

# Shinto Eguchi

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4298776/publications.pdf>

Version: 2024-02-01

111  
papers

2,234  
citations

201385

27  
h-index

243296

44  
g-index

116  
all docs

116  
docs citations

116  
times ranked

1409  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Robust parameter estimation with a small bias against heavy contamination. Journal of Multivariate Analysis, 2008, 99, 2053-2081.                                   | 0.5 | 176       |
| 2  | Information Geometry of U-Boost and Bregman Divergence. Neural Computation, 2004, 16, 1437-1481.  | 1.3 | 139       |
| 3  | Robust Blind Source Separation by Beta Divergence. Neural Computation, 2002, 14, 1859-1886.   | 1.3 | 129       |
| 4  | Interpreting Kullback-Leibler divergence with the Neyman-Pearson lemma. Journal of Multivariate Analysis, 2006, 97, 2034-2040.                                      | 0.5 | 121       |
| 5  | Second Order Efficiency of Minimum Contrast Estimators in a Curved Exponential Family. Annals of Statistics, 1983, 11, 793.   | 1.4 | 97        |
| 6  | Geometry of minimum contrast. Hiroshima Mathematical Journal, 1992, 22, .   | 0.1 | 80        |
| 7  | A class of logistic-type discriminant functions. Biometrika, 2002, 89, 1-22.  | 1.3 | 73        |
| 8  | Local sensitivity approximations for selectivity bias. Journal of the Royal Statistical Society Series B: Statistical Methodology, 2001, 63, 871-895.               | 1.1 | 64        |
| 9  | Robust estimation in the normal mixture model. Journal of Statistical Planning and Inference, 2006, 136, 3989-4011.   | 0.4 | 63        |
| 10 | A paradox concerning nuisance parameters and projected estimating functions. Biometrika, 2004, 91, 929-941.   | 1.3 | 62        |
| 11 | Robustifying AdaBoost by Adding the Naive Error Rate. Neural Computation, 2004, 16, 767-787.  | 1.3 | 56        |
| 12 | A boosting method for maximizing the partial area under the ROC curve. BMC Bioinformatics, 2010, 11, 314.   | 1.2 | 48        |
| 13 | A differential geometric approach to statistical inference on the basis of contrast functionals. Hiroshima Mathematical Journal, 1985, 15, .                        | 0.1 | 47        |
| 14 | Robust Kernel Principal Component Analysis. Neural Computation, 2009, 21, 3179-3213.  | 1.3 | 46        |
| 15 | A class of local likelihood methods and near-parametric asymptotics. Journal of the Royal Statistical Society Series B: Statistical Methodology, 1998, 60, 709-724. | 1.1 | 45        |
| 16 | Robust Loss Functions for Boosting. Neural Computation, 2007, 19, 2183-2244.  | 1.3 | 43        |
| 17 | Identification of biomarkers from mass spectrometry data using a "common" peak approach. BMC Bioinformatics, 2006, 7, 358.  | 1.2 | 40        |
| 18 | Robust Prewhitening for ICA by Minimizing $\hat{l}^2$ -Divergence and Its Application to FastICA. Neural Processing Letters, 2007, 25, 91-110.                      | 2.0 | 37        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Entropy and Divergence Associated with Power Function and the Statistical Application. Entropy, 2010, 12, 262-274.   | 1.1 | 36        |
| 20 | Risk assessment of radioisotope contamination for aquatic living resources in and around Japan. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3838-3843. | 3.3 | 35        |
| 21 | Local model uncertainty and incomplete-data bias (with discussion). Journal of the Royal Statistical Society Series B: Statistical Methodology, 2005, 67, 459-513.                                     | 1.1 | 34        |
| 22 | Exploring Latent Structure of Mixture ICA Models by the Minimum $\hat{I}^2$ -Divergence Method. Neural Computation, 2006, 18, 166-190.   | 1.3 | 33        |
| 23 | Robust extraction of local structures by the minimum $\gamma$ -divergence method. Neural Networks, 2010, 23, 226-238.  | 3.3 | 33        |
| 24 | A class of tests for a general covariance structure. Journal of Multivariate Analysis, 1990, 32, 313-325.  | 0.5 | 32        |
| 25 | An asymmetric logistic regression model for ecological data. Methods in Ecology and Evolution, 2016, 7, 249-260.   | 2.2 | 31        |
| 26 | Spontaneous Clustering via Minimum Gamma-Divergence. Neural Computation, 2014, 26, 421-448.  | 1.3 | 30        |
| 27 | Diurnal Transcriptome and Gene Network Represented through Sparse Modeling in <i>Brachypodium distachyon</i> . Frontiers in Plant Science, 2017, 8, 2055.  | 1.7 | 29        |
