Xiao-Qing Jin

List of Publications by Year
in descending order

68 papers	1,108 citations	516561 16 h-index	501076 28 g-index
69 all docs	69 docs citations	69 times ranked	475 citing authors

#	Article	IF	Citations
1	The Riemannian two-step perturbed Gauss–Newton method for least squares inverse eigenvalue problems. Journal of Computational and Applied Mathematics, 2022, 405, 113971.	1.1	0
2	A Riemannian derivative-free Polak–Ribiére–Polyak method for tangent vector field. Numerical Algorithms, 2021, 86, 325-355.	1.1	5
3	Crank-Nicolson-weighted-shifted-Grünwald-difference schemes for space Riesz variable-order fractional diffusion equations. Numerical Algorithms, 2021, 87, 601-631.	1.1	7
4	An optimal preconditioner for tensor equations involving Einstein product. Linear and Multilinear Algebra, 2020, 68, 886-902.	0.5	11
5	A geometric Gauss–Newton method for least squares inverse eigenvalue problems. BIT Numerical Mathematics, 2020, 60, 825-852.	1.0	4
6	Riemannian inexact Newton method for structured inverse eigenvalue and singular value problems. BIT Numerical Mathematics, 2019, 59, 675-694.	1.0	3
7	Tensor Methods for Solving Symmetric $${\mathcal {M}}$$ M -tensor Systems. Journal of Scientific Computing, 2018, 74, 412-425.	1.1	56
8	Some norm inequalities for commutators of contracted tensor products. Linear Algebra and Its Applications, 2018, 540, 244-256.	0.4	1
9	A Riemannian inexact Newton-CG method for constructing a nonnegative matrix with prescribed realizable spectrum. Numerische Mathematik, 2018, 140, 827-855.	0.9	10
10	A fast algorithm for solving circulant tensor systems. Linear and Multilinear Algebra, 2017, 65, 1894-1904.	0.5	13
11	A Convergence Analysis of the MINRES Method for Some Hermitian Indefinite Systems. East Asian Journal on Applied Mathematics, 2017, 7, 827-836.	0.4	1
12	A Geometric Nonlinear Conjugate Gradient Method for Stochastic Inverse Eigenvalue Problems. SIAM Journal on Numerical Analysis, 2016, 54, 2015-2035.	1.1	22
13	Preconditioned iterative methods for space-time fractional advection-diffusion equations. Journal of Computational Physics, 2016, 319, 266-279.	1.9	24
14	Newton-type methods for inverse singular value problems with multiple singular values. Applied Numerical Mathematics, 2016, 109, 138-156.	1.2	6
15	Preconditioned Iterative Methods for Two-Dimensional Space-Fractional Diffusion Equations. Communications in Computational Physics, 2015, 18, 469-488.	0.7	45
16	Superoptimal Preconditioners for Functions of Matrices. Numerical Mathematics, 2015, 8, 515-529.	0.6	2
17	Backward Error Analysis for Eigenproblems Involving Conjugate Symplectic Matrices. East Asian Journal on Applied Mathematics, 2015, 5, 312-326.	0.4	1
18	A Riemannian Newton Algorithm for Nonlinear Eigenvalue Problems. SIAM Journal on Matrix Analysis and Applications, 2015, 36, 752-774.	0.7	34

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19	A survey on the Böttcher-Wenzel conjecture and related problems. Operators and Matrices, 2015, , 659-673.	0.1	7
20	Preconditioned iterative methods for fractional diffusion equation. Journal of Computational Physics, 2014, 256, 109-117.	1.9	93
21	Optimal preconditioners for functions of matrices. Linear Algebra and Its Applications, 2014, 457, 224-243.	0.4	3
22	The Mediating Morphism of the Multilinear Optimal Map. East Asian Journal on Applied Mathematics, 2014, 4, 82-87.	0.4	0
23	Sinc Nyström Method for Singularly Perturbed Love's Integral Equation. East Asian Journal on Applied Mathematics, 2013, 3, 48-58.	0.4	4
24	Numerical Solutions of Coupled Nonlinear Schrödinger Equations by Orthogonal Spline Collocation Method. Communications in Computational Physics, 2012, 12, 1392-1416.	0.7	9
25	A High-Order Difference Scheme for the Generalized Cattaneo Equation. East Asian Journal on Applied Mathematics, 2012, 2, 170-184.	0.4	27
26	On some inverse singular value problems with Toeplitz-related structure. Numerical Algebra, Control and Optimization, 2012, 2, 187-192.	1.0	7
27	An Ulm-like Method for Inverse Singular Value Problems. SIAM Journal on Matrix Analysis and Applications, 2011, 32, 412-429.	0.7	17
28	Tri-Diagonal Preconditioner for Toeplitz Systems from Finance. East Asian Journal on Applied Mathematics, 2011, 1, 82-88.	0.4	1
29	The generalized superoptimal preconditioner. Linear Algebra and Its Applications, 2010, 432, 203-217.	0.4	2
30	Some Relationships between Optimal Preconditioner and Superoptimal Preconditioner. , 2010, , 266-272.		0
31	Block preconditioners with circulant blocks for general linear systems. Computers and Mathematics With Applications, 2009, 58, 1309-1319.	1.4	1
32	A survey and some extensions of T. Chan's preconditioner. Linear Algebra and Its Applications, 2008, 428, 403-412.	0.4	11
33	Convergence analysis of superoptimal PCG algorithm for Toeplitz systems with a Fisher–Hartwig singularity. Linear Algebra and Its Applications, 2008, 428, 535-549.	0.4	0
34	Proof of Böttcher and Wenzel's Conjecture. Operators and Matrices, 2008, , 435-442.	0.1	31
35	A short note on singular values of optimal and superoptimal preconditioned matrices. International Journal of Computer Mathematics, 2007, 84, 1261-1263.	1.0	4
36	A note on spectra of optimal and superoptimal preconditioned matrices. Linear Algebra and Its Applications, 2007, 422, 482-485.	0.4	8

