Inverse Problems, 2017, 33, 125012.	2.0	26
24	An Inverse Source Problem with Sparsity Constraint for the Time-Fractional Diffusion Equation. Advances in Applied Mathematics and Mechanics, 2016, 8, 1-18.	1.2	10
25	Alternating Direction Method of Multipliers for Linear Inverse Problems. SIAM Journal on Numerical Analysis, 2016, 54, 2114-2137.	2.3	37
26	Fuzzy clustering method with graph-based regularization. , 2016, , .		5
27	A simple finite element method for boundary value problems with a Riemannâ€“Liouville derivative. Journal of Computational and Applied Mathematics, 2016, 293, 94-111.	2.0	25
28	An Alternating Direction Method with Continuation for Nonconvex Low Rank Minimization. Journal of Scientific Computing, 2016, 66, 849-869.	2.3	35
29	A stabilized finite element method for the convection dominated diffusion optimal control problem. Applicable Analysis, 2016, 95, 2807-2823.	1.3	5
30	Stripe Noise Separation and Removal in Remote Sensing Images by Consideration of the Global Sparsity and Local Variational Properties. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 3049-3060.	6.3	75
31	Two-grid variational multiscale method with bubble stabilization for convection diffusion equation. Applied Mathematical Modelling, 2016, 40, 1097-1109.	4.2	4
32	Lq-regularization for the inverse Robin problem. Journal of Inverse and Ill-Posed Problems, 2016, 24, .	1.0	3
33	Tikhonov Regularisation Method for Simultaneous Inversion of the Source Term and Initial Data in a Time-Fractional Diffusion Equation. East Asian Journal on Applied Mathematics, 2015, 5, 273-300.	0.9	19
34	A primal dual active set with continuation algorithm forÂtheÂ<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi>â„“</mml:mi></mml:mrow><mml:mrow><mml:mn>0</mml:mn></mml:mrow></ optimization problem. Applied and Computational Harmonic Analysis, 2015, 39, 400-426.	2.2	57
35	Finite element approximation to the extremal eigenvalue problem for inhomogenous materials. Numerische Mathematik, 2015, 130, 741-762.	1.9	3
36	Two-level quadratic equal-order stabilized method for the Stokes eigenvalue problem. International Journal of Computer Mathematics, 2015, 92, 337-348.	1.8	5

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37	Numerical identification of a sparse Robin coefficient. Advances in Computational Mathematics, 2015, 41, 131-148.	1.6	4
38	A fast nonstationary iterative method with convex penalty for inverse problems in Hilbert spaces. Inverse Problems, 2014, 30, 045012.	2.0	12
39	An analysis of finite element approximation in electrical impedance tomography. Inverse Problems, 2014, 30, 045013.	2.0	20
40	A Primal Dual Active Set Algorithm With Continuation for Compressed Sensing. IEEE Transactions on Signal Processing, 2014, 62, 6276-6285.	5.3	30
41	Optimal control for an elliptic system with convex polygonal control constraints. IMA Journal of Numerical Analysis, 2013, 33, 875-897.	2.9	7
42	Optimization-based structure identification of dynamical networks. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 1038-1049.	2.6	13
43	Optimal control for elliptic systems with pointwise euclidean norm constraints on the controls. Mathematical Programming, 2013, 142, 461-483.	2.4	7
44	Extremal Eigenvalues of the Sturm-Liouville Problems with Discontinuous Coefficients. Numerical Mathematics, 2013, 6, 657-684.	1.3	1
45	Numerical identification of a Robin coefficient in parabolic problems. Mathematics of Computation, 2012, 81, 1369-1398.	2.1	37
46	Optimal control for multi-phase fluid Stokes problems. Nonlinear Analysis: Theory, Methods & Applications, 2011, 74, 585-599.	1.1	7
47	Error estimate of the P 1 nonconforming finite element method for the penalized unsteady Navier-Stokes equations. Numerische Mathematik, 2010, 115, 261-287.	1.9	12
48	Optimal Control for an Elliptic System with Polygonal State Constraints. SIAM Journal on Control and Optimization, 2010, 48, 5053-5072.	2.1	4
49	Long Time Numerical Solution of the Navierâ€“Stokes Equations Based on a Sequential Regularization Formulation. SIAM Journal of Scientific Computing, 2008, 31, 398-419.	2.8	5
50	Analysis of a sequential regularization method for the unsteady Navier-Stokes equations. Mathematics of Computation, 2008, 77, 1467-1494.	2.1	12