

Volker Mehrmann

List of Publications by Year in descending order

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194
papers

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87723

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197
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197
docs citations

197
times ranked

2050
citing authors

#	ARTICLE	IF	CITATIONS
1	Structured Polynomial Eigenvalue Problems: Good Vibrations from Good Linearizations. SIAM Journal on Matrix Analysis and Applications, 2006, 28, 1029-1051.	0.7	216
2	Vector Spaces of Linearizations for Matrix Polynomials. SIAM Journal on Matrix Analysis and Applications, 2006, 28, 971-1004.	0.7	212
3	SLICOT – A Subroutine Library in Systems and Control Theory. , 1999, , 499-539.		180
4	NLEVP. ACM Transactions on Mathematical Software, 2013, 39, 1-28.	1.6	177
5	Nonlinear eigenvalue problems: a challenge for modern eigenvalue methods. GAMM Mitteilungen, 2004, 27, 121-152.	2.7	159
6	Numerical computation of an analytic singular value decomposition of a matrix valued function. Numerische Mathematik, 1991, 60, 1-39.	0.9	130
7	Numerical Methods for Simultaneous Diagonalization. SIAM Journal on Matrix Analysis and Applications, 1993, 14, 927-949.	0.7	130
8	A numerically stable, structure preserving method for computing the eigenvalues of real Hamiltonian or symplectic pencils. Numerische Mathematik, 1998, 78, 329-358.	0.9	107
9	Structure-Preserving Methods for Computing Eigenpairs of Large Sparse Skew-Hamiltonian/Hamiltonian Pencils. SIAM Journal of Scientific Computing, 2001, 22, 1905-1925.	1.3	107
10	Sparse solutions to underdetermined Kronecker product systems. Linear Algebra and Its Applications, 2009, 431, 2437-2447.	0.4	107
11	Regularization of Descriptor Systems by Derivative and Proportional State Feedback. SIAM Journal on Matrix Analysis and Applications, 1992, 13, 46-67.	0.7	103
12	Numerical solution of singularly perturbed convection-diffusion-reaction problems with two small parameters. BIT Numerical Mathematics, 2016, 56, 51-76.	1.0	102
13	A symplectic QR like algorithm for the solution of the real algebraic Riccati equation. IEEE Transactions on Automatic Control, 1986, 31, 1104-1113.	3.6	101
14	Canonical Forms for Hamiltonian and Symplectic Matrices and Pencils. Linear Algebra and Its Applications, 1999, 302-303, 469-533.	0.4	95
15	The Shifted Proper Orthogonal Decomposition: A Mode Decomposition for Multiple Transport Phenomena. SIAM Journal of Scientific Computing, 2018, 40, A1322-A1344.	1.3	90
16	A Chart of Numerical Methods for Structured Eigenvalue Problems. SIAM Journal on Matrix Analysis and Applications, 1992, 13, 419-453.	0.7	83
17	Feedback design for regularizing descriptor systems. Linear Algebra and Its Applications, 1999, 299, 119-151.	0.4	80
18	Canonical forms for linear differential-algebraic equations with variable coefficients. Journal of Computational and Applied Mathematics, 1994, 56, 225-251.	1.1	78

