Li-Zhi Liao

List of Publications by Year
in descending order

68 papers	2,392 citations	257450 24 h-index	206112 48 g-index
69 all docs	69 docs citations	69 times ranked	1367 citing authors

#	Article	IF	Citations
1	New Conjugacy Conditions and Related Nonlinear Conjugate Gradient Methods. Applied Mathematics and Optimization, 2001, 43, 87-101.	1.6	343
2	A new inexact alternating directions method for monotone variational inequalities. Mathematical Programming, 2002, 92, 103-118.	2.4	311
3	R-linear convergence of the Barzilai and Borwein gradient method. IMA Journal of Numerical Analysis, 2002, 22, 1-10.	2.9	239
4	Improvements of Some Projection Methods for Monotone Nonlinear Variational Inequalities. Journal of Optimization Theory and Applications, 2002, 112, 111-128.	1.5	186
5	Sparse Canonical Correlation Analysis: New Formulation and Algorithm. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 3050-3065.	13.9	92
6	Convergence in unconstrained discrete-time differential dynamic programming. IEEE Transactions on Automatic Control, 1991, 36, 692-706.	5.7	78
7	Decomposition Method with a Variable Parameter for a Class of Monotone Variational Inequality Problems. Journal of Optimization Theory and Applications, 2001, 109, 415-429.	1.5	76
8	A Novel Neural Network for Variational Inequalities With Linear and Nonlinear Constraints. IEEE Transactions on Neural Networks, 2005, 16, 1305-1317.	4.2	56
9	Neurodynamical Optimization. Journal of Global Optimization, 2004, 28, 175-195.	1.8	55
10	Incremental Linear Discriminant Analysis: A Fast Algorithm and Comparisons. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 2716-2735.	11.3	54
11	A Smoothing Newton Method for Extended Vertical Linear Complementarity Problems. SIAM Journal on Matrix Analysis and Applications, 1999, 21, 45-66.	1.4	52
12	A New One-Layer Neural Network for Linear and Quadratic Programming. IEEE Transactions on Neural Networks, 2010, 21, 918-929.	4.2	47
13	On Restart Procedures for the Conjugate Gradient Method. Numerical Algorithms, 2004, 35, 249-260.	1.9	46
14	Solving nonlinear complementarity problems with neural networks: a reformulation method approach. Journal of Computational and Applied Mathematics, 2001, 131, 343-359.	2.0	43
15	A Neural Network for a Class of Convex Quadratic Minimax Problems With Constraints. IEEE Transactions on Neural Networks, 2004, 15, 622-628.	4.2	42
16	Regularized orthogonal linear discriminant analysis. Pattern Recognition, 2012, 45, 2719-2732.	8.1	38
17	A Smoothing Newton Method for General Nonlinear Complementarity Problems. Computational Optimization and Applications, 2000, 17, 231-253.	1.6	37
18	Stability Analysis of Gradient-Based Neural Networks for Optimization Problems. Journal of Global Optimization, 2001, 19, 363-381.	1.8	37

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19	Self-adaptive operator splitting methods for monotone variational inequalities. Numerische Mathematik, 2003, 94, 715-737.	1.9	35
20	Fast Algorithms for the Generalized Foleyâ€“Sammon Discriminant Analysis. SIAM Journal on Matrix Analysis and Applications, 2010, 31, 1584-1605.	1.4	34
21	Convergence analysis of the Levenbergâ€“Marquardt method. Optimization Methods and Software, 2007, 22, 659-678.	2.4	29
22	A New Projection-Based Neural Network for Constrained Variational Inequalities. IEEE Transactions on Neural Networks, 2009, 20, 373-388.	4.2	29
23	A Novel Neural Network for a Class of Convex Quadratic Minimax Problems. Neural Computation, 2006, 18, 1818-1846.	2.2	27
24	Projected Pseudotransient Continuation. SIAM Journal on Numerical Analysis, 2008, 46, 3071-3083.	2.3	26
25	Utilizing Sparsity in Time-Varying Optimal Control of Aquifer Cleanup. Journal of Water Resources Planning and Management - ASCE, 1998, 124, 15-21.	2.6	22
26	Adaptive differential dynamic programming for multiobjective optimal control. Automatica, 2002, 38, 1003-1015.	5.0	22
27	A neural network for monotone variational inequalities with linear constraints. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 307, 118-128.	2.1	22
28	Combining Trust-Region Techniques and Rosenbrock Methods to Compute Stationary Points. Journal of Optimization Theory and Applications, 2009, 140, 265-286.	1.5	22
29	A neural network for the linear complementarity problem. Mathematical and Computer Modelling, 1999, 29, 9-18.	2.0	20
30	Continuous methods for extreme and interior eigenvalue problems. Linear Algebra and Its Applications, 2006, 415, 31-51.	0.9	17
31	Towards the global solution of the maximal correlation problem. Journal of Global Optimization, 2011, 49, 91-107.	1.8	17
32	On sparse linear discriminant analysis algorithm for highâ€dimensional data classification. Numerical Linear Algebra With Applications, 2011, 18, 223-235.	1.6	15
33	Proximal-like contraction methods for monotone variational inequalities in a unified framework I: Effective quadruplet and primary methods. Computational Optimization and Applications, 2012, 51, 649-679.	1.6	13
34	Nonconvex and Nonsmooth Optimization with Generalized Orthogonality Constraints: An Approximate Augmented Lagrangian Method. Journal of Scientific Computing, 2017, 72, 331-372.	2.3	13
35	An alternating variable method for the maximal correlation problem. Journal of Global Optimization, 2012, 54, 199-218.	1.8	12
36	A Gradient-based Continuous Method for Large-scale Optimization Problems. Journal of Global Optimization, 2005, 31, 271-286.	1.8	11

