Matt P Wand

List of Publications by Citations

153 papers	**11,724** citations
49 h-index	**107** g-index
173 ext. papers	**13,110** ext. citations
2.2 avg, IF	**6.42** L-index

#	Paper	IF	Citations
153	Kernel Smoothing **1995**,		2022
152	Semiparametric Regression **2003**,		1543
151	Multivariate Locally Weighted Least Squares Regression. *Annals of Statistics*, **1994**, 22, 1346	3.2	558
150	Generalized Partially Linear Single-Index Models. *Journal of the American Statistical Association*, **1997**, 92, 477-489	2.8	537
149	An Effective Bandwidth Selector for Local Least Squares Regression. *Journal of the American Statistical Association*, **1995**, 90, 1257-1270	2.8	511
148	Exact Mean Integrated Squared Error. *Annals of Statistics*, **1992**, 20, 712	3.2	440
147	Geoadditive models. *Journal of the Royal Statistical Society Series C: Applied Statistics*, **2003**, 52, 1-18	1.5	269
146	Chronic caregiver stress and IgE expression, allergen-induced proliferation, and cytokine profiles in a birth cohort predisposed to atopy. *Journal of Allergy and Clinical Immunology*, **2004**, 113, 1051-7	11.5	210
145	Local Polynomial Kernel Regression for Generalized Linear Models and Quasi-Likelihood Functions. *Journal of the American Statistical Association*, **1995**, 90, 141-150	2.8	208
144	Comparison of Smoothing Parameterizations in Bivariate Kernel Density Estimation. *Journal of the American Statistical Association*, **1993**, 88, 520-528	2.8	196
143	Explaining Variational Approximations. *American Statistician*, **2010**, 64, 140-153	5	194
142	Bayesian Analysis for Penalized Spline Regression UsingWinBUGS. *Journal of Statistical Software*, **2005**, 14,	7.3	193
141	Generalized additive distributed lag models: quantifying mortality displacement. *Biostatistics*, **2000**, 1, 279-92	3.7	190
140	Self-organization of bacterial biofilms is facilitated by extracellular DNA. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 11541-6	11.5	188
139	Smoothing and mixed models. *Computational Statistics*, **2003**, 18, 223-249	1	183
138	Transformations in Density Estimation. *Journal of the American Statistical Association*, **1991**, 86, 343-353	2.8	161
137	Local Polynomial Variance-Function Estimation. *Technometrics*, **1997**, 39, 262-273	1.4	132

118	Gaussian-based kernels. *Canadian Journal of Statistics*, **1990**, 18, 197-204	0.4	67
117	Transformations in Density Estimation		67
116	On the Accuracy of Binned Kernel Density Estimators. *Journal of Multivariate Analysis*, **1996**, 56, 165-184	1.4	66
115	Variable Selection and Function Estimation in Additive Nonparametric Regression Using a Data-Based Prior: Comment. *Journal of the American Statistical Association*, **1999**, 94, 794	2.8	63
114	Mean Field Variational Bayes for Elaborate Distributions. *Bayesian Analysis*, **2011**, 6,	2.3	62
113	Feature significance for multivariate kernel density estimation. *Computational Statistics and Data Analysis*, **2008**, 52, 4225-4242	1.6	58
112	A Comparison of Regression Spline Smoothing Procedures. *Computational Statistics*, **2000**, 15, 443-462	1	57
111	Local Polynomial Variance-Function Estimation		55
110	Simple incorporation of interactions into additive models. *Biometrics*, **2001**, 57, 539-45	1.8	54
109	Data-Based Choice of Histogram Bin Width. *American Statistician*, **1997**, 51, 59	5	53
108	Smoothing with Mixed Model Software. *Journal of Statistical Software*, **2004**, 9,	7.3	53
107	The urban spread of visceral leishmaniasis: clues from spatial analysis. *Epidemiology*, **2002**, 13, 364-7	3.1	52
106	Mixed Model-Based Hazard Estimation. *Journal of Computational and Graphical Statistics*, **2002**, 11, 784-798	2.1	49
105	A local likelihood proportional hazards model for interval censored data. *Statistics in Medicine*, **2002**, 21, 263-75	2.3	45
104	Comparison of Smoothing Parameterizations in Bivariate Kernel Density Estimation		45
103	Minimizing L1 distance in nonparametric density estimation. *Journal of Multivariate Analysis*, **1988**, 26, 59-88	1.4	44
102	Understanding exponential smoothing via kernel regression. *Journal of the Royal Statistical Society Series B: Statistical Methodology*, **1999**, 61, 39-50	3.9	42
101	Gaussian Variational Approximate Inference for Generalized Linear Mixed Models. *Journal of Computational and Graphical Statistics*, **2012**, 21, 2-17	1.4	39

