André C M Ran

List of Publications by Year in descending order

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110 papers 2,340 citations

430874 18 h-index 233421 45 g-index

118 all docs

 $\frac{118}{\text{docs citations}}$

118 times ranked

716 citing authors

#	Article	IF	Citations
1	An alternative canonical form for quaternionic H-unitary matrices. Linear Algebra and Its Applications, 2021, 623, 282-298.	0.9	O
2	mth roots of H-selfadjoint matrices. Linear Algebra and Its Applications, 2021, 610, 804-826.	0.9	1
3	A Toeplitz-Like Operator with Rational Matrix Symbol Having Poles on the Unit Circle: Fredholm Properties. Complex Analysis and Operator Theory, 2021, 15, 1.	0.6	3
4	Global Properties of Eigenvalues of Parametric Rank One Perturbations for Unstructured and Structured Matrices. Complex Analysis and Operator Theory, 2021, 15, 1.	0.6	3
5	Equivalence After Extension and Schur Coupling for Relatively Regular Operators. Integral Equations and Operator Theory, 2020, 92, 1.	0.8	O
6	A Toeplitz-Like Operator with Rational Symbol Having Poles on the Unit Circle III: The Adjoint. Integral Equations and Operator Theory, 2019, 91, 1.	0.8	4
7	Equivalence after extension and Schur coupling do not coincide on essentially incomparable Banach spaces. Bulletin of the London Mathematical Society, 2019, 51, 1005-1014.	0.8	2
8	A Toeplitz-like Operator with Rational Symbol Having Poles on the Unit Circle II: The Spectrum. Operator Theory: Advances and Applications, 2019, , 133-154.	0.2	3
9	Equivalence after extension and Schur coupling coincide for inessential operators. Indagationes Mathematicae, 2018, 29, 1350-1361.	0.4	3
10	A Toeplitz-like operator with rational symbol having poles on the unit circle I: Fredholm properties. Operator Theory: Advances and Applications, 2018, , 239-268.	0.2	3
11	A note on inner-outer factorization of wide matrix-valued functions. Operator Theory: Advances and Applications, 2018, , 201-214.	0.2	O
12	Canonical form for H-symplectic matrices. Operator Theory: Advances and Applications, 2018, , 269-290.	0.2	O
13	Wiener–Hopf indices of unitary functions on the unit circle in terms of realizations and related results on Toeplitz operators. Indagationes Mathematicae, 2017, 28, 694-710.	0.4	4
14	A canonical form for H-unitary matrices. Operators and Matrices, 2016, , 739-783.	0.3	3
15	Equivalence after extension for compact operators on Banach spaces. Journal of Mathematical Analysis and Applications, 2015, 431, 136-149.	1.0	5
16	Simple forms and invariant subspaces of H-expansive matrices. Linear Algebra and Its Applications, 2015, 470, 300-340.	0.9	2
17	Coordinated Linear Systems. Lecture Notes in Control and Information Sciences, 2015, , 113-121.	1.0	2
18	Distributed State Estimation with Communication of Observations. Lecture Notes in Control and Information Sciences, 2015, , 223-228.	1.0	0

