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	Matrix Analysis. Graduate Texts in Mathematics, 1997, , .	0.5	1,899
2	Riemannian geometry for EEG-based brain-computer interfaces; a primer and a review. Brain-Computer Interfaces, 2017, 4, 155-174.	1.8	258
3	How and Why to Solve the Operator Equation AX −XB = Y. Bulletin of the London Mathematical Society, 1997, 29, 1-21.	0.8	218
4	Riemannian geometry and matrix geometric means. Linear Algebra and Its Applications, 2006, 413, 594-618.	0.9	179
5	On the Singular Values of a Product of Operators. SIAM Journal on Matrix Analysis and Applications, 1990, 11, 272-277.	1.4	149
6	More Matrix Forms of the Arithmetic-Geometric Mean Inequality. SIAM Journal on Matrix Analysis and Applications, 1993, 14, 132-136.	1.4	135
7	A Better Bound on the Variance. American Mathematical Monthly, 2000, 107, 353-357.	0.3	116
8	Orthogonality of matrices and some distance problems. Linear Algebra and Its Applications, 1999, 287, 77-85.	0.9	107
9	Notes on matrix arithmetic–geometric mean inequalities. Linear Algebra and Its Applications, 2000, 308, 203-211.	0.9	91
10	Norm inequalities for partitioned operators and an application. Mathematische Annalen, 1990, 287, 719-726.	1.4	71
11	Positive Definite Functions and Operator Inequalities. Bulletin of the London Mathematical Society, 2000, 32, 214-228.	0.8	68
12	On the exponential metric increasing property. Linear Algebra and Its Applications, 2003, 375, 211-220.	0.9	68
13	Interpolating the arithmetic–geometric mean inequality and its operator version. Linear Algebra and Its Applications, 2006, 413, 355-363.	0.9	65
14	Monotonicity of the matrix geometric mean. Mathematische Annalen, 2012, 353, 1453-1467.	1.4	60
15	Infinitely Divisible Matrices. American Mathematical Monthly, 2006, 113, 221-235.	0.3	55
16	The matrix arithmetic–geometric mean inequality revisited. Linear Algebra and Its Applications, 2008, 428, 2177-2191.	0.9	54
17	On symplectic eigenvalues of positive definite matrices. Journal of Mathematical Physics, 2015, 56, .	1.1	42
18	Mean matrices and infinite divisibility. Linear Algebra and Its Applications, 2007, 424, 36-54.	0.9	40

#	Article	IF	Citations
19	An extremal problem in Fourier analysis with applications to operator theory. Journal of Functional Analysis, 1989, 82, 138-150.	1.4	38
20	A bound for the spectral variation of a unitary operator. Linear and Multilinear Algebra, 1984, 15, 71-76.	1.0	33
21	Linear Algebra to Quantum Cohomology: The Story of Alfred Horn's Inequalities. American Mathematical Monthly, 2001, 108, 289-318.	0.3	32
22	Some inequalities for positive linear maps. Linear Algebra and Its Applications, 2012, 436, 1562-1571.	0.9	32
23	Some inequalities for norm ideals. Communications in Mathematical Physics, 1987, 111, 33-39.	2.2	31
24	Analysis of spectral variation and some inequalities. Transactions of the American Mathematical Society, 1982, 272, 323-323.	0.9	28
25	Variation of Grassman powers and spectra. Linear Algebra and Its Applications, 1981, 40, 1-18.	0.9	26
26	Loewner matrices and operator convexity. Mathematische Annalen, 2009, 344, 703-716.	1.4	26
27	Cartesian decompositions and Schatten norms. Linear Algebra and Its Applications, 2000, 318, 109-116.	0.9	25
28	CLARKSON INEQUALITIES WITH SEVERAL OPERATORS. Bulletin of the London Mathematical Society, 2004, 36, 820-832.	0.8	25
29	Noncommutative geometric means. Mathematical Intelligencer, 2006, 28, 32-39.	0.2	24
30	Pinching, Trimming, Truncating, and Averaging of Matrices. American Mathematical Monthly, 2000, 107, 602-608.	0.3	23
31	Approximate Isometries on Euclidean Spaces. American Mathematical Monthly, 1997, 104, 497-504.	0.3	22
32	On the rate of change of spectra of operators. Linear Algebra and Its Applications, 1979, 27, 147-157.	0.9	20
33	A note on the Lyapunov equation. Linear Algebra and Its Applications, 1997, 259, 71-76.	0.9	19
34	Higher order derivatives and perturbation bounds for determinants. Linear Algebra and Its Applications, 2009, 431, 2102-2108.	0.9	18
35	Some norm inequalities for matrix means. Linear Algebra and Its Applications, 2016, 501, 112-122.	0.9	18
36	Unitary invariance and spectral variation. Linear Algebra and Its Applications, 1987, 95, 43-68.	0.9	17