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37	Stability properties of superoptimal preconditioner from numerical range. Numerical Linear Algebra With Applications, 2006, 13, 513-521.	0.9	5
38	Some stability properties of T. Chanâ€™s preconditioner. Linear Algebra and Its Applications, 2005, 395, 361-365.	0.4	4
39	A generalization of T. Chanâ€™s preconditioner. Linear Algebra and Its Applications, 2005, 407, 11-18.	0.4	5
40	BCCB preconditioners for solving linear systems from delay differential equations. Computers and Mathematics With Applications, 2005, 50, 281-288.	1.4	4
41	A note on preconditioning for "mmlmath altimg="si7.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. Applied Mathema	1.5	4
42	Circulant preconditioners for solving singular perturbation delay differential equations. Numerical Linear Algebra With Applications, 2005, 12, 327-336.	0.9	7
43	Circulant preconditioners for solving differential equations with multidelays. Computers and Mathematics With Applications, 2004, 47, 1429-1436.	1.4	15
44	BCCB preconditioners for systems of BVM-based numerical integrators. Numerical Linear Algebra With Applications, 2004, 11, 25-40.	0.9	5
45	A note on T. Chanâ€™s preconditioner. Linear Algebra and Its Applications, 2004, 376, 283-290.	0.4	7
46	Circulant preconditioned WR-BVM methods for ODE systems. Journal of Computational and Applied Mathematics, 2004, 162, 201-211.	1.1	3
47	Strang-type preconditioners for solving linear systems from neutral delay differential equations. Calcolo, 2003, 40, 21-31.	0.6	6
48	Sine transform based preconditioners for solving constant-coefficient first-order PDEs. Linear Algebra and Its Applications, 2003, 366, 283-294.	0.4	1
49	Circulant-block preconditioners for solving ordinary differential equations. Applied Mathematics and Computation, 2003, 140, 409-418.	1.4	5
50	Recursive-Based PCG Methods for Toeplitz Systems with Nonnegative Generating Functions. SIAM Journal of Scientific Computing, 2003, 24, 1507-1529.	1.3	13
51	A Stability Property of T. Chan's Preconditioner. SIAM Journal on Matrix Analysis and Applications, 2003, 25, 627-629.	0.7	6
52	A note on the fast algorithm for block Toeplitz systems with tensor structure. Applied Mathematics and Computation, 2002, 126, 187-197.	1.4	3
53	Perturbation bounds for constrained and weighted least squares problems. Linear Algebra and Its Applications, 2002, 349, 221-232.	0.4	43
54	Convergence of the Multigrid Method of Ill-conditioned Block Toeplitz Systems. BIT Numerical Mathematics, 2001, 41, 179-190.	1.0	25

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55	Addendum to "a note on construction of circulant preconditioners from kernels" Applied Mathematics and Computation, 1998, 95, 91-99.	1.4	0
56	A note on construction of circulant preconditioners from kernels. Applied Mathematics and Computation, 1997, 83, 3-12.	1.4	3
57	Band Toeplitz preconditioners for block Toeplitz systems. Journal of Computational and Applied Mathematics, 1996, 70, 225-230.	1.1	10
58	A preconditioner for constrained and weighted least squares problems with Toeplitz structure. BIT Numerical Mathematics, 1996, 36, 101-109.	1.0	9
59	Fast iterative solvers for symmetric Toeplitz systems — A survey and an extension. Journal of Computational and Applied Mathematics, 1996, 66, 315-321.	1.1	11
60	A fast algorithm for block Toeplitz systems with tensor structure. Applied Mathematics and Computation, 1995, 73, 115-124.	1.4	2
61	A Note on Preconditioned Block Toeplitz Matrices. SIAM Journal of Scientific Computing, 1995, 16, 951-955.	1.3	17
62	A Family of Block Preconditioners for Block Systems. SIAM Journal on Scientific and Statistical Computing, 1992, 13, 1218-1235.	1.5	91
63	Circulant preconditioners for second order hyperbolic equations. BIT Numerical Mathematics, 1992, 32, 650-664.	1.0	9
64	The circulant operator in the banach algebra of matrices. Linear Algebra and Its Applications, 1991, 149, 41-53.	0.4	76
65	Circulant and skew-circulant preconditioners for skew-hermitian type Toeplitz systems. BIT Numerical Mathematics, 1991, 31, 632-646.	1.0	25
66	The Spectra of Super-Optimal Circulant Preconditioned Toeplitz Systems. SIAM Journal on Numerical Analysis, 1991, 28, 871-879.	1.1	25
67	Singular extremal control problem with time delay. International Journal of Control, 1988, 47, 1795-1810.	1.2	0
68	A Riemannian under-determined BFGS method for least squares inverse eigenvalue problems. BIT Numerical Mathematics, 0, , 1.	1.0	0