| 28 | An introduction to the predictive technique AdaBoost with a comparison to generalized additive models. Fisheries Research, 2005, 76, 328-343.  | 0.9 | 28        |
| 29 | Supervised image classification by contextual AdaBoost based on posteriors in neighborhoods. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 2547-2554.                                  | 2.7 | 27        |
| 30 | Projective Power Entropy and Maximum Tsallis Entropy Distributions. Entropy, 2011, 13, 1746-1764.  | 1.1 | 27        |
| 31 | Confidence Intervals and P-Values for Meta-Analysis with Publication Bias. Biometrics, 2007, 63, 475-482.  | 0.8 | 26        |
| 32 | Genotyping of single nucleotide polymorphism using model-based clustering. Bioinformatics, 2004, 20, 718-726.  | 1.8 | 24        |
| 33 | Target-based catch-per-unit-effort standardization in multispecies fisheries. Canadian Journal of Fisheries and Aquatic Sciences, 2018, 75, 452-463.   | 0.7 | 24        |
| 34 | Modeling Late Entry Bias in Survival Analysis. Biometrics, 2005, 61, 559-566.  | 0.8 | 22        |
| 35 | The power $\hat{\epsilon}$ -integrated discriminant improvement: An accurate measure of the incremental predictive value of additional biomarkers. Statistics in Medicine, 2019, 38, 2589-2604.        | 0.8 | 21        |
| 36 | Sampling bias correction in species distribution models by quasi-linear Poisson point process. Ecological Informatics, 2020, 55, 101015.   | 2.3 | 20        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Robust Boosting Algorithm Against Mislabeling in Multiclass Problems. <i>Neural Computation</i> , 2008, 20, 1596-1630.   | 1.3 | 19        |
| 38 | Duality of Maximum Entropy and Minimum Divergence. <i>Entropy</i> , 2014, 16, 3552-3572.   | 1.1 | 19        |
| 39 | An Extension of the Receiver Operating Characteristic Curve and AUC-Optimal Classification. <i>Neural Computation</i> , 2012, 24, 2789-2824.                       | 1.3 | 17        |
| 40 | Robust estimation of location and concentration parameters for the von Mises-Fisher distribution. <i>Statistical Papers</i> , 2016, 57, 205-234.                   | 0.7 | 15        |
| 41 | The Influence Function of Principal Component Analysis by Self-Organizing Rule. <i>Neural Computation</i> , 1998, 10, 1435-1444.                                   | 1.3 | 14        |
| 42 | Local likelihood method: a bridge over parametric and nonparametric regression. <i>Journal of Nonparametric Statistics</i> , 2003, 15, 665-683.                    | 0.4 | 13        |
| 43 | The Most Robust Loss Function for Boosting. <i>Lecture Notes in Computer Science</i> , 2004, , 496-501.  | 1.0 | 13        |
| 44 | Image classification based on Markov random field models with Jeffreys divergence. <i>Journal of Multivariate Analysis</i> , 2006, 97, 1997-2008.                  | 0.5 | 13        |
| 45 | Robust Independent Component Analysis via Minimum $\gamma$ -Divergence Estimation. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2013, 7, 614-624. | 7.3 | 10        |
| 46 | A characterization of second order efficiency in a curved exponential family. <i>Annals of the Institute of Statistical Mathematics</i> , 1984, 36, 199-206.       | 0.5 | 9         |
| 47 | A Class of Robust Principal Component Vectors. <i>Journal of Multivariate Analysis</i> , 2001, 77, 239-269.  | 0.5 | 9         |
| 48 | Quasi-linear score for capturing heterogeneous structure in biomarkers. <i>BMC Bioinformatics</i> , 2017, 18, 308.   | 1.2 | 9         |
| 49 | Information Divergence Geometry and the Application to Statistical Machine Learning. , 2009, , 309-332.  |     | 9         |
| 50 | Path Connectedness on a Space of Probability Density Functions. <i>Lecture Notes in Computer Science</i> , 2015, , 615-624.  | 1.0 | 9         |
| 51 | Area under the curve maximization method in credit scoring. <i>Journal of Risk Model Validation</i> , 2010, 4, 3-25.   | 0.1 | 9         |
| 52 | A comparison of methods for estimating individual pharmacokinetic parameters. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 1999, 27, 103-121.         | 0.6 | 8         |
| 53 | Boosting Method for Local Learning in Statistical Pattern Recognition. <i>Neural Computation</i> , 2008, 20, 2792-2838.  | 1.3 | 8         |
