Robert Aykroyd

List of Publications by Year
in descending order

58 papers	1,164 citations	361413 20 h-index	395702 33 g-index
58 all docs	58 docs citations	58 times ranked	799 citing authors

#	Article	IF	Citations
1	Technical note: Regression analysis in adult age estimation. American Journal of Physical Anthropology, 1997, 104, 259-265.	2.1	125
2	Nasty, Brutish, but Not Necessarily Short: A Reconsideration of the Statistical Methods Used to Calculate Age at Death from Adult Human Skeletal and Dental Age Indicators. American Antiquity, 1999, 64, 55-70.	1.1	124
3	A Bayesian Approach to Adult Human Age Estimation from Dental Observations by Johanson's Age Changes. Journal of Forensic Sciences, 1996, 41, 189-194.	1.6	121
4	Birnbaum-Saunders spatial regression models: Diagnostics and application to chemical data. Chemometrics and Intelligent Laboratory Systems, 2018, 177, 114-128.	3.5	51
5	Nonparametric calibration for age estimation. Journal of the Royal Statistical Society Series C: Applied Statistics, 2002, 51, 183-196.	1.0	50
6	Recent developments of control charts, identification of big data sources and future trends of current research. Technological Forecasting and Social Change, 2019, 144, 221-232.	11.6	50
7	Birnbaumâ€“Saunders spatial modelling and diagnostics applied to agricultural engineering data. Stochastic Environmental Research and Risk Assessment, 2017, 31, 105-124.	4.0	48
8	Bayesian Probabilistic Numerical Methods in Time-Dependent State Estimation for Industrial Hydrocyclone Equipment. Journal of the American Statistical Association, 2019, 114, 1518-1531.	3.1	44
9	Birnbaumâ€“Saunders autoregressive conditional duration models applied to high-frequency financial data. Statistical Papers, 2019, 60, 1605-1629.	1.2	44
10	Hybrid PET-MR list-mode kernelized expectation maximization reconstruction. Inverse Problems, 2019, 35, 044001.	2.0	36
11	Bayesian estimation for homogeneous and inhomogeneous Gaussian random fields. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1998, 20, 533-539.	13.9	35
12	A kernel-based Bayesian approach to climatic reconstruction. Holocene, 1999, 9, 495-500.	1.7	33
13	Inhomogeneous Prior Models for Image Reconstruction. Journal of the American Statistical Association, 1999, 94, 934-946.	3.1	32
14	Markov chain Monte Carlo techniques and spatialâ€“temporal modelling for medical EIT. Physiological Measurement, 2004, 25, 181-194.	2.1	27
15	A new BISARMA time series model for forecasting mortality using weather and particulate matter data. Journal of Forecasting, 2021, 40, 346-364.	2.8	27
16	Temporal variability in the strength of proxy-climate correlations. Geophysical Research Letters, 2001, 28, 1559-1562.	4.0	23
17	An errors-in-variables model based on the Birnbaumâ€“Saunders distribution and its diagnostics with an application to earthquake data. Stochastic Environmental Research and Risk Assessment, 2020, 34, 369-380.	4.0	23
18	Effect of PET-MR Inconsistency in the Kernel Image Reconstruction Method. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 400-409.	3.7	22

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19	L-moments of the Birnbaumâ€“Saunders distribution and its extreme value version: estimation, goodness of fit and application to earthquake data. Journal of Applied Statistics, 2018, 45, 187-209.	1.3	21
20	Multivariate Birnbaum-Saunders Distributions: Modelling and Applications. Risks, 2018, 6, 21.	2.4	20
21	Advanced Statistical Analysis as a Novel Tool to Pneumatic Conveying Monitoring and Control Strategy Development. Particle and Particle Systems Characterization, 2006, 23, 289-296.	2.3	19
22	A boundary-element approach for the complete-electrode model of EIT illustrated using simulated and real data. Inverse Problems in Science and Engineering, 2007, 15, 441-461.	1.2	19
23	Sequential particle filter estimation of a time-dependent heat transfer coefficient in a multidimensional nonlinear inverse heat conduction problem. Applied Mathematical Modelling, 2021, 89, 654-668.	4.2	16
24	Spatial-temporal modeling for electrical impedance imaging of a mixing process. Review of Scientific Instruments, 2005, 76, 073703.	1.3	12
25	Iterative reconstruction incorporating background correction improves quantification of [18F]-NaF PET/CT images of patients with abdominal aortic aneurysm. Journal of Nuclear Cardiology, 2021, 28, 1875-1886.	2.1	12
26	Unexpected Spatial Patterns in Exponential Family Auto Models. Graphical Models, 1996, 58, 452-463.	1.3	11
27	Hybrid PET/MR Kernelised Expectation Maximisation Reconstruction for Improved Image-Derived Estimation of the Input Function from the Aorta of Rabbits. Contrast Media and Molecular Imaging, 2019, 2019, 1-12.	0.8	11
28	Estimates of uncertainty in the prediction of past climatic variables. Applied Geochemistry, 2008, 23, 2961-2965.	3.0	10
29	Conditional Bayes reconstruction for ERT data using resistance monotonicity information. Measurement Science and Technology, 2006, 17, 2405-2413.	2.6	7
30	Discussion of â€œBirnbaumâ€“Saunders distribution: A review of models, analysis, and applicationsâ€• and a novel multivariate data analytics for an economics example in the textile industry. Applied Stochastic Models in Business and Industry, 2019, 35, 112-117.	1.5	7
31	Inhomogeneous Prior Models for Image Reconstruction. Journal of the American Statistical Association, 1999, 94, 934.	3.1	7
32	Bayesian Methods Applied to Survey Data From Archeological Magnetometry. Journal of the American Statistical Association, 2001, 96, 64-76.	3.1	6
33	Comparison of Correction Techniques for the Spillin Effect in Emission Tomography. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 422-432.	3.7	6
34	Use of the EM algorithm for maximum likelihood estimation in electron microscope autoradiography. Biometrika, 1994, 81, 41-52.	2.4	5
35	A wavelet approach to shape analysis for spinal curves. Journal of Applied Statistics, 2003, 30, 605-623.	1.3	5
36	Advanced statistical computing for capacitance tomography as a monitoring and control tool. , 2005, , .		5

