Rajendra Bhatia

List of Publications by Year
in descending order

83 papers	4,508 citations	236925 25 h-index	106344 65 g-index
85 all docs	85 docs citations	85 times ranked	2289 citing authors

#	Article	IF	Citations
1	Variational principles for symplectic eigenvalues. Canadian Mathematical Bulletin, 2021, 64, 553-559.	0.5	5
2	A Schur-Horn theorem for symplectic eigenvalues. Linear Algebra and Its Applications, 2020, 599, 133-139.	0.9	6
3	Some inequalities for eigenvalues and symplectic eigenvalues of positive definite matrices. International Journal of Mathematics, 2019, 30, 1950055.	0.5	3
4	Procrustes problems in Riemannian manifolds of positive definite matrices. Linear Algebra and Its Applications, 2019, 563, 440-445.	0.9	5
5	Inequalities for the Wasserstein mean of positive definite matrices. Linear Algebra and Its Applications, 2019, 576, 108-123.	0.9	17
6	Strong convexity of sandwiched entropies and related optimization problems. Reviews in Mathematical Physics, 2018, 30, 1850014.	1.7	13
7	Riemannian geometry for EEG-based brain-computer interfaces; a primer and a review. Brain-Computer Interfaces, 2017, 4, 155-174.	1.8	258
8	Positive linear maps and spreads of matrices-II. Linear Algebra and Its Applications, 2016, 491, 30-40.	0.9	8
9	Some norm inequalities for matrix means. Linear Algebra and Its Applications, 2016, 501, 112-122.	0.9	18
10	On symplectic eigenvalues of positive definite matrices. Journal of Mathematical Physics, 2015, 56, .	1.1	42
11	Inertia of the matrix $[(p_i+p_j)^r]$. Journal of Spectral Theory, 2015, 5, 71-87.	0.8	12
12	On some positive definite functions. Positivity, 2015, 19, 903-910.	0.7	7
13	Positivity properties of the matrix $${\left[(i+j)^{i+j}\right]}$$ (i + j) i + j. Archiv Der Mathematik, 2014, 103, 279-283.	0.5	1
14	Positive Linear Maps and Spreads of Matrices. American Mathematical Monthly, 2014, 121, 619.	0.3	13
15	Approximation problems in the Riemannian metric on positive definite matrices. Annals of Functional Analysis, 2014, 5, 118-126.	0.8	1
16	The bipolar decomposition. Linear Algebra and Its Applications, 2013, 439, 3031-3037.	0.9	4
17	Monotonicity of the matrix geometric mean. Mathematische Annalen, 2012, 353, 1453-1467.	1.4	60
18	Some inequalities for positive linear maps. Linear Algebra and Its Applications, 2012, 436, 1562-1571.	0.9	32

