Jack W Silverstein

List of Publications by Year
in descending order

54 papers	5,172 citations	218677 26 h-index	223800 46 g-index
67 all docs	67 docs citations	67 times ranked	1716 citing authors

#	Article	IF	Citations
1	Distinctive features, categorical perception, and probability learning: Some applications of a neural model.. Psychological Review, 1977, 84, 413-451.	3.8	818
2	Spectral Analysis of Large Dimensional Random Matrices. Springer Series in Statistics, 2010, , .	0.9	683
3	On the Empirical Distribution of Eigenvalues of a Class of Large Dimensional Random Matrices. Journal of Multivariate Analysis, 1995, 54, 175-192.	1.0	500
4	Eigenvalues of large sample covariance matrices of spiked population models. Journal of Multivariate Analysis, 2006, 97, 1382-1408.	1.0	443
5	Strong Convergence of the Empirical Distribution of Eigenvalues of Large Dimensional Random Matrices. Journal of Multivariate Analysis, 1995, 55, 331-339.	1.0	377
6	No eigenvalues outside the support of the limiting spectral distribution of large-dimensional sample covariance matrices. Annals of Probability, 1998, 26, 316.	1.8	329
7	CLT for linear spectral statistics of large-dimensional sample covariance matrices. Annals of Probability, 2004, 32, 553.	1.8	315
8	Analysis of the Limiting Spectral Distribution of Large Dimensional Random Matrices. Journal of Multivariate Analysis, 1995, 54, 295-309.	1.0	182
9	The Smallest Eigenvalue of a Large Dimensional Wishart Matrix. Annals of Probability, 1985, 13, 1364.	1.8	145
10	A note on the largest eigenvalue of a large dimensional sample covariance matrix. Journal of Multivariate Analysis, 1988, 26, 166-168.	1.0	113
11	A Deterministic Equivalent for the Analysis of Correlated MIMO Multiple Access Channels. IEEE Transactions on Information Theory, 2011, 57, 3493-3514.	2.4	111
12	Fundamental Limit of Sample Generalized Eigenvalue Based Detection of Signals in Noise Using Relatively Few Signal-Bearing and Noise-Only Samples. IEEE Journal on Selected Topics in Signal Processing, 2010, 4, 468-480.	10.8	104
13	On the empirical distribution of eigenvalues of large dimensional information-plus-noise-type matrices. Journal of Multivariate Analysis, 2007, 98, 678-694.	1.0	102
14	Exact Separation of Eigenvalues of Large Dimensional Sample Covariance Matrices. Annals of Probability, 1999, 27, 1536.	1.8	92
15	Spectral Analysis of Networks with Random Topologies. SIAM Journal on Applied Mathematics, 1977, 32, 499-519.	1.8	71
16	Signal detection via spectral theory of large dimensional random matrices. IEEE Transactions on Signal Processing, 1992, 40, 2100-2105.	5.3	56
17	Robust Estimates of Covariance Matrices in the Large Dimensional Regime. IEEE Transactions on Information Theory, 2014, 60, 7269-7278.	2.4	51
18	No eigenvalues outside the support of the limiting empirical spectral distribution of a separable covariance matrix. Journal of Multivariate Analysis, 2009, 100, 37-57.	1.0	50