#	ARTICLE	IF	CITATIONS
19	Numerical Computation of Deflating Subspaces of Skew-Hamiltonian/Hamiltonian Pencils. SIAM Journal on Matrix Analysis and Applications, 2002, 24, 165-190.	0.7	74
20	Linear port-Hamiltonian descriptor systems. Mathematics of Control, Signals, and Systems, 2018, 30, 1.	1.4	71
21	A new method for computing the stable invariant subspace of a real Hamiltonian matrix. Journal of Computational and Applied Mathematics, 1997, 86, 17-43.	1.1	63
22	A quaternion QR algorithm. Numerische Mathematik, 1989, 55, 83-95.	0.9	62
23	Regularization of descriptor systems by output feedback. IEEE Transactions on Automatic Control, 1994, 39, 1742-1748.	3.6	60
24	On Hamiltonian and symplectic Hessenberg forms. Linear Algebra and Its Applications, 1991, 149, 55-72.	0.4	53
25	Eigenvalue perturbation theory of classes of structured matrices under generic structured rank one perturbations. Linear Algebra and Its Applications, 2011, 435, 687-716.	0.4	53
26	The Matrix Sign Function Method and the Computation of Invariant Subspaces. SIAM Journal on Matrix Analysis and Applications, 1997, 18, 615-632.	0.7	50
27	Structured eigenvalue methods for the computation of corner singularities in 3D anisotropic elastic structures. Computer Methods in Applied Mechanics and Engineering, 2002, 191, 4459-4473.	3.4	49
28	The linear quadratic optimal control problem for linear descriptor systems with variable coefficients. Mathematics of Control, Signals, and Systems, 1997, 10, 247-264.	1.4	47
29	Existence, Uniqueness, and Parametrization of Lagrangian Invariant Subspaces. SIAM Journal on Matrix Analysis and Applications, 2002, 23, 1045-1069.	0.7	46
30	Perturbation Theory for Hamiltonian Matrices and the Distance to Bounded-Realness. SIAM Journal on Matrix Analysis and Applications, 2011, 32, 484-514.	0.7	46
31	Existence, uniqueness, and stability of solutions to singular linear quadratic optimal control problems. Linear Algebra and Its Applications, 1989, 121, 291-331.	0.4	45
32	On Structure-Preserving Model Reduction for Damped Wave Propagation in Transport Networks. SIAM Journal of Scientific Computing, 2018, 40, A331-A365.	1.3	44
33	A New Class of Discretization Methods for the Solution of Linear Differential-Algebraic Equations with Variable Coefficients. SIAM Journal on Numerical Analysis, 1996, 33, 1941-1961.	1.1	43
34	Minimum norm regularization of descriptor systems by mixed output feedback. Linear Algebra and Its Applications, 1999, 296, 39-77.	0.4	43
35	Analysis of Over- and Underdetermined Nonlinear Differential-Algebraic Systems with Application to Nonlinear Control Problems. Mathematics of Control, Signals, and Systems, 2001, 14, 233-256.	1.4	43
36	Regular solutions of nonlinear differential-algebraic equations and their numerical determination. Numerische Mathematik, 1998, 79, 581-600.	0.9	42

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37	Where is the nearest non-regular pencil?. <i>Linear Algebra and Its Applications</i> , 1998, 285, 81-105.	0.4	42
38	Defect correction method for the solution of algebraic Riccati equations. <i>IEEE Transactions on Automatic Control</i> , 1988, 33, 695-698.	3.6	41
39	Stability and Robust Stability of Linear Time-Invariant Delay Differential-Algebraic Equations. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2013, 34, 1631-1654.	0.7	41
40	Numerical methods for palindromic eigenvalue problems: Computing the anti-triangular Schur form. <i>Numerical Linear Algebra With Applications</i> , 2009, 16, 63-86.	0.9	40
41	A numerical method for computing the Hamiltonian Schur form. <i>Numerische Mathematik</i> , 2006, 105, 375-412.	0.9	39
42	A Symplectic Orthogonal Method for Single Input or Single Output Discrete Time Optimal Quadratic Control Problems. <i>SIAM Journal on Matrix Analysis and Applications</i> , 1988, 9, 221-247.	0.7	38
43	Index reduction for differential-algebraic equations by minimal extension. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2004, 84, 579-597.	0.9	37
44	Stability Radii for Linear Hamiltonian Systems with Dissipation Under Structure-Preserving Perturbations. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2016, 37, 1625-1654.	0.7	37
45	Smith forms of palindromic matrix polynomials. <i>Electronic Journal of Linear Algebra</i> , 0, 22, .	0.6	37
46	Incomplete Factorizations of Matrices and Connections with H-Matrices. <i>SIAM Journal on Numerical Analysis</i> , 1980, 17, 787-793.	1.1	36
47	Analysis and Numerical Solution of Control Problems in Descriptor Form. <i>Mathematics of Control, Signals, and Systems</i> , 2001, 14, 29-61.	1.4	36
48	Optimal control for unstructured nonlinear differential-algebraic equations of arbitrary index. <i>Mathematics of Control, Signals, and Systems</i> , 2008, 20, 227-269.	1.4	36
49	Möbius transformations of matrix polynomials. <i>Linear Algebra and Its Applications</i> , 2015, 470, 120-184.	0.4	36
50	Structure-preserving discretization for port-Hamiltonian descriptor systems. , 2019, , .		36
51	A New Software Package for Linear Differential-Algebraic Equations. <i>SIAM Journal of Scientific Computing</i> , 1997, 18, 115-138.	1.3	35
52	Model reduction for systems with inhomogeneous initial conditions. <i>Systems and Control Letters</i> , 2017, 99, 99-106.	1.3	35
53	Robust port-Hamiltonian representations of passive systems. <i>Automatica</i> , 2019, 100, 182-186.	3.0	35
54	Disturbance decoupling for linear time-invariant systems: a matrix pencil approach. <i>IEEE Transactions on Automatic Control</i> , 2001, 46, 802-808.	3.6	34