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19	Min Matrices and Mean Matrices. Mathematical Intelligencer, 2011, 33, 22-28.	0.2	13
20	Modulus of continuity of the matrix absolute value. Indian Journal of Pure and Applied Mathematics, 2010, 41, 99-111.	0.5	4
21	Positivity and conditional positivity of Loewner matrices. Positivity, 2010, 14, 421-430.	0.7	10
22	Loewner matrices and operator convexity. Mathematische Annalen, 2009, 344, 703-716.	1.4	26
23	The singular values of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mi>A</mml:mi><mml:mo>+</mml:mo><mml:mi>B</mml:mi></mml:mrow></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.gif" overflow="scroll"><mml:mrow><mml:mi>A</mml:mi><mml:mo>+</mml:mo><mml:mi mathvariant="italic">iB</mml:mi></mml:mrow></mml:math>. Linear Algebra and Its Applications, 2009, 431, 1502-1508.	0.9	15
24	Higher order derivatives and perturbation bounds for determinants. Linear Algebra and Its Applications, 2009, 431, 2102-2108.	0.9	18
25	A Conversation with S. R. S. Varadhan. Mathematical Intelligencer, 2008, 30, 24-42.	0.2	1
26	The matrix arithmeticâ€"geometric mean inequality revisited. Linear Algebra and Its Applications, 2008, 428, 2177-2191.	0.9	54
27	Infinite Divisibility of GCD Matrices. American Mathematical Monthly, 2008, 115, 551-553.	0.3	12
28	Mean matrices and infinite divisibility. Linear Algebra and Its Applications, 2007, 424, 36-54.	0.9	40
29	Spectral variation, normal matrices, and finsler geometry. Mathematical Intelligencer, 2007, 29, 41-46.	0.2	1
30	Positivity Preserving Hadamard Matrix Functions. Positivity, 2007, 11, 583-588.	0.7	9
31	Infinitely Divisible Matrices. American Mathematical Monthly, 2006, 113, 221-235.	0.3	55
32	Interpolating the arithmeticâ€"geometric mean inequality and its operator version. Linear Algebra and Its Applications, 2006, 413, 355-363.	0.9	65
33	Riemannian geometry and matrix geometric means. Linear Algebra and Its Applications, 2006, 413, 594-618.	0.9	179
34	Noncommutative geometric means. Mathematical Intelligencer, 2006, 28, 32-39.	0.2	24
35	Generalized Lyapunov Equations and Positive Definite Functions. SIAM Journal on Matrix Analysis and Applications, 2005, 27, 103-114.	1.4	13
36	CLARKSON INEQUALITIES WITH SEVERAL OPERATORS. Bulletin of the London Mathematical Society, 2004, 36, 820-832.	0.8	25

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37	On the exponential metric increasing property. Linear Algebra and Its Applications, 2003, 375, 211-220.	0.9	68
38	Higher Order Logarithmic Derivatives of Matrices in the Spectral Norm. SIAM Journal on Matrix Analysis and Applications, 2003, 25, 662-668.	1.4	5
39	Pinchings and Norms of Scaled Triangular Matrices. Linear and Multilinear Algebra, 2002, 50, 15-21.	1.0	11
40	Variation of induced linear operators. Linear Algebra and Its Applications, 2002, 341, 391-402.	0.9	12
41	Linear Algebra to Quantum Cohomology: The Story of Alfred Horn's Inequalities. American Mathematical Monthly, 2001, 108, 289-318.	0.3	32
42	Cartesian decompositions and Schatten norms. Linear Algebra and Its Applications, 2000, 318, 109-116.	0.9	25
43	Notes on matrix arithmeticâ€"geometric mean inequalities. Linear Algebra and Its Applications, 2000, 308, 203-211.	0.9	91
44	A Better Bound on the Variance. American Mathematical Monthly, 2000, 107, 353-357.	0.3	116
45	Pinching, Trimming, Truncating, and Averaging of Matrices. American Mathematical Monthly, 2000, 107, 602-608.	0.3	23
46	Positive Definite Functions and Operator Inequalities. Bulletin of the London Mathematical Society, 2000, 32, 214-228.	0.8	68
47	Orthogonality of matrices and some distance problems. Linear Algebra and Its Applications, 1999, 287, 77-85.	0.9	107
48	Eigenvalues of symmetrizable matrices. BIT Numerical Mathematics, 1998, 38, 1-11.	2.0	3
49	Differentiation of Operator Functions and Perturbation Bounds. Communications in Mathematical Physics, 1998, 191, 603-611.	2.2	17
50	Some inequalities for commutators and an application to spectral variation. II. Linear and Multilinear Algebra, 1997, 43, 207-219.	1.0	8
51	How and Why to Solve the Operator Equation AX âˆ'XB = Y. Bulletin of the London Mathematical Society, 1997, 29, 1-21.	0.8	218
52	Matrix Analysis. Graduate Texts in Mathematics, 1997, , .	0.5	1,899
53	Some Inequalities for Norms of Commutators. SIAM Journal on Matrix Analysis and Applications, 1997, 18, 258-263.	1.4	12
54	Approximate Isometries on Euclidean Spaces. American Mathematical Monthly, 1997, 104, 497-504.	0.3	22

