Bo Kågström

List of Publications by Year
in descending order

50	1,805	279487	264894
papers	citations	23	42
		h-index	g-index

52	52	52	540
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Geometry of Matrix Polynomial Spaces. Foundations of Computational Mathematics, 2020, 20, 423-450.	1.5	5
2	Canonical Structure Transitions of System Pencils. SIAM Journal on Matrix Analysis and Applications, 2017, 38, 1249-1267.	0.7	4
3	Change of the congruence canonical form of 2-by-2 and 3-by-3 matrices under perturbations and bundles of matrices under congruence. Linear Algebra and Its Applications, 2015, 469, 305-334.	0.4	16
4	A Parallel QZ Algorithm for Distributed Memory HPC Systems. SIAM Journal of Scientific Computing, 2014, 36, C480-C503.	1.3	12
5	Orbit Closure Hierarchies of Skew-symmetric Matrix Pencils. SIAM Journal on Matrix Analysis and Applications, 2014, 35, 1429-1443.	0.7	17
6	Stratification of full rank polynomial matrices. Linear Algebra and Its Applications, 2013, 439, 1062-1090.	0.4	24
7	Skew-symmetric matrix pencils: Codimension counts and the solution of a pair of matrix equations. Linear Algebra and Its Applications, 2013, 438, 3375-3396.	0.4	12
8	Parallel and Cache-Efficient In-Place Matrix Storage Format Conversion. ACM Transactions on Mathematical Software, 2012, 38, 1-32.	1.6	54
9	Chapter 5: StratiGraph Tool: Matrix Stratifications in Control Applications. , 2012, , 79-103.		1
10	A numerical evaluation of solvers for the periodic Riccati differential equation. BIT Numerical Mathematics, 2010, 50, 301-329.	1.0	21
11	Parallel Solvers for Sylvester-Type Matrix Equations with Applications in Condition Estimation, Part I. ACM Transactions on Mathematical Software, 2010, 37, 1-32.	1.6	5
12	Stratification of Controllability and Observability Pairsâ€"Theory and Use in Applications. SIAM Journal on Matrix Analysis and Applications, 2009, 31, 203-226.	0.7	12
13	RECSY and SCASY Library Software: Recursive Blocked and Parallel Algorithms for Sylvester-Type Matrix Equations with Some Applications. Springer Optimization and Its Applications, 2009, , 3-24.	0.6	2
14	Parallel Algorithms for Triangular Periodic Sylvester-Type Matrix Equations. Lecture Notes in Computer Science, 2008, , 780-789.	1.0	9
15	MATLAB TOOLS FOR SOLVING PERIODIC EIGENVALUE PROBLEMS1 1Supported by the Swedish Foundation for Strategic Research under the Frame Programme Grant A3 02:128.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 169-174.	0.4	8
16	Multishift Variants of the QZ Algorithm with Aggressive Early Deflation. SIAM Journal on Matrix Analysis and Applications, 2007, 29, 199-227.	0.7	24
17	Computing periodic deflating subspaces associated with a specified set of eigenvalues. BIT Numerical Mathematics, 2007, 47, 763-791.	1.0	30
18	Parallel Variants of the Multishift QZ Algorithm with Advanced Deflation Techniques. , 2007, , 117-126.		5