100	Variational Bayesian Inference for Parametric and Nonparametric Regression With Missing Data. *Journal of the American Statistical Association*, **2011**, 106, 959-971	2.8	38
99	Local EM estimation of the hazard function for interval-censored data. *Biometrics*, **1999**, 55, 238-45	1.8	35
98	Penalized Splines and Reproducing Kernel Methods. *American Statistician*, **2006**, 60, 233-240	5	34
97	Miscellanea. On the optimal amount of smoothing in penalised spline regression. *Biometrika*, **1999**, 86, 936-940	2	34
96	Finite sample performance of deconvolving density estimators. *Statistics and Probability Letters*, **1998**, 37, 131-139	0.6	31
95	Generalized additive models for cancer mapping with incomplete covariates. *Biostatistics*, **2004**, 5, 177-93	3.7	31
94	Negative binomial additive models. *Biometrics*, **2000**, 56, 139-44	1.8	31
93	On nonparametric discrimination using density differences. *Biometrika*, **1988**, 75, 541-547	2	31
92	Searching for the best bet in life-strategy: A quantitative approach to individual performance and population dynamics in reef-building corals. *Ecological Complexity*, **2015**, 23, 73-84	2.6	29
91	Asymptotics and optimal bandwidth selection for highest density region estimation. *Annals of Statistics*, **2010**, 38,	3.2	28
90	Respiratory health and air pollution: additive mixed model analyses. *Biostatistics*, **2001**, 2, 337-49	3.7	27
89	Some theory for penalized spline generalized additive models. *Journal of Statistical Planning and Inference*, **2002**, 103, 455-470	0.8	26
88	Error analysis for general multtvariate kernel estimators. *Journal of Nonparametric Statistics*, **1992**, 2, 1-15	0.7	26
87	Automation in high-content flow cytometry screening. *Cytometry Part A: the Journal of the International Society for Analytical Cytology*, **2009**, 75, 789-97	4.6	25
86	The curvHDR method for gating flow cytometry samples. *BMC Bioinformatics*, **2010**, 11, 44	3.6	25
85	Vector Differential Calculus in Statistics. *American Statistician*, **2002**, 56, 55-62	5	25
84	Functional regression via variational Bayes. *Electronic Journal of Statistics*, **2011**, 5, 572-602	1.2	24
83	The association of expired nitric oxide with occupational particulate metal exposure. *Environmental Research*, **2003**, 93, 158-66	7.9	24

82	Penalized wavelets: Embedding wavelets into semiparametric regression. *Electronic Journal of Statistics*, **2011**, 5,	1.2	23
81	Real-Time Semiparametric Regression. *Journal of Computational and Graphical Statistics*, **2014**, 23, 589-615	1.4	22
80	Mixed model-based additive models for sample extremes. *Statistics and Probability Letters*, **2008**, 78, 2850-2858	0.6	22
79	Kriging with nonparametric variance function estimation. *Biometrics*, **1999**, 55, 704-10	1.8	22
78	Incorporation of historical controls using semiparametric mixed models. *Journal of the Royal Statistical Society Series C: Applied Statistics*, **2001**, 50, 31-42	1.5	21
77	Non-Standard Semiparametric Regression viaBRugs. *Journal of Statistical Software*, **2010**, 37,	7.3	20
76	Semiparametric Regression with R. *Use R!*, **2018**,	0.3	20
75	Quasi-Monte Carlo for Highly Structured Generalised Response Models. *Methodology and Computing in Applied Probability*, **2008**, 10, 239-275	0.6	19
74	Mean field variational Bayes for continuous sparse signal shrinkage: Pitfalls and remedies. *Electronic Journal of Statistics*, **2014**, 8,	1.2	18
73	Robustness for general design mixed models using the t-distribution. *Statistical Modelling*, **2009**, 9, 235-255	2.5	18
72	Fast Approximate Inference for Arbitrarily Large Semiparametric Regression Models via Message Passing. *Journal of the American Statistical Association*, **2017**, 112, 137-168	2.8	17
71	Facts about the gaussian probability density function. *Applicable Analysis*, **1995**, 59, 289-306	0.8	17
70	NONPARAMETRIC AUTOCOVARIANCE FUNCTION ESTIMATION. *The Australian Journal of Statistics*, **1997**, 39, 313-324		16
69	CORRECTING FOR KURTOSIS IN DENSITY ESTIMATION. *The Australian Journal of Statistics*, **1992**, 34, 19-29		16
68	Asymptotic normality and valid inference for Gaussian variational approximation. *Annals of Statistics*, **2011**, 39,	3.2	15
67	A Central Limit Theorem for Local Polynomial Backfitting Estimators. *Journal of Multivariate Analysis*, **1999**, 70, 57-65	1.4	15
66	Highest density difference region estimation with application to flow cytometric data. *Biometrical Journal*, **2009**, 51, 504-21	1.5	14
65	Generalised linear mixed model analysis via sequential Monte Carlo sampling. *Electronic Journal of Statistics*, **2008**, 2,	1.2	14

