Akimichi Takemura

List of Publications by Year
in descending order

133	1,695	331670 21	361022 35
papers	citations	h-index	g-index

142	142	142	572
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An asymptotically optimal policy for finite support models in the multiarmed bandit problem. Machine Learning, 2011, 85, 361-391.	5.4	66
2	Minimal Basis for a Connected Markov Chain over 3 x 3 x K Contingency Tables with Fixed Two-Dimensional Marginals. Australian and New Zealand Journal of Statistics, 2003, 45, 229-249.	0.9	58
3	WHY DO NONINVERTIBLE ESTIMATED MOVING AVERAGES OCCUR?*. Journal of Time Series Analysis, 1986, 7, 235-254.	1.2	55
4	Validity of the expected Euler characteristic heuristic. Annals of Probability, 2005, 33, 1362.	1.8	55
5	Tail probabilities of the maxima of multilinear forms and their applications. Annals of Statistics, 2001, 29, .	2.6	55
6	On connectivity of fibers with positive marginals in multiple logistic regression. Journal of Multivariate Analysis, 2010, 101, 909-925.	1.0	52
7	Holonomic gradient descent and its application to the Fisherâ€“Bingham integral. Advances in Applied Mathematics, 2011, 47, 639-658.	0.7	52
8	Tensor Analysis of ANOVA Decomposition. Journal of the American Statistical Association, 1983, 78, 894-900.	3.1	51
9	Weights of $overline{chi}{}sp 2$ distribution for smooth or piecewise smooth cone alternatives. Annals of Statistics, 1997, 25, .	2.6	51
10	An orthogonally invariant minimax estimator of the covariance matrix of a multivariate normal population. Tsukuba Journal of Mathematics, 1984, 8, 367.	0.1	50
11	Some characterizations of minimal Markov basis for sampling from discrete conditional distributions. Annals of the Institute of Statistical Mathematics, 2004, 56, 1-17.	0.8	46
12	Markov Bases in Algebraic Statistics. Springer Series in Statistics, 2012, , .	0.9	41
13	The holonomic gradient method for the distribution function of the largest root of a Wishart matrix. Journal of Multivariate Analysis, 2013, 117, 296-312.	1.0	41
14	Exact MIMO Zero-Forcing Detection Analysis for Transmit-Correlated Rician Fading. IEEE Transactions on Wireless Communications, 2014, 13, 1514-1527.	9.2	41
15	Inadmissibility of non-order-preserving orthogonally invariant estimators of the covariance matrix in the case of Stein's loss. Journal of Multivariate Analysis, 1992, 41, 117-131.	1.0	40
16	On the equivalence of the tube and Euler characteristic methods for the distribution of the maximum of Gaussian fields over piecewise smooth domains. Annals of Applied Probability, 2002, 12, 768.	1.3	40
17	Empirical characteristic function approach to goodness-of-fit tests for the Cauchy distribution with parameters estimated by MLE or EISE. Annals of the Institute of Statistical Mathematics, 2005, 57, 183-199.	0.8	40
18	Goodness-of-fit tests for symmetric stable distributionsâ€”Empirical characteristic function approach. Test, 2008, 17, 546-566.	1.1	35

