

Shmuel Friedland

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2597316/publications.pdf>

Version: 2024-02-01

103
papers

2,214
citations

257101

24
h-index

253896

43
g-index

105
all docs

105
docs citations

105
times ranked

1136
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonnegativity for hafnians of certain matrices. <i>Linear and Multilinear Algebra</i> , 2022, 70, 4615-4619.	0.5	1
2	Graph isomorphism and Gaussian boson sampling. <i>Special Matrices</i> , 2021, 9, 166-196.	0.2	20
3	On the Complexity of Finding Tensor Ranks. <i>Communications on Applied Mathematics and Computation</i> , 2021, 3, 281-289.	0.7	1
4	Spectral norm of a symmetric tensor and its computation. <i>Mathematics of Computation</i> , 2020, 89, 2175-2215.	1.1	7
5	Spectral Inequalities for Nonnegative Tensors and Their Tropical Analogues. <i>Vietnam Journal of Mathematics</i> , 2020, 48, 893-928.	0.4	1
6	A note on Hermitian positive semidefinite matrix polynomials. <i>Linear Algebra and Its Applications</i> , 2020, 598, 105-109.	0.4	2
7	Quantum Strassen's theorem. <i>Infinite Dimensional Analysis, Quantum Probability and Related Topics</i> , 2020, 23, 2050020.	0.3	6
8	An elementary and unified proof of Grothendieck's inequality. <i>L'Enseignement Mathématique</i> , 2019, 64, 327-351.	0.2	3
9	Grothendieck constant is norm of Strassen matrix multiplication tensor. <i>Numerische Mathematik</i> , 2019, 143, 905-922.	0.9	1
10	Infinite dimensional generalizations of Choi's Theorem. <i>Special Matrices</i> , 2019, 7, 67-77.	0.2	3
11	The tensor rank of tensor product of two three-qubit W states is eight. <i>Linear Algebra and Its Applications</i> , 2018, 543, 1-16.	0.4	23
12	<i>Linear Algebra and Matrices.</i> , 2018, , .		3
13	Tensor and hypergraph. <i>Frontiers of Mathematics in China</i> , 2017, 12, 1277-1277.	0.4	1
14	On best rank-2 and rank-(2,2,2) approximations of order-3 tensors. <i>Linear and Multilinear Algebra</i> , 2017, 65, 1289-1310.	0.5	5
15	Nuclear norm of higher-order tensors. <i>Mathematics of Computation</i> , 2017, 87, 1255-1281.	1.1	105
16	A simple spectral algorithm for recovering planted partitions. <i>Special Matrices</i> , 2017, 5, 139-157.	0.2	2
17	On the extreme points of quantum channels. <i>Linear Algebra and Its Applications</i> , 2016, 498, 553-573.	0.4	6
18	Remarks on the Symmetric Rank of Symmetric Tensors. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2016, 37, 320-337.	0.7	26