#	Article	IF	Citations
19	Stability in Matrix Analysis Problems. , 2015, , 349-376.		O
20	The Algebraic Riccati Equation and Its Role in Indefinite Inner Product Spaces., 2015, , 451-469.		0
21	Eigenvalue perturbation theory of symplectic, orthogonal, and unitary matrices under generic structured rank one perturbations. BIT Numerical Mathematics, 2014, 54, 219-255.	2.0	25
22	LQ Control for Coordinated Linear Systems. IEEE Transactions on Automatic Control, 2014, 59, 851-862.	5.7	8
23	Construction and minimality of coordinated linear systems. Linear Algebra and Its Applications, 2014, 452, 202-236.	0.9	5
24	A peculiar permutation phenomenon arising from the singular vector entries of a special class of Toeplitz matrices. Linear Algebra and Its Applications, 2014, 459, 368-383.	0.9	1
25	Asymptotics of the Smallest Singular Value of a Class of Toeplitz-generated Matrices II. Integral Equations and Operator Theory, 2014, 79, 243-253.	0.8	2
26	A singular M-matrix perturbed by a nonnegative rank one matrix has positive principal minors; is it D-stable?. Linear Algebra and Its Applications, 2014, 457, 191-208.	0.9	10
27	The Algebraic Riccati Equation and Its Role in Indefinite Inner Product Spaces. , 2014, , 1-17.		0
28	Asymptotics of the Smallest Singular Value of a Class of Toeplitz-Generated Matrices and Related Finite Rank Perturbations. Integral Equations and Operator Theory, 2013, 77, 385-396.	0.8	2
29	Distributed state estimation with communication of observations. Linear Algebra and Its Applications, 2013, 439, 600-612.	0.9	2
30	Rank one perturbations of H -positive real matrices. Linear Algebra and Its Applications, 2013, 439, 653-674.	0.9	12
31	Jordan forms of real and complex matrices under rank one perturbations. Operators and Matrices, 2013, , 381-398.	0.3	25
32	Rational Matrix Solutions of a Bezout Type Equation on the Half-plane. Operator Theory: Advances and Applications, 2013, , 145-160.	0.2	3
33	The Discrete Algebraic Riccati Equation and Hermitian Block Toeplitz Matrices. , 2012, , 495-512.		2
34	Right invertible multiplication operators and stable rational matrix solutions to an associate Bezout equation, II: Description of all solutions. Operators and Matrices, 2012, , 833-857.	0.3	6
35	Right Invertible Multiplication Operators and Stable Rational Matrix Solutions to an Associate Bezout Equation, I: The Least Squares Solution. Integral Equations and Operator Theory, 2011, 70, 395-418.	0.8	10
36	Local Definitizability of $\{T^{[ast]}T\}$ and $\{T^{\{[ast]}\}\}$. Integral Equations and Operator Theory, 2011, 71, 491-508.	0.8	5

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37	The Non–symmetric Discrete Algebraic Riccati Equation and Canonical Factorization of Rational Matrix Functions on the Unit Circle. Integral Equations and Operator Theory, 2010, 66, 215-229.	0.8	14
38	The Pair of Operators $T^{c}= 1$ and $T^c= $	0.8	2
39	A State Space Approach to Canonical Factorization with Applications. , 2010, , .		26
40	Analysis of Spectral Points of the Operators T [*] T and TT [*] in a Krein Space. Integral Equations and Operator Theory, 2009, 63, 263-280.	0.8	5
41	Preface to the 13th ILAS Conference Proceedings, Amsterdam 2006. Linear Algebra and Its Applications, 2008, 429, 949-950.	0.9	0
42	On the Index of Conditional Stability of Stable Invariant Lagrangian Subspaces. SIAM Journal on Matrix Analysis and Applications, 2008, 29, 1181-1190.	1.4	2
43	Positive real matrices in indefinite inner product spaces and invariant maximal semidefinite subspaces. Linear Algebra and Its Applications, 2007, 424, 346-370.	0.9	6
44	On the relation between XX^[\hat{a} ce»] and X^[\hat{a} ce»]X in an indefinite inner product space. Operators and Matrices, 2007, , 181-197.	0.3	3
45	A Perturbation Analysis for Nonlinear Selfadjoint Operator Equations. SIAM Journal on Matrix Analysis and Applications, 2006, 28, 89-104.	1.4	22
46	Basic classes of matrices with respect to quaternionic indefinite inner product spaces. Linear Algebra and Its Applications, 2006, 416, 242-269.	0.9	13
47	Invariant Maximal Positive Subspaces and Polar Decompositions. Integral Equations and Operator Theory, 2006, 56, 83-91.	0.8	2
48	Schur complements and state space realizations. Linear Algebra and Its Applications, 2005, 399, 203-224.	0.9	19
49	Characterization of integral operators with semi-separable kernels with symmetries. Journal of Functional Analysis, 2005, 219, 255-284.	1.4	1
50	Approximation of Solutions of Riccati Equations. SIAM Journal on Control and Optimization, 2005, 44, 1419-1435.	2.1	8
51	LU- versus UL-Factorization of Integral Operators with Semi-Separable Kernel. Integral Equations and Operator Theory, 2004, 50, 549-558.	0.8	3
52	Existence of minimal nonsquare J-symmetric factorizations for self-adjoint rational matrix functions. Linear Algebra and Its Applications, 2004, 379, 159-178.	0.9	5
53	A New Inertia Theorem for Stein Equations, Inertia of Invertible Hermitian Block Toeplitz Matrices and Matrix Orthogonal Polynomials. Integral Equations and Operator Theory, 2003, 47, 339-360.	0.8	8
54	Necessary and sufficient conditions for existence of J-spectral factorization for para-Hermitian rational matrix functions. Automatica, 2003, 39, 1935-1939.	5.0	11