64	Fisher information for generalised linear mixed models. *Journal of Multivariate Analysis*, **2007**, 98, 1412-1416	1.1	14
63	Feature significance in generalized additive models. *Statistics and Computing*, **2007**, 17, 179-192	1.8	14
62	Semiparametric Estimation in Logistic Measurement Error Models. *Journal of the Royal Statistical Society Series B: Methodological*, **1991**, 53, 573-585		14
61	SEMIPARAMETRIC REGRESSION AND GRAPHICAL MODELS. *Australian and New Zealand Journal of Statistics*, **2009**, 51, 9-41	0.7	13
60	The upper airway response to pollen is enhanced by exposure to combustion particulates: a pilot human experimental challenge study. *Environmental Health Perspectives*, **2003**, 111, 472-7	8.4	13
59	ADDITIVE MODELS WITH PREDICTORS SUBJECT TO MEASUREMENT ERROR. *Australian and New Zealand Journal of Statistics*, **2005**, 47, 193-202	0.7	13
58	Modeling the health effects of time-varying complex environmental mixtures: Mean field variational Bayes for lagged kernel machine regression. *Environmetrics*, **2018**, 29, e2504	1.3	12
57	Variational Inference for Count Response Semiparametric Regression. *Bayesian Analysis*, **2015**, 10,	2.3	12
56	Feature Significance in Geostatistics. *Journal of Computational and Graphical Statistics*, **2004**, 13, 954-973	1.4	12
55	On the minimization of absolute distance in kernel density estimation. *Statistics and Probability Letters*, **1988**, 6, 311-314	0.6	12
54	Streamlined mean field variational Bayes for longitudinal and multilevel data analysis. *Biometrical Journal*, **2016**, 58, 868-95	1.5	11
53	Mean field variational Bayesian inference for nonparametric regression with measurement error. *Computational Statistics and Data Analysis*, **2013**, 68, 375-387	1.6	11
52	Association of expired nitric oxide with occupational particulate exposure. *Environmental Health Perspectives*, **2003**, 111, 676-80	8.4	11
51	Finite sample performance of density estimators under moving average dependence. *Statistics and Probability Letters*, **1992**, 13, 109-115	0.6	11
50	How easy is a given density to estimate?. *Computational Statistics and Data Analysis*, **1993**, 16, 311-323	1.6	11
49	Bandwidth Choice for Density Derivatives. *Journal of the Royal Statistical Society Series B: Methodological*, **1990**, 52, 223-232		11
48	Using Infer.NET for Statistical Analyses. *American Statistician*, **2011**, 65, 115-126	5	10
47	Accuracy of binned kernel functional approximations. *Computational Statistics and Data Analysis*, **1996**, 22, 1-16	1.6	9

46	On expectation propagation for generalised, linear and mixed models. *Australian and New Zealand Journal of Statistics*, **2018**, 60, 75-102	0.7	8
45	Variational methods for fitting complex Bayesian mixed effects models to health data. *Statistics in Medicine*, **2016**, 35, 165-88	2.3	8
44	Accurate logistic variational message passing: algebraic and numerical details. *Stat*, **2017**, 6, 102-112	0.7	7
43	GENERALIZED EXTREME VALUE ADDITIVE MODEL ANALYSIS VIA MEAN FIELD VARIATIONAL BAYES. *Australian and New Zealand Journal of Statistics*, **2011**, 53, 305-330	0.7	7
42	Variational inference for marginal longitudinal semiparametric regression. *Stat*, **2013**, 2, 61-71	0.7	6
41	Exact risk approaches to smoothing parameter selection. *Journal of Nonparametric Statistics*, **1997**, 8, 337-354	0.7	6
40	A Bandwidth Selector for Bivariate Kernel Regression. *Journal of the Royal Statistical Society Series B: Methodological*, **1995**, 57, 171-180		6
39	Fast Computation of Auxiliary Quantities in Local Polynomial Regression. *Journal of Computational and Graphical Statistics*, **1996**, 5, 337-350	1.4	6
38	Investigating the detection limits of scent-detection dogs to residual blood odour on clothing. *Forensic Chemistry*, **2018**, 9, 62-75	2.8	6
37	Marginal longitudinal semiparametric regression via penalized splines. *Statistics and Probability Letters*, **2010**, 80, 1242-1252	0.6	5
36	Streamlined variance calculations for semiparametric mixed models. *Statistics in Medicine*, **2008**, 27, 435-48		5
35	Additive models for geo-referenced failure time data. *Statistics in Medicine*, **2006**, 25, 2469-82	2.3	5
34	Classifying antibodies using flow cytometry data: class prediction and class discovery. *Biometrical Journal*, **2005**, 47, 740-54	1.5	5
33	Variational Inference for Heteroscedastic Semiparametric Regression. *Australian and New Zealand Journal of Statistics*, **2015**, 57, 119-138	0.7	4
32	Wavelet-based gradient boosting. *Statistics and Computing*, **2016**, 26, 93-105	1.8	4
31	Variational Message Passing for Elaborate Response Regression Models. *Bayesian Analysis*, **2019**, 14,	2.3	4
30	Explicit connections between longitudinal data analysis and kernel machines. *Electronic Journal of Statistics*, **2009**, 3,	1.2	4
29	Large cell lymphoma associated with prosthetic joint debris. *Stat*, **2012**, 164, 31-2	0.7	4