#	Article	IF	Citations
19	Markov chain Monte Carlo exact tests for incomplete two-way contingency tables. Journal of Statistical Computation and Simulation, 2005, 75, 787-812.	1.2	34
20	MIMO Zero-Forcing Performance Evaluation Using the Holonomic Gradient Method. IEEE Transactions on Wireless Communications, 2015, 14, 2322-2335.	9.2	29
21	Some Improvements in Numerical Evaluation of Symmetric Stable Density and Its Derivatives. Communications in Statistics - Theory and Methods, 2006, 35, 149-172.	1.0	25
22	Periodicity of hyperplane arrangements with integral coefficients modulo positive integers. Journal of Algebraic Combinatorics, 2008, 27, 317-330.	0.8	23
23	Indispensable monomials of toric ideals and Markov bases. Journal of Symbolic Computation, 2008, 43, 490-507.	0.8	21
24	Properties and applications of Fisher distribution on the rotation group. Journal of Multivariate Analysis, 2013, 116, 440-455.	1.0	21
25	Statistical Modeling of Soil Moisture, Integrating Satellite Remote-Sensing (SAR) and Ground-Based Data. Remote Sensing, 2015, 7, 2752-2780.	4.0	21
26	On a simple strategy weakly forcing the strong law of large numbers in the bounded forecasting game. Annals of the Institute of Statistical Mathematics, 2008, 60, 801-812.	0.8	19
27	Schur Complement Based Analysis of MIMO Zero-Forcing for Rician Fading. IEEE Transactions on Wireless Communications, 2015, 14, 1757-1771.	9.2	19
28	Distribution of eigenvalues and eigenvectors of Wishart matrix when the population eigenvalues are infinitely dispersed and its application to minimax estimation of covariance matrix. Journal of Multivariate Analysis, 2005, 94, 271-299.	1.0	18
29	Distance-reducing Markov bases for sampling from a discrete sample space. Bernoulli, 2005, 11, 793.	1.3	17
30	The largest group of invariance for Markov bases and toric ideals. Journal of Symbolic Computation, 2008, 43, 342-358.	0.8	17
31	Markov chain Monte Carlo tests for designed experiments. Journal of Statistical Planning and Inference, 2010, 140, 817-830.	0.6	17
32	Game-theoretic versions of strong law of large numbers for unbounded variables. Stochastics, 2007, 79, 449-468.	1.1	16
33	Shrinkage Estimation towards a Closed Convex Set with a Smooth Boundary. Journal of Multivariate Analysis, 2000, 75, 79-111.	1.0	15
34	Star-shaped distributions and their generalizations. Journal of Statistical Planning and Inference, 2008, 138, 3429-3447.	0.6	14
35	A new formulation of asset trading games in continuous time with essential forcing of variation exponent. Bernoulli, 2009, 15, .	1.3	14
36	Graver basis for an undirected graph and its application to testing the beta model of random graphs. Annals of the Institute of Statistical Mathematics, 2013, 65, 191-212.	0.8	14

#	Article	IF	Citations
37	On sum of 0â€“1 random variables I. Univariate case. Annals of the Institute of Statistical Mathematics, 1987, 39, 85-102.	0.8	13
38	Markov bases for two-way subtable sum problems. Journal of Pure and Applied Algebra, 2009, 213, 1507-1521.	0.6	13
39	Markov basis and GrÃ¶bner basis of Segreâ€“Veronese configuration for testing independence in group-wise selections. Annals of the Institute of Statistical Mathematics, 2010, 62, 299-321.	0.8	13
40	Admissibility and minimaxity of generalized Bayes estimators for spherically symmetric family. Journal of Multivariate Analysis, 2008, 99, 50-73.	1.0	12
41	GrÃ¶bner bases of nested configurations. Journal of Algebra, 2008, 320, 2583-2593.	0.7	11
42	Capital Process and Optimality Properties of a Bayesian Skeptic in Coin-Tossing Games. Stochastic Analysis and Applications, 2008, 26, 1161-1180.	1.5	11
43	Sequential optimizing strategy in multi-dimensional bounded forecasting games. Stochastic Processes and Their Applications, 2011, 121, 155-183.	0.9	11
44	A-hypergeometric distributions and Newton polytopes. Advances in Applied Mathematics, 2018, 99, 109-133.	0.7	11
45	Arrangements and Ranking Patterns. Annals of Combinatorics, 2006, 10, 219-235.	0.6	10
46	Some characterizations of affinely full-dimensional factorial designs. Journal of Statistical Planning and Inference, 2009, 139, 3525-3532.	0.6	10
47	Convergence of random series and the rate of convergence of the strong law of large numbers in game-theoretic probability. Stochastic Processes and Their Applications, 2012, 122, 1-30.	0.9	10
48	Exact ZF Analysis and Computer-Algebra-Aided Evaluation in Rank-1 LoS Rician Fading. IEEE Transactions on Wireless Communications, 2016, 15, 5245-5259.	9.2	10
49	RELATIONSHIP BETWEEN LOGARITHMIC SERIES MODEL AND OTHER SUPERPOPULATION MODELS USEFUL FOR MICRODATA DISCLOSURE RISK ASSESSMENT. Journal of the Japan Statistical Society, 1998, 28, 125-134.	0.1	10
50	On Rankings Generated by Pairwise Linear Discriminant Analysis ofmPopulations. Journal of Multivariate Analysis, 1997, 61, 1-28.	1.0	9
51	Some Geometry of the Cone of Nonnegative Definite Matrices and Weights of Associated X2Distribution. Annals of the Institute of Statistical Mathematics, 2000, 52, 1-14.	0.8	9
52	Tail probability via tube formula when the critical radius is zero. Bernoulli, 2003, 9, 535.	1.3	9
53	Minimal invariant Markov basis for sampling contingency tables with fixed marginals. Annals of the Institute of Statistical Mathematics, 2008, 60, 229-256.	0.8	9
54	A Markov basis for conditional test of common diagonal effect in quasi-independence model for square contingency tables. Computational Statistics and Data Analysis, 2009, 53, 1006-1014.	1.2	9