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55	A robust numerical method for the $\hat{\Gamma}^3$ -iteration in \hat{H}^∞ control. Linear Algebra and Its Applications, 2007, 425, 548-570.	0.4	34
56	Lyapunov, Bohl and Sacker-Sell Spectral Intervals for Differential-Algebraic Equations. Journal of Dynamics and Differential Equations, 2009, 21, 153-194.	1.0	34
57	Linear Algebra Properties of Dissipative Hamiltonian Descriptor Systems. SIAM Journal on Matrix Analysis and Applications, 2018, 39, 1489-1519.	0.7	34
58	A step toward a unified treatment of continuous and discrete time control problems. Linear Algebra and Its Applications, 1996, 241-243, 749-779.	0.4	33
59	Benchmarks for the numerical solution of algebraic Riccati equations. IEEE Control Systems, 1997, 17, 18-28.	1.0	33
60	Descriptor Systems Without Controllability at Infinity. SIAM Journal on Control and Optimization, 1997, 35, 462-479.	1.1	33
61	Regularization of Linear Descriptor Systems with Variable Coefficients. SIAM Journal on Control and Optimization, 1997, 35, 117-133.	1.1	33
62	The Anderson Model of Localization: A Challenge for Modern Eigenvalue Methods. SIAM Journal of Scientific Computing, 1999, 20, 2089-2102.	1.3	33
63	Jordan structures of alternating matrix polynomials. Linear Algebra and Its Applications, 2010, 432, 867-891.	0.4	33
64	Skew-Hamiltonian and Hamiltonian Eigenvalue Problems: Theory, Algorithms and Applications. , 2005, , 3-39.		33
65	Disturbance decoupled observer design for descriptor systems. Systems and Control Letters, 1999, 38, 37-48.	1.3	32
66	Perturbation theory of selfadjoint matrices and sign characteristics under generic structured rank one perturbations. Linear Algebra and Its Applications, 2012, 436, 4027-4042.	0.4	32
67	Perturbation Analysis for the Eigenvalue Problem of a Formal Product of Matrices. BIT Numerical Mathematics, 2002, 42, 1-43.	1.0	31
68	Hybrid systems of differential-algebraic equations " Analysis and numerical solution. Journal of Process Control, 2009, 19, 1218-1228.	1.7	31
69	Transformation of high order linear differential-algebraic systems to first order. Numerical Algorithms, 2006, 42, 281-307.	1.1	28
70	Numerical methods for parametric model reduction in the simulation of disk brake squeal. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2016, 96, 1388-1405.	0.9	28
71	Nonlinear optimization of district heating networks. Optimization and Engineering, 2021, 22, 783-819.	1.3	28
72	Perturbation Analysis of Hamiltonian Schur and Block-Schur Forms. SIAM Journal on Matrix Analysis and Applications, 2001, 23, 387-424.	0.7	27