28	Penalised spline support vector classifiers: computational issues. *Computational Statistics*, **2008**, 23, 623-641		4
27	Fast Computation of Auxiliary Quantities in Local Polynomial Regression. *Journal of Computational and Graphical Statistics*, **1996**, 5, 337	1.4	4
26	On the effect of density shape on the performance of its kernel estimate. *Statistics*, **1993**, 24, 215-233	0.5	4
25	Mixed Model-Based Hazard Estimation		4
24	A Conversation with Peter Hall. *Statistical Science*, **2016**, 31,	2.4	4
23	Parsimonious Classification Via Generalized Linear Mixed Models. *Journal of Classification*, **2010**, 27, 89-110	1.2	3
22	Association of expired nitric oxide with urinary metal concentrations in boilermakers exposed to residual oil fly ash. *American Journal of Industrial Medicine*, **2003**, 44, 458-66	2.7	3
21	The HLDA8 blind panel: findings and conclusions. *Journal of Immunological Methods*, **2005**, 305, 75-83	2.5	3
20	Transformations in Density Estimation: Rejoinder. *Journal of the American Statistical Association*, **1991**, 86, 360	2.8	3
19	The explicit form of expectation propagation for a simple statistical model. *Electronic Journal of Statistics*, **2016**, 10,	1.2	3
18	Generalised extreme value geoadditive model analysis via variational Bayes. *Procedia Environmental Sciences*, **2011**, 3, 8-13		2
17	Detecting antibodies with similar reactivity patterns in the HLDA8 blind panel of flow cytometry data. *Journal of Immunological Methods*, **2005**, 305, 67-74	2.5	2
16	Asymptotic effectiveness of some higher order kernels. *Journal of Statistical Planning and Inference*, **1992**, 31, 15-21	0.8	2
15	Semiparametric Regression Analysis via Infer.NET. *Journal of Statistical Software*, **2018**, 87,	7.3	2
14	Variational message passing for skew t regression. *Stat*, **2018**, 7, e196	0.7	2
13	STREAMLINED SOLUTIONS TO MULTILEVEL SPARSE MATRIX PROBLEMS. *ANZIAM Journal*, **2020**, 62, 18-41	0.5	1
12	Factor graph fragmentization of expectation propagation. *Journal of the Korean Statistical Society*, **2020**, 49, 722-756	0.5	1
11	COMPARISON OF FEATURE SIGNIFICANCE QUANTILE APPROXIMATIONS. *Australian and New Zealand Journal of Statistics*, **2004**, 46, 569-581	0.7	1

10	The Inverse G-Wishart distribution and variational message passing. *Australian and New Zealand Journal of Statistics*, **2021**, 63, 517	0.7	1
9	Density estimation via Bayesian inference engines. *AStA Advances in Statistical Analysis*,1	1	1
8	Streamlined variational inference for higher level group-specific curve models.. *Statistical Modelling* , **2021**, 21, 479-519	0.7	1
7	Fast and Accurate Binary Response Mixed Model Analysis via Expectation Propagation. *Journal of the American Statistical Association*, **2020**, 115, 1902-1916	2.8	1
6	Generalised additive mixed models analysis via gammSlice. *Australian and New Zealand Journal of Statistics*, **2018**, 60, 279-300	0.7	0
5	Bringing coals to Newcastle. *Significance*, **2016**, 13, 32-37	0.5	
4	Penalized Splines. *Use R!*, **2018**, 15-70	0.3	
3	Semiparametric Regression Analysis of Grouped Data. *Use R!*, **2018**, 129-172	0.3	
2	Bivariate Function Extensions. *Use R!*, **2018**, 173-220	0.3	
1	Selection of Additional Topics. *Use R!*, **2018**, 221-314	0.3	