

Axel Munk

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6789196/publications.pdf>

Version: 2024-02-01

94
papers

2,347
citations

218677

26
h-index

243625

44
g-index

96
all docs

96
docs citations

96
times ranked

2167
citing authors

#	ARTICLE	IF	CITATIONS
1	Box-Type Approximations in Nonparametric Factorial Designs. <i>Journal of the American Statistical Association</i> , 1997, 92, 1494-1502.	3.1	207
2	Multiscale Change Point Inference. <i>Journal of the Royal Statistical Society Series B: Statistical Methodology</i> , 2014, 76, 495-580.	2.2	187
3	Fluorescence nanoscopy by polarization modulation and polarization angle narrowing. <i>Nature Methods</i> , 2014, 11, 579-584.	19.0	107
4	Self-consistent residual dipolar coupling based model-free analysis for the robust determination of nanosecond to microsecond protein dynamics. <i>Journal of Biomolecular NMR</i> , 2008, 41, 139-155.	2.8	100
5	Hidden Markov models for circular and linear-circular time series. <i>Environmental and Ecological Statistics</i> , 2006, 13, 325-347.	3.5	82
6	Inference for Empirical Wasserstein Distances on Finite Spaces. <i>Journal of the Royal Statistical Society Series B: Statistical Methodology</i> , 2018, 80, 219-238.	2.2	68
7	Identifiability of Finite Mixtures of Elliptical Distributions. <i>Scandinavian Journal of Statistics</i> , 2006, 33, 753-763.	1.4	67
8	On difference-based variance estimation in nonparametric regression when the covariate is high dimensional. <i>Journal of the Royal Statistical Society Series B: Statistical Methodology</i> , 2005, 67, 19-41.	2.2	65
9	Mapping molecules in scanning far-field fluorescence nanoscopy. <i>Nature Communications</i> , 2015, 6, 7977.	12.8	64
10	Contributions of empirical and quantile processes to the asymptotic theory of goodness-of-fit tests. <i>Test</i> , 2000, 9, 1-96.	1.1	61
11	Security Considerations in Minutiae-Based Fuzzy Vaults. <i>IEEE Transactions on Information Forensics and Security</i> , 2015, 10, 985-998.	6.9	60
12	Global Models for the Orientation Field of Fingerprints: An Approach Based on Quadratic Differentials. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2008, 30, 1507-1519.	13.9	59
13	Partial Least-Squares Functional Mode Analysis: Application to the Membrane Proteins AQP1, Aqy1, and CLC-ec1. <i>Biophysical Journal</i> , 2012, 103, 786-796.	0.5	57
14	Iteratively Regularized Gauss-Newton Method for Nonlinear Inverse Problems with Random Noise. <i>SIAM Journal on Numerical Analysis</i> , 2009, 47, 1827-1846.	2.3	56
15	Nonparametric validation of similar distributions and assessment of goodness of fit. <i>Journal of the Royal Statistical Society Series B: Statistical Methodology</i> , 1998, 60, 223-241.	2.2	55
16	Nonparametric comparison of several regression functions: exact and asymptotic theory. <i>Annals of Statistics</i> , 1998, 26, 2339.	2.6	53
17	Drift estimation for single marker switching based imaging schemes. <i>Optics Express</i> , 2012, 20, 7274.	3.4	50
18	On Identifiability in Capture-Recapture Models. <i>Biometrics</i> , 2006, 62, 934-936.	1.4	46