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73	A Behavioral Approach to Time-Varying Linear Systems. Part 1: General Theory. SIAM Journal on Control and Optimization, 2005, 44, 1725-1747.	1.1	27
74	Calculation of high-dimensional probability density functions of stochastically excited nonlinear mechanical systems. Nonlinear Dynamics, 2012, 67, 2089-2099.	2.7	27
75	On the distance to singularity via low rank perturbations. Operators and Matrices, 2015, , 733-772.	0.1	27
76	Trimmed linearizations for structured matrix polynomials. Linear Algebra and Its Applications, 2008, 429, 2373-2400.	0.4	26
77	Adaptive computation of smallest eigenvalues of self-adjoint elliptic partial differential equations. Numerical Linear Algebra With Applications, 2011, 18, 387-409.	0.9	26
78	Skew-symmetric matrix polynomials and their Smith forms. Linear Algebra and Its Applications, 2013, 438, 4625-4653.	0.4	26
79	Numerical Solution of Quadratic Eigenvalue Problems with Structure-Preserving Methods. SIAM Journal of Scientific Computing, 2003, 24, 1283-1302.	1.3	25
80	Controllability and Observability of Second Order Descriptor Systems. SIAM Journal on Control and Optimization, 2008, 47, 1351-1379.	1.1	25
81	Eigenvalue perturbation theory of symplectic, orthogonal, and unitary matrices under generic structured rank one perturbations. BIT Numerical Mathematics, 2014, 54, 219-255.	1.0	25
82	Jordan forms of real and complex matrices under rank one perturbations. Operators and Matrices, 2013, , 381-398.	0.1	25
83	Explicit Solutions for a Riccati Equation from Transport Theory. SIAM Journal on Matrix Analysis and Applications, 2009, 30, 1339-1357.	0.7	24
84	Choosing Poles So That the Single-Input Pole Placement Problem Is Well Conditioned. SIAM Journal on Matrix Analysis and Applications, 1998, 19, 664-681.	0.7	23
85	The Modified Optimal H_{∞} Control Problem for Descriptor Systems. SIAM Journal on Control and Optimization, 2009, 47, 2795-2811.	1.1	23
86	An implicitly-restarted Krylov subspace method for real symmetric/skew-symmetric eigenproblems. Linear Algebra and Its Applications, 2012, 436, 4070-4087.	0.4	23
87	On properties of Sylvester and Lyapunov operators. Linear Algebra and Its Applications, 2000, 312, 35-71.	0.4	22
88	Numerical solution of hybrid systems of differential-algebraic equations. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 693-705.	3.4	22
89	Operator Differential-Algebraic Equations Arising in Fluid Dynamics. Computational Methods in Applied Mathematics, 2013, 13, 443-470.	0.4	22
90	On best rank one approximation of tensors. Numerical Linear Algebra With Applications, 2013, 20, 942-955.	0.9	22

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91	Smooth factorizations of matrix valued functions and their derivatives. Numerische Mathematik, 1991, 60, 115-131.	0.9	21
92	Numerical methods in control. Journal of Computational and Applied Mathematics, 2000, 123, 371-394.	1.1	20
93	Linear Perturbation Theory for Structured Matrix Pencils Arising in Control Theory. SIAM Journal on Matrix Analysis and Applications, 2006, 28, 148-169.	0.7	20
94	A new look at pencils of matrix valued functions. Linear Algebra and Its Applications, 1994, 212-213, 215-248.	0.4	19
95	Symmetric collocation for unstructured nonlinear differential-algebraic equations of arbitrary index. Numerische Mathematik, 2004, 98, 277-304.	0.9	19
96	A Behavioral Approach to Time-Varying Linear Systems. Part 2: Descriptor Systems. SIAM Journal on Control and Optimization, 2005, 44, 1748-1765.	1.1	19
97	Descriptor Systems: A General Mathematical Framework for Modelling, Simulation and Control (Deskriptorsysteme: Ein allgemeines mathematisches Konzept für Modellierung, Simulation und Tj ETQq1 1 0.7843 14 rgBT9/Overlock	1.1	19
98	Perturbation analysis of Lagrangian invariant subspaces of symplectic matrices. Linear and Multilinear Algebra, 2009, 57, 141-184.	0.5	19
99	Port-Hamiltonian Modeling of District Heating Networks. Differential-algebraic Equations Forum, 2020, , 333-355.	0.6	19
100	Divide and conquer methods for block tridiagonal systems. Parallel Computing, 1993, 19, 257-279.	1.3	17
101	An adaptive homotopy approach for non-selfadjoint eigenvalue problems. Numerische Mathematik, 2011, 119, 557-583.	0.9	17
102	Index Concepts for Differential-Algebraic Equations. , 2015, , 676-681.		17
103	Dampening controllers via a Riccati equation approach. IEEE Transactions on Automatic Control, 1998, 43, 1280-1284.	3.6	16
104	Doubling Algorithms with Permuted Lagrangian Graph Bases. SIAM Journal on Matrix Analysis and Applications, 2012, 33, 780-805.	0.7	16
105	Analysis and numerical solution of linear delay differential-algebraic equations. BIT Numerical Mathematics, 2016, 56, 633-657.	1.0	16
106	On the Nearest Singular Matrix Pencil. SIAM Journal on Matrix Analysis and Applications, 2017, 38, 776-806.	0.7	16
107	Computing the nearest stable matrix pairs. Numerical Linear Algebra With Applications, 2018, 25, e2153.	0.9	16
108	Schur-like forms for matrix Lie groups, Lie algebras and Jordan algebras. Linear Algebra and Its Applications, 1999, 287, 11-39.	0.4	15