| 54 | Group Invariance of Information Geometry on q-Gaussian Distributions Induced by Beta-Divergence. <i>Entropy</i> , 2013, 15, 4732-4747.                             | 1.1 | 8         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | SNEP: Simultaneous detection of nucleotide and expression polymorphisms using Affymetrix GeneChip. BMC Bioinformatics, 2009, 10, 131.                                 | 1.2 | 7         |
| 56 | A Unified Formulation of k-Means, Fuzzy c-Means and Gaussian Mixture Model by the Kolmogorov-Nagumo Average. Entropy, 2021, 23, 518.                                  | 1.1 | 7         |
| 57 | Novel robust time series analysis for long-term and short-term prediction. Scientific Reports, 2021, 11, 11938.   | 1.6 | 7         |
| 58 | Testing the Hardy-Weinberg Equilibrium in the HLA System. Biometrics, 1990, 46, 415.  | 0.8 | 6         |
| 59 | A geometric look at nuisance parameter effect of local powers in testing hypothesis. Annals of the Institute of Statistical Mathematics, 1991, 43, 245-260.           | 0.5 | 6         |
| 60 | Pharmacokinetic parameter estimations by minimum relative entropy method. Journal of Pharmacokinetics and Pharmacodynamics, 1995, 23, 479-494.                        | 0.6 | 6         |
| 61 | Importance Sampling Via the Estimated Sampler. Biometrika, 2007, 94, 985-991.   | 1.3 | 6         |
| 62 | Likelihood for Statistically Equivalent Models. Journal of the Royal Statistical Society Series B: Statistical Methodology, 2010, 72, 193-217.                        | 1.1 | 6         |
| 63 | On local likelihood density estimation when the bandwidth is large. Journal of Statistical Planning and Inference, 2006, 136, 839-859.                                | 0.4 | 5         |
| 64 | Asymptotical improvement of maximum likelihood estimators on Kullback-Leibler loss. Journal of Statistical Planning and Inference, 2008, 138, 3502-3511.              | 0.4 | 5         |
| 65 | Density estimation with minimization of U-divergence. Machine Learning, 2013, 90, 29-57.  | 3.4 | 5         |
| 66 | Generalized $T$ -Statistic for Two-Group Classification. Biometrics, 2015, 71, 404-416.   | 0.8 | 5         |
| 67 | Robust bias correction model for estimation of global trend in marine populations. Ecosphere, 2017, 8, e02038.  | 1.0 | 5         |
| 68 | Statistical Methods for Imbalanced Data in Ecological and Biological Studies. SpringerBriefs in Statistics, 2019, , .   | 0.3 | 4         |
| 69 | $\eta$ -Maxent. SpringerBriefs in Statistics, 2019, , 27-33.  | 0.3 | 4         |
| 70 | Generalized quasi-linear mixed-effects model. Statistical Methods in Medical Research, 2022, , 096228022210858.   | 0.7 | 4         |
| 71 | A projection method of estimation for a subfamily of exponential families. Annals of the Institute of Statistical Mathematics, 1986, 38, 385-398.                     | 0.5 | 3         |
| 72 | Common Peak Approach Using Mass Spectrometry Data Sets for Predicting the Effects of Anticancer Drugs on Breast Cancer. Cancer Informatics, 2007, 3, 117693510700300. | 0.9 | 3         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Robust QTL analysis by minimum $\beta$ -divergence method. International Journal of Data Mining and Bioinformatics, 2010, 4, 471.                                       | 0.1 | 3         |
| 74 | Boosting Learning Algorithm for Pattern Recognition and Beyond. IEICE Transactions on Information and Systems, 2011, E94-D, 1863-1869.                                  | 0.4 | 3         |
| 75 | Robust Clustering Method in the Presence of Scattered Observations. Neural Computation, 2016, 28, 1141-1162.  | 1.3 | 3         |
| 76 | Pythagoras theorem in information geometry and applications to generalized linear models. Handbook of Statistics, 2021, 45, 15-42.                                      | 0.4 | 3         |
| 77 | Copula-based measures of asymmetry between the lower and upper tail probabilities. Statistical Papers, 2022, 63, 1907-1929.   | 0.7 | 3         |
| 78 | Robust supervised image classifiers by spatial AdaBoost based on robust loss functions. , 2005, 5982, 124.  |     | 2         |
| 79 | GroupAdaBoost for Selecting Important Genes. , 0, , .   |     | 2         |
| 80 | GroupAdaBoost: Accurate Prediction and Selection of Important Genes. IPSJ Digital Courier, 2007, 3, 145-152.  | 0.3 | 2         |
| 81 | Identifying haplotype block structure using an ancestor-derived model. Journal of Human Genetics, 2007, 52, 738-746.  | 1.1 | 2         |