#	ARTICLE	IF	CITATIONS
19	Robust Orientation Field Estimation and Extrapolation Using Semilocal Line Sensors. IEEE Transactions on Information Forensics and Security, 2009, 4, 802-811.	6.9	46
20	Convergence Analysis of Generalized Iteratively Reweighted Least Squares Algorithms on Convex Function Spaces. SIAM Journal on Optimization, 2009, 19, 1828-1845.	2.0	44
21	Limit laws of the empirical Wasserstein distance: Gaussian distributions. Journal of Multivariate Analysis, 2016, 151, 90-109.	1.0	41
22	Statistical multiresolution Dantzig estimation in imaging: Fundamental concepts and algorithmic framework. Electronic Journal of Statistics, 2012, 6, .	0.7	39
23	Field localization and rescattering in tip-enhanced photoemission. Annalen Der Physik, 2013, 525, L12.	2.4	37
24	Idealizing Ion Channel Recordings by a Jump Segmentation Multiresolution Filter. IEEE Transactions on Nanobioscience, 2013, 12, 376-386.	3.3	32
25	Modeling the Growth of Fingerprints Improves Matching for Adolescents. IEEE Transactions on Information Forensics and Security, 2011, 6, 1165-1169.	6.9	31
26	The Estimation of Threshold Models in Price Transmission Analysis. American Journal of Agricultural Economics, 2013, 95, 900-916.	4.3	31
27	Modern Statistical Challenges in High-Resolution Fluorescence Microscopy. Annual Review of Statistics and Its Application, 2015, 2, 163-202.	7.0	27
28	Statistical Multiresolution Estimation for Variational Imaging: With an Application in Poisson-Biophotonics. Journal of Mathematical Imaging and Vision, 2013, 46, 370-387.	1.3	26
29	Empirical Regularized Optimal Transport: Statistical Theory and Applications. SIAM Journal on Mathematics of Data Science, 2020, 2, 419-443.	1.8	21
30	A nonparametric test for similarity of marginals With applications to the assessment of population bioequivalence. Journal of Statistical Planning and Inference, 2007, 137, 697-711.	0.6	20
31	Density testing in a contaminated sample. Journal of Multivariate Analysis, 2007, 98, 57-75.	1.0	19
32	Empirical optimal transport on countable metric spaces: Distributional limits and statistical applications. Annals of Applied Probability, 2019, 29, .	1.3	19
33	$1 - \hat{\alpha}$ Equivariant Confidence Rules for Convex Alternatives are $\hat{\alpha}/2$ -Level Tests-With Applications to the Multivariate Assessment of Bioequivalence. Journal of the American Statistical Association, 1999, 94, 1311.	3.1	18
34	Noncanonical links in generalized linear models "when is the effort justified?. Journal of Statistical Planning and Inference, 2000, 87, 317-345.	0.6	17
35	Assessing the similarity of distributions - finite sample performance of the empirical mallows distance. Journal of Statistical Computation and Simulation, 1998, 60, 319-346.	1.2	16
36	Extreme value analysis of empirical frame coefficients and implications for denoising by soft-thresholding. Applied and Computational Harmonic Analysis, 2014, 36, 434-460.	2.2	16