#	Article	IF	Citations
19	Direct Eigenvalue Reordering in a Product of Matrices in Periodic Schur Form. SIAM Journal on Matrix Analysis and Applications, 2006, 28, 285-300.	0.7	19
20	Management of Deep Memory Hierarchies â€" Recursive Blocked Algorithms and Hybrid Data Structures for Dense Matrix Computations. Lecture Notes in Computer Science, 2006, , 21-32.	1.0	4
21	Parallel Algorithms and Condition Estimators for Standard and Generalized Triangular Sylvester-Type Matrix Equations. , 2006, , 127-136.		2
22	Recursive Blocked Algorithms for Solving Periodic Triangular Sylvester-Type Matrix Equations. , 2006, , 531-539.		9
23	Recursive Blocked Algorithms and Hybrid Data Structures for Dense Matrix Library Software. SIAM Review, 2004, 46, 3-45.	4.2	140
24	Combining Explicit and Recursive Blocking for Solving Triangular Sylvester-Type Matrix Equations on Distributed Memory Platforms. Lecture Notes in Computer Science, 2004, , 742-750.	1.0	3
25	Parallel ScaLAPACK-Style Algorithms for Solving Continuous-Time Sylvester Matrix Equations. Lecture Notes in Computer Science, 2003, , 800-809.	1.0	7
26	Parallel and Blocked Algorithms for Reduction of a Regular Matrix Pair to Hessenberg-Triangular and Generalized Schur Forms. Lecture Notes in Computer Science, 2002, , 319-328.	1.0	6
27	Recursive blocked algorithms for solving triangular systemsâ€"Part II. ACM Transactions on Mathematical Software, 2002, 28, 416-435.	1.6	73
28	Recursive blocked algorithms for solving triangular systemsâ€"Part I. ACM Transactions on Mathematical Software, 2002, 28, 392-415.	1.6	97
29	Parallel Two-Sided Sylvester-Type Matrix Equation Solvers for SMP Systems Using Recursive Blocking. Lecture Notes in Computer Science, 2002, , 297-306.	1.0	0
30	Computation and presentation of graphs displaying closure hierarchies of Jordan and Kronecker structures. Numerical Linear Algebra With Applications, 2001, 8, 381-399.	0.9	10
31	Parallel Triangular Sylvester-Type Matrix Equation Solvers for SMP Systems Using Recursive Blocking. Lecture Notes in Computer Science, 2001, , 64-73.	1.0	3
32	Extracting partial canonical structure for large scale eigenvalue problems. Numerical Algorithms, 2000, 24, 195-237.	1.1	5
33	A Geometric Approach to Perturbation Theory of Matrices and Matrix Pencils. Part II: A Stratification-Enhanced Staircase Algorithm. SIAM Journal on Matrix Analysis and Applications, 1999, 20, 667-699.	0.7	69
34	Blocked algorithms and software for reduction of a regular matrix pair to generalized Schur form. ACM Transactions on Mathematical Software, 1999, 25, 425-454.	1.6	28
35	GEMM-based level 3 BLAS. ACM Transactions on Mathematical Software, 1998, 24, 268-302.	1.6	136
36	Algorithm 784: GEMM-based level 3 BLAS. ACM Transactions on Mathematical Software, 1998, 24, 303-316.	1.6	32

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37	A Geometric Approach to Perturbation Theory of Matrices and Matrix Pencils. Part I: Versal Deformations. SIAM Journal on Matrix Analysis and Applications, 1997, 18, 653-692.	0.7	110
38	The Set of 2-by-3 Matrix Pencils â€" Kronecker Structures and Their Transitions under Perturbations. SIAM Journal on Matrix Analysis and Applications, 1996, 17, 1-34.	0.7	19
39	Computing eigenspaces with specified eigenvalues of a regular matrix pair (A, B) and condition estimation: theory, algorithms and software. Numerical Algorithms, 1996, 12, 369-407.	1.1	53
40	LAPACK-style algorithms and software for solving the generalized Sylvester equation and estimating the separation between regular matrix pairs. ACM Transactions on Mathematical Software, 1996, 22, 78-103.	1.6	52
41	A Perturbation Analysis of the Generalized Sylvester Equation $(AR - LB,DR - LE) = (C,F)$. SIAM Journal on Matrix Analysis and Applications, 1994, 15, 1045-1060.	0.7	53
42	The generalized Schur decomposition of an arbitrary pencil Aâ€"Î»Bâ€"robust software with error bounds and applications. Part II. ACM Transactions on Mathematical Software, 1993, 19, 175-201.	1.6	90
43	The generalized Schur decomposition of an arbitrary pencil Aâ€"Î»Bâ€"robust software with error bounds and applications. Part I. ACM Transactions on Mathematical Software, 1993, 19, 160-174.	1.6	143
44	Distributed and Shared Memory Block Algorithms for the Triangular Sylvester Equation with $\operatorname{sep}^{ - 1} $ Estimators. SIAM Journal on Matrix Analysis and Applications, 1992, 13, 90-101.	0.7	38
45	Analytical and numerical solutions to higher index linear variable coefficient DAE systems. Journal of Computational and Applied Mathematics, 1990, 31, 305-330.	1.1	11
46	Accurate Solutions of Ill-Posed Problems in control theory. SIAM Journal on Matrix Analysis and Applications, 1988, 9, 126-145.	0.7	46
47	Computing stable eigendecompositions of matrix pencils. Linear Algebra and Its Applications, 1987, 88-89, 139-186.	0.4	84
48	RGSVDâ€"AN Algorithm for Computing the Kronecker Structure and Reducing Subspaces of Singular $A - \lambda B$ Pencils. SIAM Journal on Scientific and Statistical Computing, 1986, 7, 185-211.	1.5	50
49	An Algorithm for Numerical Computation of the Jordan Normal Form of a Complex Matrix. ACM Transactions on Mathematical Software, 1980, 6, 398-419.	1.6	87
50	Bounds and perturbation bounds for the matrix exponential. BIT Numerical Mathematics, 1977, 17, 39-57.	1.0	56