#	ARTICLE	IF	CITATIONS
19	Equality in Wielandt's eigenvalue inequality. <i>Special Matrices</i> , 2015, 3, .	0.2	0
20	Upper bounds on the number of perfect matchings and directed 2-factors in graphs with given number of vertices and edges. <i>European Journal of Combinatorics</i> , 2015, 45, 132-144.	0.5	7
21	Low-Rank Approximation of Tensors. , 2015, , 377-411.		11
22	On convex optimization problems in quantum information theory. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2014, 47, 505302.	0.7	19
23	Compressive Sensing of Sparse Tensors. <i>IEEE Transactions on Image Processing</i> , 2014, 23, 4438-4447.	6.0	66
24	The Number of Singular Vector Tuples and Uniqueness of Best Rank-One Approximation of Tensors. <i>Foundations of Computational Mathematics</i> , 2014, 14, 1209-1242.	1.5	41
25	Best rank one approximation of real symmetric tensors can be chosen symmetric. <i>Frontiers of Mathematics in China</i> , 2013, 8, 19-40.	0.4	37
26	Universal Uncertainty Relations. <i>Physical Review Letters</i> , 2013, 111, 230401.	2.9	127
27	Submodular spectral functions of principal submatrices of a hermitian matrix, extensions and applications. <i>Linear Algebra and Its Applications</i> , 2013, 438, 3872-3884.	0.4	7
28	Perron-Frobenius theorem for nonnegative multilinear forms and extensions. <i>Linear Algebra and Its Applications</i> , 2013, 438, 738-749.	0.4	232
29	On tensors of border rank l in $C \otimes \dots \otimes m$. <i>Linear Algebra and Its Applications</i> , 2013, 438, 713-737.	0.4	17
30	Preface to the special issue on tensors and multilinear algebra. <i>Linear Algebra and Its Applications</i> , 2013, 438, 635-638.	0.4	0
31	The Minimum Entropy Output of a Quantum Channel Is Locally Additive. <i>IEEE Transactions on Information Theory</i> , 2013, 59, 603-614.	1.5	8
32	Generalized tensor compressive sensing. , 2013, , .		16
33	On best rank one approximation of tensors. <i>Numerical Linear Algebra With Applications</i> , 2013, 20, 942-955.	0.9	22
34	Nonnegative definite hermitian matrices with increasing principal minors. <i>Special Matrices</i> , 2013, 1, 1-2.	0.2	3
35	A note on the nonzero spectra of irreducible matrices. <i>Linear and Multilinear Algebra</i> , 2012, 60, 1235-1238.	0.5	1
36	A proof of the set-theoretic version of the salmon conjecture. <i>Journal of Algebra</i> , 2012, 356, 374-379.	0.4	19

#	ARTICLE	IF	CITATIONS
37	On the generic and typical ranks of 3-tensors. <i>Linear Algebra and Its Applications</i> , 2012, 436, 478-497.	0.4	22
38	On the minimum rank of a graph over finite fields. <i>Linear Algebra and Its Applications</i> , 2012, 436, 1710-1720.	0.4	1
39	The Pressure, Densities and First-order Phase Transitions Associated with Multidimensional SOFT. , 2011, , 179-220.		23
40	Nonnegative Matrix Inequalities and their Application to Nonconvex Power Control Optimization. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2011, 32, 1030-1055.	0.7	40
41	An Asymptotic Expansion and Recursive Inequalities for the Monomer-Dimer Problem. <i>Journal of Statistical Physics</i> , 2011, 143, 306-325.	0.5	8
42	Parametric Poincaré-Perron theorem with applications. <i>Journal D'Analyse Mathématique</i> , 2011, 113, 197-225.	0.4	4
43	The automorphism group of separable states in quantum information theory. <i>Journal of Mathematical Physics</i> , 2011, 52, .	0.5	36
44	An explicit expression for the relative entropy of entanglement in all dimensions. <i>Journal of Mathematical Physics</i> , 2011, 52, .	0.5	24
45	Numerical estimation of the relative entropy of entanglement. <i>Physical Review A</i> , 2010, 82, .	1.0	26
46	The \mathbb{Z} -Vertex Transfer Matrix and Accurate Estimation of Channel Capacity. <i>IEEE Transactions on Information Theory</i> , 2010, 56, 3692-3699.	1.5	7
47	Asymptotic positivity of Hurwitz product traces: Two proofs. <i>Linear Algebra and Its Applications</i> , 2010, 432, 1363-1383.	0.4	4
48	Additive Invariants on Quantum Channels and Regularized Minimum Entropy. , 2010, , 237-245.		1
49	A note on the graph's resolvent and the multifilar structure. <i>Linear Algebra and Its Applications</i> , 2009, 431, 1367-1379.	0.4	7
50	On the Validations of the Asymptotic Matching Conjectures. <i>Journal of Statistical Physics</i> , 2008, 133, 513-533.	0.5	16
51	An upper bound for the minimum rank of a graph. <i>Linear Algebra and Its Applications</i> , 2008, 429, 1629-1638.	0.4	39
52	Lower Bounds for Partial Matchings in Regular Bipartite Graphs and Applications to the Monomer-Dimer Entropy. <i>Combinatorics Probability and Computing</i> , 2008, 17, 347-361.	0.8	8
53	On the Number of Matchings in Regular Graphs. <i>Electronic Journal of Combinatorics</i> , 2008, 15, .	0.2	23
54	The Maximum Number of Perfect Matchings in Graphs with a Given Degree Sequence. <i>Electronic Journal of Combinatorics</i> , 2008, 15, .	0.2	26