#	ARTICLE	IF	CITATIONS
37	Testing for dependence on tree structures. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9787-9792.	7.1	16
38	Some Methodological Aspects of Validation of Models in Nonparametric Regression. Statistica Neerlandica, 2003, 57, 207-244.	1.6	15
39	On Hadamard differentiability in k -sample semiparametric models with applications to the assessment of structural relationships. Journal of Multivariate Analysis, 2005, 94, 123-158.	1.0	15
40	Design and semiparametric analysis of noninferiority trials with active and placebo control for censored time-to-event data. Statistics in Medicine, 2013, 32, 3055-3066.	1.6	14
41	Design and analysis of three-arm trials with negative binomially distributed endpoints. Statistics in Medicine, 2016, 35, 505-521.	1.6	14
42	A studentized permutation test for three-arm trials in the "gold standard" design. Statistics in Medicine, 2017, 36, 883-898.	1.6	13
43	Colocalization for super-resolution microscopy via optimal transport. Nature Computational Science, 2021, 1, 199-211.	8.0	13
44	A Test for Additivity in Nonparametric Regression. Annals of the Institute of Statistical Mathematics, 2002, 54, 60-82.	0.8	12
45	Therapeutic Equivalence – Clinical Issues and Statistical Methodology in Noninferiority Trials. Biometrical Journal, 2005, 47, 7-9.	1.0	12
46	Fully Automatic Multiresolution Idealization for Filtered Ion Channel Recordings: Flickering Event Detection. IEEE Transactions on Nanobioscience, 2018, 17, 300-320.	3.3	12
47	High-resolution experimental and computational electrophysiology reveals weak \hat{I}^2 -lactam binding events in the porin PorB. Scientific Reports, 2019, 9, 1264.	3.3	12
48	Aggregated motion estimation for real-time MRI reconstruction. Magnetic Resonance in Medicine, 2014, 72, 1039-1048.	3.0	11
49	Testing the Goodness of Fit of Parametric Regression Models with Random Toeplitz Forms. Scandinavian Journal of Statistics, 2002, 29, 501-533.	1.4	10
50	Neyman smooth goodness-of-fit tests for the marginal distribution of dependent data. Annals of the Institute of Statistical Mathematics, 2011, 63, 939-959.	0.8	10
51	Partial least squares for dependent data. Biometrika, 2016, 103, 351-362.	2.4	10
52	Testing noninferiority in three-armed clinical trials based on likelihood ratio statistics. Canadian Journal of Statistics, 2007, 35, 413-431.	0.9	9
53	Shape-constrained regularization by statistical multiresolution for inverse problems: asymptotic analysis. Inverse Problems, 2012, 28, 065006.	2.0	9
54	Reply to "Polarization modulation adds little additional information to super-resolution fluorescence microscopy". Nature Methods, 2016, 13, 8-9.	19.0	9

#	ARTICLE	IF	CITATIONS
55	Multiscale blind source separation. <i>Annals of Statistics</i> , 2018, 46, .	2.6	9
56	The essential histogram. <i>Biometrika</i> , 2020, 107, 347-364.	2.4	9
57	An antibiotic-resistance conferring mutation in a neisserial porin: Structure, ion flux, and ampicillin binding. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2021, 1863, 183601.	2.6	9
58	Equivalence and Interval Testing for Lehmann's Alternative. <i>Journal of the American Statistical Association</i> , 1996, 91, 1187-1196.	3.1	8
59	A note on unbiased testing for the equivalence problem "another christmas tree. <i>Statistics and Probability Letters</i> , 1999, 41, 401-406.	0.7	8
60	Multiscale Quantile Segmentation. <i>Journal of the American Statistical Association</i> , 2022, 117, 1384-1397.	3.1	8
61	Multidimensional multiscale scanning in exponential families: Limit theory and statistical consequences. <i>Annals of Statistics</i> , 2020, 48, .	2.6	8
62	An Extension of Welch's Approximate t-Solution to Comparative Bioequivalence Trials. <i>Biometrika</i> , 1994, 81, 91.	2.4	7
63	Connections between average and individual bioequivalence. <i>Statistics in Medicine</i> , 2000, 19, 2843-2854.	1.6	7
64	An unbiased test for the average equivalence problem "the small sample case. <i>Journal of Statistical Planning and Inference</i> , 2000, 87, 69-86.	0.6	7
65	A Simple Goodness-of-fit Test for Linear Models Under a Random Design Assumption. <i>Annals of the Institute of Statistical Mathematics</i> , 1998, 50, 253-275.	0.8	6
66	Shao's theorem on the maximum of standardized random walk increments for multidimensional arrays. <i>ESAIM - Probability and Statistics</i> , 2009, 13, 409-416.	0.5	6
67	Identifiability for Blind Source Separation of Multiple Finite Alphabet Linear Mixtures. <i>IEEE Transactions on Information Theory</i> , 2017, , 1-1.	2.4	6
68	Multiple haplotype reconstruction from allele frequency data. <i>Nature Computational Science</i> , 2021, 1, 262-271.	8.0	6
69	Minimax Rates for Estimating the Variance and its Derivatives in Non"Parametric Regression. <i>Australian and New Zealand Journal of Statistics</i> , 2002, 44, 479-488.	0.9	5
70	Non-parametric Analysis of Covariance ? The Case of Inhomogeneous and Heteroscedastic Noise. <i>Scandinavian Journal of Statistics</i> , 2007, 34, 511-534.	1.4	5
71	The likelihood ratio test for non-standard hypotheses near the boundary of the null " with application to the assessment of non-inferiority. <i>Statistics & Risk Modeling</i> , 2009, 27, 75-92.	0.3	5
72	Drift Estimation in Sparse Sequential Dynamic Imaging, With Application to Nanoscale Fluorescence Microscopy. <i>Journal of the Royal Statistical Society Series B: Statistical Methodology</i> , 2016, 78, 563-587.	2.2	5