#	Article	IF	Citations
55	Minimal and minimal invariant Markov bases of decomposable models for contingency tables. Bernoulli, 2010, 16, .	1.3	9
56	A generalization of the integer linear infeasibility problem. Discrete Optimization, 2008, 5, 36-52.	0.9	8
57	Implications of contrarian and one-sided strategies for the fair-coin game. Stochastic Processes and Their Applications, 2008, 118, 2125-2142.	0.9	8
58	A Localization Approach to Improve Iterative Proportional Scaling in Gaussian Graphical Models. Communications in Statistics - Theory and Methods, 2010, 39, 1643-1654.	1.0	8
59	The generality of the zero-one laws. Annals of the Institute of Statistical Mathematics, 2011, 63, 873-885.	0.8	8
60	Periodicity of Non-Central Integral Arrangements Modulo Positive Integers. Annals of Combinatorics, 2011, 15, 449-464.	0.6	8
61	Ranking patterns of unfolding models of codimension one. Advances in Applied Mathematics, 2011, 47, 379-400.	0.7	8
62	LÃ©vyâ€™s Zeroâ€“One Law in Game-Theoretic Probability. Journal of Theoretical Probability, 2012, 25, 1-24.	0.8	8
63	Strong consistency of MLE for finite uniform mixtures when the scale parameters are exponentially small. Annals of the Institute of Statistical Mathematics, 2005, 57, 1-19.	0.8	7
64	The tube method for the moment index in projection pursuit. Journal of Statistical Planning and Inference, 2008, 138, 2749-2762.	0.6	7
65	Bayes admissible estimation of the means in Poisson decomposable graphical models. Journal of Statistical Planning and Inference, 2009, 139, 1297-1319.	0.6	7
66	The law of the iterated logarithm in game-theoretic probability with quadratic and stronger hedges. Stochastic Processes and Their Applications, 2013, 123, 3132-3152.	0.9	7
67	Defensive Forecasting for Linear Protocols. Lecture Notes in Computer Science, 2005, , 459-473.	1.3	7
68	A new proof of admissibility of tests in the multivariate analysis of variance. Journal of Multivariate Analysis, 1982, 12, 457-468.	1.0	6
69	On sum of 0â€“1 random variables II. Multivariate case. Annals of the Institute of Statistical Mathematics, 1987, 39, 307-324.	0.8	6
70	Conformal Geometry of Statistical Manifold with Application to Sequential Estimation. Sequential Analysis, 2011, 30, 308-337.	0.5	6
71	Markov degree of the Birkhoff model. Journal of Algebraic Combinatorics, 2014, 40, 293-311.	0.8	6
72	Calculation of orthant probabilities by the holonomic gradient method. Japan Journal of Industrial and Applied Mathematics, 2015, 32, 187-204.	0.9	6