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37	Proximal-like contraction methods for monotone variational inequalities in a unified frameworkÂII: general methods and numerical experiments. Computational Optimization and Applications, 2012, 51, 681-708.	1.6	11
38	Superlinear Convergence of a General Algorithm for the Generalized Foleyâ€“Sammon Discriminant Analysis. Journal of Optimization Theory and Applications, 2013, 157, 853-865.	1.5	11
39	Successive method for general multiple linear-quadratic control problem in discrete time. IEEE Transactions on Automatic Control, 2000, 45, 1380-1385.	5.7	10
40	A Globally Convergent and Efficient Method for Unconstrained Discrete-Time Optimal Control. Journal of Global Optimization, 2002, 23, 401-421.	1.8	10
41	Continuous methods for symmetric generalized eigenvalue problems. Linear Algebra and Its Applications, 2008, 428, 676-696.	0.9	10
42	Inexact Alternating Direction Methods of Multipliers with Logarithmicâ€“Quadratic Proximal Regularization. Journal of Optimization Theory and Applications, 2013, 159, 412-436.	1.5	10
43	Quadratic two-stage stochastic optimization with coherent measures of risk. Mathematical Programming, 2018, 168, 599-613.	2.4	10
44	Regularized Smoothing Approximations to Vertical Nonlinear Complementarity Problems. Journal of Mathematical Analysis and Applications, 1999, 230, 261-276.	1.0	8
45	A modified descent method for co-coercive variational inequalities. European Journal of Operational Research, 2008, 189, 310-323.	5.7	8
46	Proximal Point Algorithms for General Variational Inequalities. Journal of Optimization Theory and Applications, 2009, 142, 125-145.	1.5	8
47	A note on the trace quotient problem. Optimization Letters, 2014, 8, 1637-1645.	1.6	8
48	Multiple graphs clustering by gradient flow method. Journal of the Franklin Institute, 2018, 355, 1819-1845.	3.4	8
49	A Recurrent Neural Network for N-Stage Optimal Control Problems. Neural Processing Letters, 1999, 10, 195-200.	3.2	7
50	A Continuous Method for Convex Programming Problems. Journal of Optimization Theory and Applications, 2005, 124, 207-226.	1.5	7
51	Sparse Orthogonal Linear Discriminant Analysis. SIAM Journal of Scientific Computing, 2012, 34, A2421-A2443.	2.8	6
52	A Study of the Dual Affine Scaling Continuous Trajectories for Linear Programming. Journal of Optimization Theory and Applications, 2014, 163, 548-568.	1.5	6
53	A Novel Neural Network for Generally Constrained Variational Inequalities. IEEE Transactions on Neural Networks and Learning Systems, 2016, 28, 1-14.	11.3	6
54	A self-adaptive projection and contraction method for monotone symmetric linear variational inequalities. Computers and Mathematics With Applications, 2002, 43, 41-48.	2.7	5

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55	Incremental Regularized Least Squares for Dimensionality Reduction of Large-Scale Data. SIAM Journal of Scientific Computing, 2016, 38, B414-B439.	2.8	5
56	Steplengths in the extragradient type methods. Journal of Computational and Applied Mathematics, 2010, 233, 2925-2939.	2.0	4
57	Stability and Convergence Analysis for a Class of Neural Networks. IEEE Transactions on Neural Networks, 2011, 22, 1770-1782.	4.2	4
58	The Convergent Generalized Central Paths for Linearly Constrained Convex Programming. SIAM Journal on Optimization, 2018, 28, 1183-1204.	2.0	3
59	Multi-Instance Dimensionality Reduction via Sparsity and Orthogonality. Neural Computation, 2018, 30, 3281-3308.	2.2	2
60	A neural network model for discrete-time optimal control with control constraints. , 0, , .		1
61	A Self-Adaptive Projection and Contraction Method for Linear Complementarity Problems. Applied Mathematics and Optimization, 2003, 48, 169-180.	1.6	1
62	Continuous optimization and combinatorial optimization. Frontiers of Mathematics in China, 2010, 5, 1-2.	0.7	1
63	Some Goldstein's type methods for co-coercive variant variational inequalities. Applied Numerical Mathematics, 2011, 61, 216-228.	2.1	1
64	Analysis of some interior point continuous trajectories for convex programming. Optimization, 2017, 66, 589-608.	1.7	1
65	A strategy of global convergence for the affine scaling algorithm for convex semidefinite programming. Mathematical Programming, 2020, 179, 1-19.	2.4	1
66	Interior point based continuous methods for linear programming. , 2010, , .		0
67	A Time-Delay Neural Network Model forÂUnconstrained Nonconvex Optimization. Springer Proceedings in Mathematics and Statistics, 2018, , 155-171.	0.2	0
68	An Interior Point Parameterized Central Path Following Algorithm for Linearly Constrained Convex Programming. Journal of Scientific Computing, 2022, 90, 1.	2.3	0