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55	A fixed point theorem in partially ordered sets and some applications to matrix equations. Proceedings of the American Mathematical Society, 2003, 132, 1435-1443.	0.8	1,001
56	On an Iteration Method for Solving a Class of Nonlinear Matrix Equations. SIAM Journal on Matrix Analysis and Applications, 2002, 23, 632-645.	1.4	98
57	Polar decompositions and related classes of operators in spaces â Î. Integral Equations and Operator Theory, 2002, 44, 50-70.	0.8	8
58	Minimal nonsquare spectral factors. Linear Algebra and Its Applications, 2002, 351-352, 553-565.	0.9	9
59	Nonsquare spectral factors via factorizations of a unitary function. Linear Algebra and Its Applications, 2002, 351-352, 567-583.	0.9	9
60	A Class of Robustness Problems in Matrix Analysis. , 2002, , 337-383.		3
61	Minimal Square Spectral Factors via Triples. SIAM Journal on Matrix Analysis and Applications, 2001, 22, 1222-1244.	1.4	13
62	Real Hamiltonian Polar Decompositions. SIAM Journal on Matrix Analysis and Applications, 2001, 22, 1263-1273.	1.4	3
63	Stability of Pseudospectral Factorizations. , 2001, , 359-383.		2
64	J-Symmetric Factorizations and Algebraic Riccati Equations. , 2001, , 319-360.		8
65	Wiener–Hopf Factorization of Transfer Functions of Extended Pritchard–Salamon Realizations. Mathematische Nachrichten, 1998, 196, 71-102.	0.8	4
66	Classes of plus matrices in finite dimensional indefinite scalar product spaces. Integral Equations and Operator Theory, 1998, 30, 432-451.	0.8	1
67	Norm bounds for Volterra integral operators and time-varying linear systems with finite horizon. , 1998, , 275-290.		1
68	Extension of Isometries in Finite-Dimensional Indefinite Scalar Product Spaces and Polar Decompositions. SIAM Journal on Matrix Analysis and Applications, 1997, 18, 752-774.	1.4	22
69	J-pseudo-spectral andJ-inner-pseudo-outer factorizations for matrix polynomials. Integral Equations and Operator Theory, 1997, 29, 23-51.	0.8	8
70	Errata for: Polar decomposition in finite dimensional indefinite scalar product spaces: Special cases and applications. Integral Equations and Operator Theory, 1997, 27, 497-501.	0.8	17
71	Weighting operator patterns of Pritchard-Salamon realizations. Integral Equations and Operator Theory, 1997, 27, 48-70.	0.8	3
72	Rate of stability of solutions of matrix polynomial and quadratic equations. Integral Equations and Operator Theory, 1997, 27, 71-102.	0.8	5

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73	On self-adjoint matrix polynomials with constant signature. Linear Algebra and Its Applications, 1997, 259, 133-153.	0.9	8
74	Nonnegative solutions of algebraic Riccati equations. Linear Algebra and Its Applications, 1997, 261, 317-352.	0.9	14
75	Dissipative matrices and invariant maximal semidefinite subspaces. Linear Algebra and Its Applications, 1994, 212-213, 169-214.	0.9	18
76	Local minimal factorizations of rational matrix functions in terms of null and pole data: Formulas for factors. Integral Equations and Operator Theory, 1993, 16, 98-130.	0.8	3
77	On pseudo-canonical factorization of rational matrix functions. Indagationes Mathematicae, 1993, 4, 51-63.	0.4	7
78	Linear Quadratic Problems with Indefinite Cost for Discrete Time Systems. SIAM Journal on Matrix Analysis and Applications, 1993, 14, 776-797.	1.4	48
79	Stability index of invariant subspaced of matrices. Linear and Multilinear Algebra, 1993, 36, 27-39.	1.0	9
80	Stable Solutions of Real Algebraic Matrix Riccati Equations. SIAM Journal on Control and Optimization, 1992, 30, 63-81.	2.1	7
81	Generalized canonical factorization of matrix and operator functions with definite hermitian part. Integral Equations and Operator Theory, 1992, 15, 673-696.	0.8	8
82	Factorizations of and extensions to J-unitary rational matrix functions on the unit circle. Integral Equations and Operator Theory, 1992, 15, 262-300.	0.8	25
83	Unitary solutions of a class of algebraic Riccati equations and factorization. Linear Algebra and Its Applications, 1992, 162-164, 521-540.	0.9	4
84	On symmetric factorizations of rational matrix functions. Linear and Multilinear Algebra, 1991, 29, 243-261.	1.0	16
85	Matrix Polynomials with prescribed zero structure in the finite complex plane. Operator Theory: Advances and Applications, 1991, , 241-266.	0.2	8
86	Regular rational matrix functions with prescribed null and pole data except at infinity. Linear Algebra and Its Applications, 1990, 137-138, 387-412.	0.9	12
87	On Stability of Invariant Subspaces of Matrices. American Mathematical Monthly, 1990, 97, 809.	0.3	4
88	Semidefinite perturbations of analytic Hermitian matrix functions. Integral Equations and Operator Theory, 1989, 12, 739-745.	0.8	4
89	Explicit formulas for Hankel norm approximations of infinite-dimensional systems. Integral Equations and Operator Theory, 1989, 12, 455-469.	0.8	25
90	Stability of Invariant Lagrangian Subspaces II. , 1989, , 391-425.		3