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37	Statistical image reconstruction. , 2015, , 401-427.		5
38	Classification of multiple time signals using localized frequency characteristics applied to industrial process monitoring. Computational Statistics and Data Analysis, 2016, 94, 351-362.	1.2	5
39	A flexible statistical and efficient computational approach to object location applied to electrical tomography. Statistics and Computing, 2006, 16, 363-375.	1.5	4
40	Comparative evaluation of image reconstruction methods for the siemens PET-MR scanner using the stir library. , 2016, , .		4
41	Statistical properties of Poisson-Voronoi tessellation cells in bounded regions. Journal of Statistical Computation and Simulation, 2021, 91, 915-933.	1.2	4
42	Improved identification of abdominal aortic aneurysm using the Kernelized Expectation Maximization algorithm. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200201.	3.4	4
43	Neighbourhood structure estimation of images using hierarchical testing. Electronics Letters, 1999, 35, 2188.	1.0	3
44	Horizon Detection in Seismic Data: An Application of Linked Feature Detection from Multiple Time Series. Advances in Statistics, 2014, 2014, 1-10.	0.5	3
45	Sequential estimation of the time-dependent heat transfer coefficient using the method of fundamental solutions and particle filters. Inverse Problems in Science and Engineering, 0, , 1-20.	1.2	3
46	An improved analysis of experimental data from ¹²⁵ I hotâ€line autoradiographs: allowing for the effects of background grains. Journal of Microscopy, 1991, 162, 271-278.	1.8	2
47	A new statistical approach to reconstruction from area magnetometry data. Archaeological Prospection, 1995, 2, 197-205.	2.2	2
48	Partition Models in the Analysis of Autoradiographic Images. Journal of the Royal Statistical Society Series C: Applied Statistics, 1995, 44, 441.	1.0	2
49	Approximations for Gibbs Distribution Normalising Constants. Statistics and Computing, 2002, 12, 391-397.	1.5	2
50	Hybrid PET-MR list-mode kernelized expectation maximization reconstruction for quantitative PET images of the carotid arteries. , 2017, , .		2
51	Modeling Mortality Based on Pollution and Temperature Using a New Birnbaumâ€“Saunders Autoregressive Moving Average Structure with Regressors and Related-Sensors Data. Sensors, 2021, 21, 6518.	3.8	2
52	Parametric Modelling Algorithms in Electrical Capacitance Tomography for Multiphase Flow Monitoring. , 2006, , .		1
53	Generalized Student's tâ€distribution mixtures for autoradiographic image spread modelling. Biometrical Journal, 2016, 58, 1021-1038.	1.0	1
54	A Bayesian approach to wavelet-based modelling of discontinuous functions applied to inverse problems. Communications in Statistics Part B: Simulation and Computation, 2020, 49, 207-225.	1.2	1

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55	Modelling and predicting flow regimes using wavelet representations. , 2006, , .		0
56	Exploratory Methods for the Study of Incomplete and Intersecting Shape Boundaries from Landmark Data. Journal of Probability and Statistics, 2016, 2016, 1-9.	0.7	0
57	Spatially adaptive Bayesian image reconstruction through locally-modulated Markov random field models. Brazilian Journal of Probability and Statistics, 2019, 33, .	0.4	0
58	Bayesian modeling of temperature-related mortality with latent functional relationships. Communications in Statistics - Theory and Methods, 2019, 48, 3-14.	1.0	0