#	Article	IF	Citations
73	Estimation of exponential-polynomial distribution by holonomic gradient descent. Communications in Statistics - Theory and Methods, 2016, 45, 6860-6882.	1.0	6
74	Distribution of the ratio of two Wishart matrices and cumulative probability evaluation by the holonomic gradient method. Journal of Multivariate Analysis, 2018, 165, 270-278.	1.0	6
75	Shrinkage to smooth non-convex cone :Principal component analysis as stein estimation. Communications in Statistics - Theory and Methods, 1999, 28, 651-669.	1.0	5
76	Improving on the maximum likelihood estimators of the means in Poisson decomposable graphical models. Journal of Multivariate Analysis, 2007, 98, 410-434.	1.0	5
77	Integral representations of one-dimensional projections for multivariate stable densities. Journal of Multivariate Analysis, 2009, 100, 334-344.	1.0	5
78	Multistep Bayesian Strategy in Coin-Tossing Games and Its Application to Asset Trading Games in Continuous Time. Stochastic Analysis and Applications, 2010, 28, 842-861.	1.5	5
79	Hierarchical subspace models for contingency tables. Journal of Multivariate Analysis, 2012, 103, 19-34.	1.0	5
80	Chi-square mixture representations for the distribution of the scalar Schur complement in a noncentral Wishart matrix. Statistics and Probability Letters, 2016, 115, 79-87.	0.7	5
81	A Markov Basis for Two-state Toric Homogeneous Markov Chain Model Without Initial Parameters. Journal of the Japan Statistical Society, 2011, 41, 033-049.	0.1	5
82	MINIMUM UNSAFE AND MAXIMUM SAFE SETS OF VARIABLES FOR DISCLOSURE RISK ASSESSMENT OF INDIVIDUAL RECORDS IN A MICRODATA SET. Journal of the Japan Statistical Society, 2002, 32, 107-117.	0.1	5
83	Euler characteristic heuristic for approximating the distribution of the largest eigenvalue of an orthogonally invariant random matrix. Journal of Statistical Planning and Inference, 2008, 138, 3357-3378.	0.6	4
84	On Intersection Lattices of Hyperplane Arrangements Generated by Generic Points. Annals of Combinatorics, 2012, 16, 789-813.	0.6	4
85	Markov degree of the three-state toric homogeneous Markov chain model. Beitrage Zur Algebra Und Geometrie, 2014, 55, 161-188.	0.5	4
86	Derandomization in game-theoretic probability. Stochastic Processes and Their Applications, 2015, 125, 39-59.	0.9	4
87	Holonomic gradient method for distribution function of a weighted sum of noncentral chi-square random variables. Computational Statistics, 2016, 31, 1645-1659.	1.5	4
88	Game-theoretic derivation of upper hedging prices of multivariate contingent claims and submodularity. Japan Journal of Industrial and Applied Mathematics, 2020, 37, 213-248.	0.9	4
89	Running Markov Chain Without Markov Bases. Springer Series in Statistics, 2012, , 275-286.	0.9	4
90	Game-Theoretic Derivation of Discrete Distributions and Discrete Pricing Formulas. Journal of the Japan Statistical Society, 2007, 37, 87-104.	0.1	4

#	Article	IF	Citations
91	Characterization of rankings generated by linear discriminant analysis. Journal of Multivariate Analysis, 2005, 92, 343-358.	1.0	3
92	Simultaneous Estimation of the Means in Some Poisson Log Linear Models. Journal of the Japan Statistical Society, 2006, 36, 17-36.	0.1	3
93	Iterative proportional scaling via decomposable submodels for contingency tables. Computational Statistics and Data Analysis, 2009, 53, 966-978.	1.2	3
94	Design and Analysis of Fractional Factorial Experiments From the Viewpoint of Computational Algebraic Statistics. Journal of Statistical Theory and Practice, 2012, 6, 147-161.	0.5	3
95	Non-linear time-varying stochastic models for agroclimate risk assessment. Environmental and Ecological Statistics, 2015, 22, 227-246.	3.5	3
96	Exponential decay rate of partial autocorrelation coefficients of ARMA and short-memory processes. Statistics and Probability Letters, 2016, 110, 207-210.	0.7	3
97	A new era of statistics and data science education in Japanese universities. Japanese Journal of Statistics and Data Science, 2018, 1, 109-116.	1.2	3
98	A lower bound for the Graver complexity of the incidence matrix of a complete bipartite graph. Electronic Journal of Combinatorics, 2012, 3, 695-708.	0.1	3
99	A proof of independent Bartlett correctability of nested likelihood ratio tests. Annals of the Institute of Statistical Mathematics, 1996, 48, 603-620.	0.8	2
100	An asymptotic expansion of Wishart distribution when the population eigenvalues are infinitely dispersed. Statistical Methodology, 2007, 4, 158-184.	0.5	2
101	Conditions for swappability of records in a microdata set when some marginals are fixed. Computational Statistics, 2007, 22, 173-185.	1.5	2
102	Hierarchical orbital decompositions and extended decomposable distributions. Journal of Multivariate Analysis, 2008, 99, 339-357.	1.0	2
103	Asymptotic distribution of Wishart matrix for block-wise dispersion of population eigenvalues. Journal of Multivariate Analysis, 2008, 99, 751-775.	1.0	2
104	New Procedures for Testing Whether Stock Price Processes are Martingales. Computational Economics, 2011, 37, 67-88.	2.6	2
105	Admissible estimator of the eigenvalues of the varianceâ€“covariance matrix for multivariate normal distributions. Journal of Multivariate Analysis, 2011, 102, 801-815.	1.0	2
106	Approximations and asymptotics of upper hedging prices in multinomial models. Japan Journal of Industrial and Applied Mathematics, 2012, 29, 1-21.	0.9	2
107	Properties of powers of functions satisfying second-order linear differential equations with applications to statistics. Japan Journal of Industrial and Applied Mathematics, 2015, 32, 553-572.	0.9	2
108	Decidability in complex social choices. Evolutionary and Institutional Economics Review, 2015, 12, 141-168.	0.6	2