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19	Analysis of the limiting spectral distribution of large dimensional information-plus-noise type matrices. Journal of Multivariate Analysis, 2007, 98, 1099-1122.	1.0	48
20	The Limiting Eigenvalue Distribution of a Multivariate F Matrix. SIAM Journal on Mathematical Analysis, 1985, 16, 641-646.	1.9	45
21	Weak Convergence of Random Functions Defined by The Eigenvectors of Sample Covariance Matrices. Annals of Probability, 1990, 18, .	1.8	45
22	On the eigenvectors of large dimensional sample covariance matrices. Journal of Multivariate Analysis, 1989, 30, 1-16.	1.0	43
23	The random matrix regime of Maronnaâ€™s M-estimator with elliptically distributed samples. Journal of Multivariate Analysis, 2015, 139, 56-78.	1.0	40
24	Eigen-Inference for Energy Estimation of Multiple Sources. IEEE Transactions on Information Theory, 2011, 57, 2420-2439.	2.4	37
25	Gaussian fluctuations for non-Hermitian random matrix ensembles. Annals of Probability, 2006, 34, 2118.	1.8	33
26	On the weak limit of the largest eigenvalue of a large dimensional sample covariance matrix. Journal of Multivariate Analysis, 1989, 30, 307-311.	1.0	27
27	On the signal-to-interference ratio of CDMA systems in wireless communications. Annals of Applied Probability, 2007, 17, .	1.3	27
28	Some limit theorems on the eigenvectors of large dimensional sample covariance matrices. Journal of Multivariate Analysis, 1984, 15, 295-324.	1.0	26
29	NO EIGENVALUES OUTSIDE THE SUPPORT OF THE LIMITING SPECTRAL DISTRIBUTION OF INFORMATION-PLUS-NOISE TYPE MATRICES. Random Matrices: Theory and Application, 2012, 01, 1150004.	1.1	25
30	A CLT FOR INFORMATION-THEORETIC STATISTICS OF NON-CENTERED GRAM RANDOM MATRICES. Random Matrices: Theory and Application, 2012, 01, 1150010.	1.1	23
31	Separation of the largest eigenvalues in eigenanalysis of genotype data from discrete subpopulations. Theoretical Population Biology, 2013, 89, 34-43.	1.1	22
32	The spectral radii and norms of large dimensional non-central random atrices matrices. Stochastic Models, 1994, 10, 525-532.	0.3	20
33	Describing the Behavior of Eigenvectors of Random Matrices Using Sequences of Measures on Orthogonal Groups. SIAM Journal on Mathematical Analysis, 1981, 12, 274-281.	1.9	19
34	A note on the CLT of the LSS for sample covariance matrix from a spiked population model. Journal of Multivariate Analysis, 2014, 130, 194-207.	1.0	16
35	Theory of Large Dimensional Random Matrices for Engineers. , 2006, , .		13
36	On the Randomness of Eigenvectors Generated from Networks with Random Topologies. SIAM Journal on Applied Mathematics, 1979, 37, 235-245.	1.8	12

#	Article	IF	Citations
37	Reply to Grossberg.. Psychological Review, 1978, 85, 597-603.	3.8	10
38	Large dimensional random matrix theory for signal detection and estimation in array processing. , 0, , .		8
39	Comments on a result of Yin, Bai, and Krishnaiah for large dimensional multivariate F matrices. Journal of Multivariate Analysis, 1984, 15, 408-409.	1.0	7
40	Asymptotics applied to a neural network. Biological Cybernetics, 1976, 22, 73-84.	1.3	6
41	Asymptotic capacity of multi-user MIMO communications. , 2009, , .		6
42	Vowel pre-processing with a neurally based model. , 0, , .		5
43	CLT FOR LINEAR SPECTRAL STATISTICS OF LARGE-DIMENSIONAL SAMPLE COVARIANCE MATRICES. , 2008, , .		5
44	THE STIELTJES TRANSFORM AND ITS ROLE IN EIGENVALUE BEHAVIOR OF LARGE DIMENSIONAL RANDOM MATRICES. Lecture Notes Series, Institute for Mathematical Sciences, 2009, , 1-25.	0.2	4
45	Singular values of large non-central random matrices. Random Matrices: Theory and Application, 2020, 09, 2050012.	1.1	4
46	Fundamental Limit of Sample Eigenvalue based Detection of Signals in Colored Noise using Relatively Few Samples. Conference Record of the Asilomar Conference on Signals, Systems and Computers, 2007, , .	0.0	3
47	A joint robust estimation and random matrix framework with application to array processing. , 2013, , .		3
48	Eigen-inference for multi-source power estimation. , 2010, , .		2
49	A nonlinear system with singular vector field near equilibria. Applicable Analysis, 1981, 12, 57-71.	1.3	0
50	Rate region of correlated MIMO multiple access channels and broadcast channels. , 2009, , .		0
51	A tribute to P.R. Krishnaiah. Journal of Multivariate Analysis, 2021, , 104828.	1.0	0
52	COLLABORATION WITH A DEAR FRIEND AND COLLEAGUE. , 2008, , .		0
53	Random Matrix Theory. , 2011, , 1168-1170.		0
54	Weak Convergence of a Collection of Random Functions Defined by the Eigenvectors of Large Dimensional Random Matrices. Random Matrices: Theory and Application, 0, , .	1.1	0