#	ARTICLE	IF	CITATIONS
73	Analysis of patchclamp recordings: model-free multiscale methods and software. European Biophysics Journal, 2021, 50, 187-209.	2.2	5
74	Bump detection in the presence of dependency: Does it ease or does it load?. Bernoulli, 2020, 26, .	1.3	5
75	Molecular contribution function in RESOLFT nanoscopy. Optics Express, 2019, 27, 21956.	3.4	5
76	Sign regularity of a generalized Cauchy kernel with applications. Journal of Statistical Planning and Inference, 1996, 52, 131-142.	0.6	4
77	Testing model assumptions in multivariate linear regression models. Journal of Nonparametric Statistics, 2000, 12, 309-342.	0.9	4
78	Persistence Barcodes Versus Kolmogorov Signatures: Detecting Modes of One-Dimensional Signals. Foundations of Computational Mathematics, 2017, 17, 1-33.	2.5	4
79	Heterogeneous Idealization of Ion Channel Recordings “ Open Channel Noise. IEEE Transactions on Nanobioscience, 2021, 20, 57-78.	3.3	4
80	Randomized Wasserstein Barycenter Computation: Resampling with Statistical Guarantees. SIAM Journal on Mathematics of Data Science, 2022, 4, 229-259.	1.8	4
81	Bootstrap methods for the nonparametric assessment of population bioequivalence and similarity of distributions. Journal of Statistical Computation and Simulation, 2001, 68, 243-280.	1.2	3
82	A graphical selection method for parametric models in noisy inhomogeneous regression. Monthly Notices of the Royal Astronomical Society, 2002, 336, 131-138.	4.4	3
83	Comments on: Goodness-of-fit tests in mixed models. Test, 2009, 18, 256-259.	1.1	3
84	Maximum likelihood estimation in hidden Markov models with inhomogeneous noise. ESAIM - Probability and Statistics, 2019, 23, 492-523.	0.5	3
85	Total variation multiscale estimators for linear inverse problems. Information and Inference, 2020, 9, 961-986.	1.6	3
86	Interpersonal dependency of preferences. Theory and Decision, 1996, 41, 257-280.	1.0	2
87	Tests in a Case-control Design Including Relatives. Scandinavian Journal of Statistics, 2006, 33, 621-635.	1.4	2
88	Limit laws for empirical optimal solutions in random linear programs. Annals of Operations Research, 2022, 315, 251-278.	4.1	2
89	<i>The authors replied as follows:</i>. Biometrics, 2008, 64, 979-981.	1.4	1
90	Variational Multiscale Nonparametric Regression: Algorithms and Implementation. Algorithms, 2020, 13, 296.	2.1	1

#	ARTICLE	IF	CITATIONS
91	A Variational View on Statistical Multiscale Estimation. Annual Review of Statistics and Its Application, 2022, 9, 343-372.	7.0	1
92	Statistical Methods for Minimax Estimation in Linear Models with Unknown Design Over Finite Alphabets. SIAM Journal on Mathematics of Data Science, 2022, 4, 490-513.	1.8	1
93	Adaptive Statistical Inference. Oberwolfach Reports, 2014, 11, 721-779.	0.0	0
94	Frontiers in Nonparametric Statistics. Oberwolfach Reports, 2012, 9, 811-883.	0.0	0