#	Article	IF	Citations
109	An objective look at obtaining the plotting positions for QQ-plots. Communications in Statistics - Theory and Methods, 2016, 45, 4716-4728.	1.0	2
110	Relation between the rate of convergence of strong law of large numbers and the rate of concentration of Bayesian prior in game-theoretic probability. Stochastic Processes and Their Applications, 2018, 128, 1466-1484.	0.9	2
111	A Power-Law Growth and Decay Model with Autocorrelation for Posting Data to Social Networking Services. PLoS ONE, 2016, 11, e0160592.	2.5	2
112	On the equivalence of proportional cell frequencies and orthogonality of interaction spaces in n-way Anova. Linear Algebra and Its Applications, 1985, 67, 35-49.	0.9	1
113	Application of tube formula to distributional problems in multiway layouts. Applied Stochastic Models in Business and Industry, 2002, 18, 245-257.	1.5	1
114	Tail probabilities of the limiting null distributions of the Andersonâ€“Stephens statistics. Journal of Multivariate Analysis, 2004, 89, 261-291.	1.0	1
115	Sequential optimizing investing strategy with neural networks. Expert Systems With Applications, 2011, 38, 12991-12998.	7.6	1
116	Markov bases for typical block effect models of two-way contingency tables. Journal of Multivariate Analysis, 2012, 112, 219-229.	1.0	1
117	Markov chain Monte Carlo test of toric homogeneous Markov chains. Statistical Methodology, 2012, 9, 392-406.	0.5	1
118	Discussion on â€œSequential Estimation for Time Series Modelsâ€•by T. N. Sriram and Ross Iaci. Sequential Analysis, 2014, 33, 190-193.	0.5	1
119	ErdÅ‘sâ€“Fellerâ€“Kolmogorovâ€“Petrowsky law of the iterated logarithm for self-normalized martingales: A game-theoretic approach. Annals of Probability, 2019, 47, .	1.8	1
120	Parallel matching for ranking all teams in a tournament. Advances in Applied Probability, 2006, 38, 804-826.	0.7	1
121	RANKINGS GENERATED BY SPHERICAL DISCRIMINANT ANALYSIS. Journal of the Japan Statistical Society, 2000, 30, 43-51.	0.1	1
122	Some Models for Merging Groups in Microdata. Oyo Tokeigaku, 2000, 29, 63-82.	0.1	1
123	Arrangements stable under the Coxeter groups. , 2012, , 327-354.		1
124	Standard imsets for undirected and chain graphical models. Bernoulli, 2015, 21, .	1.3	1
125	Separation of integer points by a hyperplane under some weak notions of discrete convexity. Discrete Mathematics, 2013, 313, 8-18.	0.7	0
126	Bayesian Logistic Betting Strategy Against Probability Forecasting. Stochastic Analysis and Applications, 2013, 31, 214-234.	1.5	0

#	Article	IF	Citations
127	Conformal geometry of sequential test in multidimensional curved exponential family. Sequential Analysis, 2016, 35, 30-68.	0.5	0
128	The volume-of-tube method for Gaussian random fields with inhomogeneous variance. Journal of Multivariate Analysis, 2021, , 104819.	1.0	0
129	GrÃ¶bner Basis Techniques for Design of Experiments. Springer Series in Statistics, 2012, , 261-273.	0.9	0
130	Disclosure Limitation Problem and Markov Basis. Springer Series in Statistics, 2012, , 251-259.	0.9	0
131	Markov Bases and Designed Experiments. , 2013, , 165-221.		0
132	THE EFFECT OF HETEROSCEDASTICITY ON THE ACTUAL SIZE OF THE CHOW TEST. Journal of the Japan Statistical Society, 1996, 26, 127-134.	0.1	0
133	Educational Goals and Achievements of Undergraduate and Graduate Programs of Data Science in Shiga University. Journal of Jsee, 2022, 70, 1_7-1_12.	0.0	0