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109	Chapter 2: Regularization of Linear and Nonlinear Descriptor Systems. , 2012, , 17-36.		15
110	Length realizability for pairs of quasi-commuting matrices. Linear Algebra and Its Applications, 2019, 568, 135-154.	0.4	15
111	Robust formulas for optimal H_2 controllers. Automatica, 2011, 47, 2639-2646.	3.0	14
112	Stability radii for real linear Hamiltonian systems with perturbed dissipation. BIT Numerical Mathematics, 2017, 57, 811-843.	1.0	14
113	Robust Stability of Differential-Algebraic Equations. , 2013, , 63-95.		14
114	Minimization of the norm, the norm of the inverse and the condition number of a matrix by completion. Numerical Linear Algebra With Applications, 1995, 2, 155-171.	0.9	13
115	Generalized Inverses of Differential-Algebraic Operators. SIAM Journal on Matrix Analysis and Applications, 1996, 17, 426-442.	0.7	13
116	Algebraic Multilevel Methods and Sparse Approximate Inverses. SIAM Journal on Matrix Analysis and Applications, 2002, 24, 191-218.	0.7	13
117	A new block method for computing the Hamiltonian Schur form. Linear Algebra and Its Applications, 2009, 431, 350-368.	0.4	13
118	QR methods and error analysis for computing Lyapunov and Sacker's spectral intervals for linear differential-algebraic equations. Advances in Computational Mathematics, 2011, 35, 281-322.	0.8	13
119	Stability Analysis of Implicit Difference Equations Under Restricted Perturbations. SIAM Journal on Matrix Analysis and Applications, 2015, 36, 178-202.	0.7	13
120	On the sign characteristics of Hermitian matrix polynomials. Linear Algebra and Its Applications, 2016, 511, 328-364.	0.4	13
121	Parameter-Dependent Rank-One Perturbations of Singular Hermitian Or Symmetric Pencils. SIAM Journal on Matrix Analysis and Applications, 2017, 38, 72-95.	0.7	13
122	Distance problems for dissipative Hamiltonian systems and related matrix polynomials. Linear Algebra and Its Applications, 2021, 623, 335-366.	0.4	13
123	Numerical Linear Algebra Methods for Linear Differential-Algebraic Equations. Differential-algebraic Equations Forum, 2015, , 117-175.	0.6	13
124	Sign Controllability of a Nonnegative Matrix and a Positive Vector. SIAM Journal on Matrix Analysis and Applications, 1993, 14, 398-407.	0.7	12
125	Potter, Wielandt, and Drazin on the Matrix Equation $AB = A^*BA$: New Answers to Old Questions. American Mathematical Monthly, 2004, 111, 655-667.	0.2	12
126	Approximation of Spectral Intervals and Leading Directions for Differential-Algebraic Equation via Smooth Singular Value Decompositions. SIAM Journal on Numerical Analysis, 2011, 49, 1810-1835.	1.1	12