| 82 | Robust Composite Interval Mapping for QTL Analysis by Minimum $\beta$ -Divergence Method. , 2008, , .   |     | 2         |
| 83 | Maximum Regularized Likelihood Estimator of Finite Mixtures with a Structural Model. Communications in Statistics - Theory and Methods, 2010, 39, 1498-1510.            | 0.6 | 2         |
| 84 | Geometry on Positive Definite Matrices Deformed by V-Potentials and Its Submanifold Structure. Signals and Communication Technology, 2014, , 31-55.                     | 0.4 | 2         |
| 85 | Binary Classification with a Pseudo Exponential Model and Its Application for Multi-Task Learning. Entropy, 2015, 17, 5673-5694.  | 1.1 | 2         |
| 86 | Reproducible detection of disease-associated markers from gene expression data. BMC Medical Genomics, 2016, 9, 53.  | 0.7 | 2         |
| 87 | Strong model dependence in statistical analysis: goodness of fit is not enough for model choice. Annals of the Institute of Statistical Mathematics, 2020, 72, 329-352. | 0.5 | 2         |
| 88 | The projection method for accelerated life test model in bivariate exponential distributions. Hiroshima Mathematical Journal, 1992, 22, .                               | 0.1 | 2         |
| 89 | Common peak approach using mass spectrometry data sets for predicting the effects of anticancer drugs on breast cancer. Cancer Informatics, 2007, 3, 285-93.            | 0.9 | 2         |
| 90 | Spatio-temporal contextual image classification based on spatial adaboost. , 0, , .   |     | 1         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 91  | PSA CUT-OFF NOMOGRAM THAT AVOID OVER-DETECTION OF PROSTATE CANCER IN ELDERLY MEN. Journal of Urology, 2009, 181, 748-748.   | 0.2 | 1         |
| 92  | Geometry on Positive Definite Matrices Induced from V-Potential Function. Lecture Notes in Computer Science, 2013, , 621-629.   | 1.0 | 1         |
| 93  | Detection of Heterogeneous Structures on the Gaussian Copula Model Using Projective Power Entropy. ISRN Probability and Statistics, 2013, 2013, 1-10.   | 0.2 | 1         |
| 94  | Statistical Analysis of Biomarkers for Personalized Medicine. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-2.  | 0.7 | 1         |
| 95  | Multiple Suboptimal Solutions for Prediction Rules in Gene Expression Data. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-14.   | 0.7 | 1         |
| 96  | Individualized Prostate-specific Antigen Threshold Values to Avoid Overdiagnosis of Prostate Cancer and Reduce Unnecessary Biopsy in Elderly Men. Japanese Journal of Clinical Oncology, 2014, 44, 852-859. | 0.6 | 1         |
| 97  | Maximum power entropy method for ecological data analysis. AIP Conference Proceedings, 2015, , .  | 0.3 | 1         |
| 98  | A novel boosting algorithm for multi-task learning based on the Itakuda-Saito divergence. , 2015, , .   |     | 1         |
| 99  | Quasi-linear Cox proportional hazards model with cross- L1 penalty. BMC Medical Research Methodology, 2020, 20, 182.  | 1.4 | 1         |
| 100 | Spontaneous Learning for Data Distributions via Minimum Divergence. Signals and Communication Technology, 2017, , 79-99.  | 0.4 | 1         |
| 101 | Information Geometry Associated with Generalized Means. Springer Proceedings in Mathematics and Statistics, 2018, , 279-295.  | 0.1 | 1         |
| 102 | Adaptively robust blind audio signals separation by the minimum &#x03B2;-divergence method. , 2007, , .   |     | 0         |
| 103 | Extension of ROC curve. , 2009, , .   |     | 0         |
| 104 | Duality in a maximum generalized entropy model. , 2015, , .   |     | 0         |
| 105 | Introduction to Imbalanced Data. SpringerBriefs in Statistics, 2019, , 1-10.  | 0.3 | 0         |
| 106 | Weighted Logistic Regression. SpringerBriefs in Statistics, 2019, , 11-25.  | 0.3 | 0         |
| 107 | Machine Learning Methods for Imbalanced Data. SpringerBriefs in Statistics, 2019, , 45-55.  | 0.3 | 0         |
| 108 | Supervised Image Classification of Multi-Spectral Images Based on Statistical Machine Learning. , 2007, , 79-105.   |     | 0         |

| #   | ARTICLE  | IF | CITATIONS |
|-----|--|----|-----------|
| 109 | Unsupervised Learning Algorithms. , 2022, , 125-152. |    | 0         |
| 110 | Regression Model. , 2022, , 153-178.                 |    | 0         |
| 111 | Maximum Entropy Model. , 2022, , 71-95.              |    | 0         |