#	Article	IF	Citations
37	Differentiation of Operator Functions and Perturbation Bounds. Communications in Mathematical Physics, 1998, 191, 603-611.	2.2	17
38	Inequalities for the Wasserstein mean of positive definite matrices. Linear Algebra and Its Applications, 2019, 576, 108-123.	0.9	17
39	Some inequalities for commutators and an application to spectral variation. Aequationes Mathematicae, 1991, 41, 70-78.	0.8	16
40	Variation of the Unitary Part of a Matrix. SIAM Journal on Matrix Analysis and Applications, 1994, 15, 1007-1014.	1.4	15
41	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
42	Short normal paths and spectral variation. Proceedings of the American Mathematical Society, 1985, 94, 377-377.	0.8	14
43	Variation of symmetric tensor powers and permanents. Linear Algebra and Its Applications, 1984, 62, 269-276.	0.9	13
44	Generalized Lyapunov Equations and Positive Definite Functions. SIAM Journal on Matrix Analysis and Applications, 2005, 27, 103-114.	1.4	13
45	Min Matrices and Mean Matrices. Mathematical Intelligencer, 2011, 33, 22-28.	0.2	13
46	Positive Linear Maps and Spreads of Matrices. American Mathematical Monthly, 2014, 121, 619.	0.3	13
47	Strong convexity of sandwiched entropies and related optimization problems. Reviews in Mathematical Physics, 2018, 30, 1850014.	1.7	13
48	On perturbations of matrix pencils with real spectra. II. Mathematics of Computation, 1996, 65, 637-646.	2.1	12
49	Some Inequalities for Norms of Commutators. SIAM Journal on Matrix Analysis and Applications, 1997, 18, 258-263.	1.4	12
50	Variation of induced linear operators. Linear Algebra and Its Applications, 2002, 341, 391-402.	0.9	12
51	Infinite Divisibility of GCD Matrices. American Mathematical Monthly, 2008, 115, 551-553.	0.3	12
52	Inertia of the matrix $[(p_i+p_j)^r]$. Journal of Spectral Theory, 2015, 5, 71-87.	0.8	12
53	Pinchings and Norms of Scaled Triangular Matrices. Linear and Multilinear Algebra, 2002, 50, 15-21.	1.0	11
54	On some perturbation inequalities for operators. Linear Algebra and Its Applications, 1988, 106, 271-279.	0.9	10

#	Article	IF	Citations
55	Positivity and conditional positivity of Loewner matrices. Positivity, 2010, 14, 421-430.	0.7	10
56	A generalization of the Hoffman-Wielandt theorem. Linear Algebra and Its Applications, 1993, 179, 11-17.	0.9	9
57	Positivity Preserving Hadamard Matrix Functions. Positivity, 2007, 11, 583-588.	0.7	9
58	Approximation by positive operators. Linear Algebra and Its Applications, 1992, 161, 1-9.	0.9	8
59	Some inequalities for commutators and an application to spectral variation. II. Linear and Multilinear Algebra, 1997, 43, 207-219.	1.0	8
60	Positive linear maps and spreads of matrices-II. Linear Algebra and Its Applications, 2016, 491, 30-40.	0.9	8
61	On the rate of change of spectra of operators. II. Linear Algebra and Its Applications, 1981, 36, 25-32.	0.9	7
62	The distance between the eigenvalues of Hermitian matrices. Proceedings of the American Mathematical Society, 1986, 96, 41-41.	0.8	7
63	On some positive definite functions. Positivity, 2015, 19, 903-910.	0.7	7
64	Normal approximants to binormal operators. Linear Algebra and Its Applications, 1991, 147, 169-179.	0.9	6
65	A Schur-Horn theorem for symplectic eigenvalues. Linear Algebra and Its Applications, 2020, 599, 133-139.	0.9	6
66	A Henrici theorem for joint spectra of commuting matrices. Proceedings of the American Mathematical Society, 1993, 118, 5-5.	0.8	6
67	Higher Order Logarithmic Derivatives of Matrices in the Spectral Norm. SIAM Journal on Matrix Analysis and Applications, 2003, 25, 662-668.	1.4	5
68	Procrustes problems in Riemannian manifolds of positive definite matrices. Linear Algebra and Its Applications, 2019, 563, 440-445.	0.9	5
69	Variational principles for symplectic eigenvalues. Canadian Mathematical Bulletin, 2021, 64, 553-559.	0.5	5
70	Modulus of continuity of the matrix absolute value. Indian Journal of Pure and Applied Mathematics, 2010, 41, 99-111.	0.5	4
71	The bipolar decomposition. Linear Algebra and Its Applications, 2013, 439, 3031-3037.	0.9	4
72	On weighted löwdin orthogonalization. International Journal of Quantum Chemistry, 1986, 29, 1775-1778.	2.0	3

#	Article	IF	Citations
73	Distance between Hermitian operators in Schatten classes. Proceedings of the Edinburgh Mathematical Society, 1996, 39, 377-380.	0.3	3
74	Eigenvalues of symmetrizable matrices. BIT Numerical Mathematics, 1998, 38, 1-11.	2.0	3
75	Some inequalities for eigenvalues and symplectic eigenvalues of positive definite matrices. International Journal of Mathematics, 2019, 30, 1950055.	0.5	3
76	Concavity of certain functions of matrices. Linear and Multilinear Algebra, 1985, 17, 155-164.	1.0	2
77	On the variation of permanents. Linear and Multilinear Algebra, 1990, 27, 105-110.	1.0	2
78	Review of matrix perturbation theory. Linear Algebra and Its Applications, 1992, 160, 255-259.	0.9	1
79	Spectral variation bounds for diagonalisable matrices. Aequationes Mathematicae, 1997, 54, 102-107.	0.8	1
80	Spectral variation, normal matrices, and finsler geometry. Mathematical Intelligencer, 2007, 29, 41-46.	0.2	1
81	A Conversation with S. R. S. Varadhan. Mathematical Intelligencer, 2008, 30, 24-42.	0.2	1
82	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
83	Approximation problems in the Riemannian metric on positive definite matrices. Annals of Functional Analysis, 2014, 5, 118-126.	0.8	1