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55	Spectral variation bounds for diagonalisable matrices. Aequationes Mathematicae, 1997, 54, 102-107.	0.8	1
56	A note on the Lyapunov equation. Linear Algebra and Its Applications, 1997, 259, 71-76.	0.9	19
57	On perturbations of matrix pencils with real spectra. II. Mathematics of Computation, 1996, 65, 637-646.	2.1	12
58	Distance between Hermitian operators in Schatten classes. Proceedings of the Edinburgh Mathematical Society, 1996, 39, 377-380.	0.3	3
59	Variation of the Unitary Part of a Matrix. SIAM Journal on Matrix Analysis and Applications, 1994, 15, 1007-1014.	1.4	15
60	A generalization of the Hoffman-Wielandt theorem. Linear Algebra and Its Applications, 1993, 179, 11-17.	0.9	9
61	More Matrix Forms of the Arithmetic-Geometric Mean Inequality. SIAM Journal on Matrix Analysis and Applications, 1993, 14, 132-136.	1.4	135
62	A Henrici theorem for joint spectra of commuting matrices. Proceedings of the American Mathematical Society, 1993, 118, 5-5.	0.8	6
63	Approximation by positive operators. Linear Algebra and Its Applications, 1992, 161, 1-9.	0.9	8
64	Review of matrix perturbation theory. Linear Algebra and Its Applications, 1992, 160, 255-259.	0.9	1
65	Normal approximants to binormal operators. Linear Algebra and Its Applications, 1991, 147, 169-179.	0.9	6
66	Some inequalities for commutators and an application to spectral variation. Aequationes Mathematicae, 1991, 41, 70-78.	0.8	16
67	Norm inequalities for partitioned operators and an application. Mathematische Annalen, 1990, 287, 719-726.	1.4	71
68	On the variation of permanents. Linear and Multilinear Algebra, 1990, 27, 105-110.	1.0	2
69	On the Singular Values of a Product of Operators. SIAM Journal on Matrix Analysis and Applications, 1990, 11, 272-277.	1.4	149
70	An extremal problem in Fourier analysis with applications to operator theory. Journal of Functional Analysis, 1989, 82, 138-150.	1.4	38
71	On some perturbation inequalities for operators. Linear Algebra and Its Applications, 1988, 106, 271-279.	0.9	10
72	Unitary invariance and spectral variation. Linear Algebra and Its Applications, 1987, 95, 43-68.	0.9	17

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73	Some inequalities for norm ideals. Communications in Mathematical Physics, 1987, 111, 33-39.	2.2	31
74	The distance between the eigenvalues of Hermitian matrices. Proceedings of the American Mathematical Society, 1986, 96, 41-41.	0.8	7
75	On weighted lÃ¶wdin orthogonalization. International Journal of Quantum Chemistry, 1986, 29, 1775-1778.	2.0	3
76	Short normal paths and spectral variation. Proceedings of the American Mathematical Society, 1985, 94, 377-377.	0.8	14
77	Concavity of certain functions of matrices. Linear and Multilinear Algebra, 1985, 17, 155-164.	1.0	2
78	A bound for the spectral variation of a unitary operator. Linear and Multilinear Algebra, 1984, 15, 71-76.	1.0	33
79	Variation of symmetric tensor powers and permanents. Linear Algebra and Its Applications, 1984, 62, 269-276.	0.9	13
80	Analysis of spectral variation and some inequalities. Transactions of the American Mathematical Society, 1982, 272, 323-323.	0.9	28
81	Variation of Grassman powers and spectra. Linear Algebra and Its Applications, 1981, 40, 1-18.	0.9	26
82	On the rate of change of spectra of operators. II. Linear Algebra and Its Applications, 1981, 36, 25-32.	0.9	7
83	On the rate of change of spectra of operators. Linear Algebra and Its Applications, 1979, 27, 147-157.	0.9	20