#	ARTICLE	IF	CITATIONS
55	2-Adic valuations of certain ratios of products of factorials and applications. Linear Algebra and Its Applications, 2007, 426, 159-189.	0.4	6
56	The polytope of dual degree partitions. Linear Algebra and Its Applications, 2007, 426, 458-461.	0.4	1
57	Convergence of products of matrices in projective spaces. Linear Algebra and Its Applications, 2006, 413, 247-263.	0.4	8
58	Generalized interval exchanges and the 2 ³ conjecture. Central European Journal of Mathematics, 2005, 3, 412-429.	0.7	0
59	Theory of computation of multidimensional entropy with an application to the monomer-dimer problem. Advances in Applied Mathematics, 2005, 34, 486-522.	0.4	43
60	Explicit Construction of Families of LDPC Codes With No 4-Cycles. IEEE Transactions on Information Theory, 2004, 50, 2378-2388.	1.5	67
61	p-Metrics on $GL(n, \mathbb{C})/U_n$ and their Busemann compactifications. Linear Algebra and Its Applications, 2004, 376, 1-18.	0.4	5
62	Revisiting the Siegel upper half plane I. Linear Algebra and Its Applications, 2004, 376, 19-44.	0.4	7
63	The limit of the product of the parameterized exponentials of two operators. Journal of Functional Analysis, 2004, 210, 436-464.	0.7	2
64	Revisiting the Siegel upper half plane II. Linear Algebra and Its Applications, 2004, 376, 45-67.	0.4	4
65	Generalizations of the odd degree theorem and applications. Israel Journal of Mathematics, 2003, 136, 353-371.	0.4	7
66	Multi-Dimensional Capacity, Pressure and Hausdorff Dimension. The IMA Volumes in Mathematics and Its Applications, 2003, , 183-222.	0.5	5
67	On Cheeger-type inequalities for weighted graphs. Journal of Graph Theory, 2002, 41, 1-17.	0.5	14
68	On spaces of matrices containing a nonzero matrix of bounded rank. Pacific Journal of Mathematics, 2002, 207, 157-176.	0.2	10
69	Discrete Lyapunov exponents and Hausdorff dimension. Ergodic Theory and Dynamical Systems, 2000, 20, 145-172.	0.4	5
70	Corrections to "Discrete Lyapunov exponents and Hausdorff dimension" 20 (2000), 145-172. Ergodic Theory and Dynamical Systems, 2000, 20, 1551-1551.	0.4	0
71	Finite and infinite dimensional generalizations of Klyachko's theorem. Linear Algebra and Its Applications, 2000, 319, 3-22.	0.4	15
72	Spaces of symmetric matrices containing a nonzero matrix of bounded rank. Linear Algebra and Its Applications, 1999, 287, 161-170.	0.4	3