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91	On parameter dependence of solutions of algebraic riccati equations. Mathematics of Control, Signals, and Systems, 1988, 1, 269-284.	2.3	26
92	Existence and comparison theorems for algebraic Riccati equations for continuous- and discrete-time systems. Linear Algebra and Its Applications, 1988, 99, 63-83.	0.9	144
93	Interpolation Problems for Rational Matrix Functions with Incomplete Data and Wiener-Hopf Factorization. Operator Theory: Advances and Applications, 1988, , 73-108.	0.2	11
94	Inverse Spectral Problems for Regular Improper Rational Matrix Functions. Operator Theory: Advances and Applications, 1988, , 123-173.	0.2	13
95	An existence and monotonicity theorem for the discrete algebraic matrix Riccati equation. Linear and Multilinear Algebra, 1987, 20, 353-361.	1.0	11
96	Stable real invariant semidefinite subspaces and stable factorizations of symmetric rational matrix functions. Linear and Multilinear Algebra, 1987, 22, 25-55.	1.0	9
97	Optimal Hankel Norm Model Reductions and Wiener–Hopf Factorization I: The Canonical Case. SIAM Journal on Control and Optimization, 1987, 25, 362-382.	2.1	93
98	Hankel Norm Approximation for Infinite Dimensional Systems and Wiener-Hopf Factorization., 1987,, 57-69.		11
99	Symmetric Wiener-Hopf Factorization of Selfadjoint Rational Matrix Functions and Realization. , 1986, , 373-409.		6
100	Hermitian solutions of the discrete algebraic Riccati equation. International Journal of Control, 1986, 44, 777-802.	1.9	51
101	Stability of solutions of the operator differential equation in transport theory. Integral Equations and Operator Theory, 1985, 8, 75-118.	0.8	5
102	Stability of invariant maximal semidefinite subspaces. I. Linear Algebra and Its Applications, 1984, 62, 51-86.	0.9	55
103	Stability of invariant maximal semidefinite subspaces. II. applications: Self-adjoint rational matrix functions, Algebraic Riccati equations. Linear Algebra and Its Applications, 1984, 63, 133-173.	0.9	24
104	The Algebraic Matrix Riccati Equation. , 1984, , 351-381.		4
105	Stability of neutral invariant subspaces in indefinite inner products and stable symmetric factorizations. Integral Equations and Operator Theory, 1983, 6, 536-571.	0.8	13
106	Minimal factorization of selfadjoint rational matrix functions. Integral Equations and Operator Theory, 1982, 5, 850-869.	0.8	51
107	mth roots of H-selfadjoint matrices over the quaternions. Electronic Journal of Linear Algebra, 0, 37, 492-503.	0.6	0
108	A note on a conjecture concerning rank one perturbations of singular M-matrices. Quaestiones Mathematicae, 0, , 1-9.	0.6	0

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#	Article	IF	CITATIONS
109	Low Rank Perturbations of Quaternion Matrices. Electronic Journal of Linear Algebra, 0, 32, 514-530.	0.6	2
110	Polar decompositions of quaternion matrices in indefinite inner product spaces. Electronic Journal of Linear Algebra, 0, 37, 659-670.	0.6	0