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127	Optimal Robustness of Port-Hamiltonian Systems. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2020, 41, 134-151.	0.7	12
128	Structure preservation: a challenge in computational control. <i>Future Generation Computer Systems</i> , 2003, 19, 1243-1252.	4.9	11
129	Generalisation of the Perron-Frobenius theory to matrix pencils. <i>Linear Algebra and Its Applications</i> , 2008, 428, 20-38.	0.4	11
130	Analysis and Decomposition for Improved Convergence of Nonlinear Process Models in Chemical Engineering. <i>Chemie-Ingenieur-Technik</i> , 2017, 89, 1503-1514.	0.4	11
131	The Multiplex Decomposition: An Analytic Framework for Multilayer Dynamical Networks. <i>SIAM Journal on Applied Dynamical Systems</i> , 2021, 20, 1752-1772.	0.7	11
132	Port-Hamiltonian formulations of poroelastic network models. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2021, 27, 429-452.	1.4	11
133	Model and Discretization Error Adaptivity Within Stationary Gas Transport Optimization. <i>Vietnam Journal of Mathematics</i> , 2018, 46, 779-801.	0.4	10
134	Numerical Methods for Linear Quadratic and H^∞ Control Problems. , 1999, , 203-222.		10
135	On classes of matrices containing M-matrices and hermitian positive semidefinite matrices. <i>Linear Algebra and Its Applications</i> , 1984, 58, 217-234.	0.4	9
136	Linear Transformations which leave controllable multiinput descriptor systems controllable. <i>Linear Algebra and Its Applications</i> , 1989, 120, 47-64.	0.4	9
137	Sparse approximate solution of partial differential equations. <i>Applied Numerical Mathematics</i> , 2010, 60, 452-472.	1.2	9
138	Analysis of Linear Variable Coefficient Delay Differential-Algebraic Equations. <i>Journal of Dynamics and Differential Equations</i> , 2014, 26, 889-914.	1.0	9
139	Eigenvalue perturbation theory of structured real matrices and their sign characteristics under generic structured rank-one perturbations. <i>Linear and Multilinear Algebra</i> , 2016, 64, 527-556.	0.5	9
140	A Newton-Type Method with Nonequivalence Deflation for Nonlinear Eigenvalue Problems Arising in Photonic Crystal Modeling. <i>SIAM Journal of Scientific Computing</i> , 2016, 38, B191-B218.	1.3	9
141	Analysis and reformulation of linear delay differential-algebraic equations. <i>Electronic Journal of Linear Algebra</i> , 0, 23, .	0.6	9
142	Potter, Wielandt, and Drazin on the Matrix Equation $AB = wBA$: New Answers to Old Questions. <i>American Mathematical Monthly</i> , 2004, 111, 655.	0.2	8
143	On doubly structured matrices and pencils that arise in linear response theory. <i>Linear Algebra and Its Applications</i> , 2004, 380, 3-51.	0.4	8
144	Multiple Shooting for Unstructured Nonlinear Differential-Algebraic Equations of Arbitrary Index. <i>SIAM Journal on Numerical Analysis</i> , 2005, 42, 2277-2297.	1.1	8

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145	Self-adjoint differential-algebraic equations. <i>Mathematics of Control, Signals, and Systems</i> , 2014, 26, 47-76.	1.4	8
146	Relations between Perron-Frobenius results for matrix pencils. <i>Linear Algebra and Its Applications</i> , 1999, 287, 257-269.	0.4	7
147	A Note on the Symmetric Recursive Inverse Eigenvalue Problem. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2003, 25, 180-187.	0.7	7
148	Model reduction techniques for port-Hamiltonian differential-algebraic systems. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2019, 19, e201900040.	0.2	7
149	Backward errors for eigenvalues and eigenvectors of Hermitian, skew-Hermitian, H-even and H-odd matrix polynomials. <i>Linear and Multilinear Algebra</i> , 2013, 61, 1244-1266.	0.5	6
150	Lengths of quasi-commutative pairs of matrices. <i>Linear Algebra and Its Applications</i> , 2016, 498, 450-470.	0.4	6
151	Singular-value-like decomposition for complex matrix triples. <i>Journal of Computational and Applied Mathematics</i> , 2010, 233, 1245-1276.	1.1	5
152	Solution of large scale parametric eigenvalue problems arising from brake squeal modeling. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2014, 14, 891-892.	0.2	5
153	Efficient integration of strangeness-free non-stiff differential-algebraic equations by half-explicit methods. <i>Journal of Computational and Applied Mathematics</i> , 2014, 262, 346-360.	1.1	5
154	Structure-Preserving Interpolatory Model Reduction for Port-Hamiltonian Differential-Algebraic Systems. , 2022, , 235-254.		5
155	Numerical solution of linear-quadratic control problems for descriptor systems. , 0, , .		4
156	Perturbed spectra of defective matrices. <i>Journal of Applied Mathematics</i> , 2003, 2003, 115-140.	0.4	4
157	A robust numerical method for optimal H_2 control. , 2004, , .		4
158	Using permuted graph bases in control. <i>Automatica</i> , 2013, 49, 1790-1797.	3.0	4
159	Matrices that commute with their derivative. On a letter from Schur to Wielandt. <i>Linear Algebra and Its Applications</i> , 2013, 438, 2574-2590.	0.4	4
160	An adaptive finite element method with asymptotic saturation for eigenvalue problems. <i>Numerische Mathematik</i> , 2014, 128, 615-634.	0.9	4
161	Approximation of stability radii for large-scale dissipative Hamiltonian systems. <i>Advances in Computational Mathematics</i> , 2020, 46, 1.	0.8	4
162	Error Analysis and Model Adaptivity for Flows in Gas Networks. <i>Analele Stiintifice Ale Universitatii Ovidius Constanta, Seria Matematica</i> , 2018, 26, 231-266.	0.1	4