#	ARTICLE	IF	CITATIONS
73	On the second real eigenvalue of nonnegative and Z-matrices. <i>Linear Algebra and Its Applications</i> , 1997, 255, 303-313.	0.4	16
74	On the entropy of Z_d subshifts of finite type. <i>Linear Algebra and Its Applications</i> , 1997, 252, 199-220.	0.4	57
75	Invariant measures of groups of homeomorphisms and Auslander's conjecture. <i>Ergodic Theory and Dynamical Systems</i> , 1995, 15, 1075-1089.	0.4	4
76	The Sparse Basis Problem and Multilinear Algebra. <i>SIAM Journal on Matrix Analysis and Applications</i> , 1995, 16, 1-20.	0.7	20
77	On the product of matrix exponentials. <i>Linear Algebra and Its Applications</i> , 1994, 196, 193-205.	0.4	12
78	Lower bounds for the first eigenvalue of certain M-matrices associated with graphs. <i>Linear Algebra and Its Applications</i> , 1992, 172, 71-84.	0.4	15
79	Quadratic forms and the graph isomorphism problem. <i>Linear Algebra and Its Applications</i> , 1991, 150, 423-442.	0.4	11
80	Rationality of certain field of invariant functions. <i>Linear and Multilinear Algebra</i> , 1990, 27, 299-301.	0.5	0
81	A remark on the variation of permanents. <i>Linear and Multilinear Algebra</i> , 1990, 27, 101-103.	0.5	2
82	Additive decomposition of nonnegative matrices with applications to permanents and scaling. <i>Linear and Multilinear Algebra</i> , 1988, 23, 63-78.	0.5	7
83	Limit eigenvalues of nonnegative matrices. <i>Linear Algebra and Its Applications</i> , 1986, 74, 173-178.	0.4	29
84	Maximality of the monomial group. <i>Linear and Multilinear Algebra</i> , 1985, 18, 1-7.	0.5	9
85	Stable convex sets of matrices. <i>Linear and Multilinear Algebra</i> , 1984, 16, 285-294.	0.5	0
86	On the crossing rule. <i>Communications on Pure and Applied Mathematics</i> , 1984, 37, 19-37.	1.2	75
87	A proof of a generalized van der Waerden conjecture on permanents. <i>Linear and Multilinear Algebra</i> , 1982, 11, 107-120.	0.5	28
88	Variation of tensor powers and spectrat. <i>Linear and Multilinear Algebra</i> , 1982, 12, 81-98.	0.5	30
89	A characterization of normal operators. <i>Israel Journal of Mathematics</i> , 1982, 42, 235-240.	0.4	9
90	Eigenvalue inequalities for products of matrix exponentials. <i>Linear Algebra and Its Applications</i> , 1982, 45, 55-95.	0.4	42

#	ARTICLE	IF	CITATIONS
91	Convex spectral functions. <i>Linear and Multilinear Algebra</i> , 1981, 9, 299-316.	0.5	80
92	A Lower Bound for the Permanent of a Doubly Stochastic Matrix. <i>Annals of Mathematics</i> , 1979, 110, 167.	2.1	37
93	Global principle for free-endpoint problems in optimal control and differential games. <i>Journal of Optimization Theory and Applications</i> , 1978, 24, 303-313.	0.8	1
94	On an inverse problem for nonnegative and eventually nonnegative matrices. <i>Israel Journal of Mathematics</i> , 1978, 29, 43-60.	0.4	98
95	Extremal eigenvalue problems. <i>Sociedade Brasileira De Matematica Boletim, Nova Serie</i> , 1978, 9, 13-40.	0.2	14
96	A study of the van der Waerden conjecture and its generalizations. <i>Linear and Multilinear Algebra</i> , 1978, 6, 123-143.	0.5	8
97	Inverse eigenvalue problems. <i>Linear Algebra and Its Applications</i> , 1977, 17, 15-51.	0.4	101
98	Subspaces of symmetric matrices containing matrices with a multiple first eigenvalue. <i>Pacific Journal of Mathematics</i> , 1976, 62, 389-399.	0.2	28
99	Some inequalities for the spectral radius of non-negative matrices and applications. <i>Duke Mathematical Journal</i> , 1975, 42, 459.	0.8	73
100	Extremal eigenvalue problems for convex sets of symmetric matrices and operators. <i>Israel Journal of Mathematics</i> , 1973, 15, 311-331.	0.4	16
101	An Algorithm for Missing Value Estimation for DNA Microarray Data. , 0, , .		8
102	Fast Monte-Carlo Low Rank Approximations for Matrices. , 0, , .		1
103	Fast low rank approximations of matrices and tensors. <i>Electronic Journal of Linear Algebra</i> , 0, 22, .	0.6	15