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163	Hypocoercivity and controllability in linear semi-dissipative Hamiltonian ordinary differential equations and differential-algebraic equations. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2023, 103, e202100171.	0.9	4
164	On the matrix sign function method for the computation of invariant subspaces. , 0, , .		3
165	Numerical Solution of Structured Problems. , 2004, , 137-156.		3
166	A note on Potter's theorem for quasi-commutative matrices. Linear Algebra and Its Applications, 2009, 430, 1812-1825.	0.4	3
167	Upwind Based Parameter Uniform Convergence Analysis for Two Parametric Parabolic Convection Diffusion Problems by Moving Mesh Methods. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 591-592.	0.2	3
168	Low-Rank Perturbation of Regular Matrix Pencils with Symmetry Structures. Foundations of Computational Mathematics, 2022, 22, 257-311.	1.5	3
169	Matrix Pencils with Coefficients that have Positive Semidefinite Hermitian Parts. SIAM Journal on Matrix Analysis and Applications, 2022, 43, 1186-1212.	0.7	3
170	On some conjectures on the spectra of \mathbb{H} -matrices. Linear and Multilinear Algebra, 1984, 16, 101-112.	0.5	2
171	On a generalized Fan inequality. Linear Algebra and Its Applications, 1984, 58, 235-245.	0.4	2
172	Linear transformations which map the classes of \mathbb{H} -matrices and \mathbb{H} -matrices into or onto themselves. Linear Algebra and Its Applications, 1986, 78, 79-106.	0.4	2
173	Adaptive solution of elliptic PDE-eigenvalue problems.. Proceedings in Applied Mathematics and Mechanics, 2009, 9, 583-584.	0.2	2
174	A generalized structured doubling algorithm for the numerical solution of linear quadratic optimal control problems. Numerical Linear Algebra With Applications, 2013, 20, 112-137.	0.9	2
175	An inverse-free ADI algorithm for computing Lagrangian invariant subspaces. Numerical Linear Algebra With Applications, 2016, 23, 147-168.	0.9	2
176	Regular solutions of DAE hybrid systems and regularization techniques. BIT Numerical Mathematics, 2018, 58, 1049-1077.	1.0	2
177	Structured Backward Errors for Eigenvalues of Linear Port-Hamiltonian Descriptor Systems. SIAM Journal on Matrix Analysis and Applications, 2021, 42, 1-16.	0.7	2
178	Characterization of classes of singular linear differential-algebraic equations. Electronic Journal of Linear Algebra, 0, 13, .	0.6	2
179	On the LU decomposition of V -matrices. Linear Algebra and Its Applications, 1984, 61, 175-186.	0.4	1
180	Algebraic Riccati Equations (Peter Lancaster and Leiba Rodman). SIAM Review, 1996, 38, 694-695.	4.2	1

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181	State estimation for reactive Euler equation by Kalman Filtering. CEAS Aeronautical Journal, 2017, 8, 261-270.	0.9	1
182	Computation of the Analytic Center of the Solution Set of the Linear Matrix Inequality Arising in Continuous- and Discrete-Time Passivity Analysis. Vietnam Journal of Mathematics, 2020, 48, 633-659.	0.4	1
183	Stability Assessment of Stochastic Differential-Algebraic Systems via Lyapunov Exponents with an Application to Power Systems. Mathematics, 2020, 8, 1393.	1.1	1
184	Optimal robustness of passive discrete-time systems. IMA Journal of Mathematical Control and Information, 2020, 37, 1248-1269.	1.1	1
185	On damped algebraic Riccati equations. IEEE Transactions on Automatic Control, 1998, 43, 1634-1637.	3.6	0
186	Ludwig Elsner and his contributions to core, applied and numerical linear algebra. Linear Algebra and Its Applications, 1999, 287, 3-10.	0.4	0
187	Anpassen oder nicht? Die Geschichte eines Mathematikers im Deutschland der Jahre 1933-1950. Mitteilungen Der Deutschen Mathematiker-Vereinigung, 2002, 10, .	0.0	0
188	LAA is 40 years old. Linear Algebra and Its Applications, 2008, 428, 1-3.	0.4	0
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