

# Walter W Piegorsch

## List of Publications by Year in descending order

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141  
papers

3,486  
citations

218677

26  
h-index

175258

52  
g-index

162  
all docs

162  
docs citations

162  
times ranked

3381  
citing authors

#	ARTICLE	IF	CITATIONS
1	From terrorism to flooding: How vulnerable is your city?. Significance, 2021, 18, 20-25.	0.4	1
2	Benchmark dose risk analysis with mixed-effects factor quantal data in environmental risk assessment. Environmetrics, 2021, 32, e2677.	1.4	0
3	Single-subject studies-derived analyses unveil altered biomechanisms between very small cohorts: implications for rare diseases. Bioinformatics, 2021, 37, i67-i75.	4.1	2
4	Spatial cluster detection of regression coefficients in a mixed-effects model. Environmetrics, 2020, 31, e2578.	1.4	12
5	Application of Bayesian Additive Regression Trees for Estimating Daily Concentrations of PM2.5 Components. Atmosphere, 2020, 11, 1233.	2.3	10
6	Quantal Risk Assessment Database: A Database for Exploring Patterns in Quantal Dose-Response Data in Risk Assessment and its Application to Develop Priors for Bayesian Dose-Response Analysis. Risk Analysis, 2019, 39, 616-629.	2.7	8
7	Spatial regression with an informatively missing covariate: Application to mapping fine particulate matter. Environmetrics, 2018, 29, e2499.	1.4	6
8	Testing for differentially expressed genetic pathways with single-subject N-of-1 data in the presence of inter-gene correlation. Statistical Methods in Medical Research, 2018, 27, 3797-3813.	1.5	13
9	Autologistic Models for Benchmark Risk or Vulnerability Assessment of Urban Terrorism Outcomes. Journal of the Royal Statistical Society Series A: Statistics in Society, 2018, 181, 803-823.	1.1	7
10	Estimation of the multivariate conditional tail expectation for extreme risk levels: Illustration on environmental data sets. Environmetrics, 2018, 29, e2510.	1.4	6
11	Risk management with expectiles. European Journal of Finance, 2017, 23, 487-506.	3.1	138
12	Are $p$ -values under attack? Contribution to the discussion of "A critical evaluation of the current $p$ -value controversy". Biometrical Journal, 2017, 59, 889-891.	1.0	3
13	Full-coverage high-resolution daily PM2.5 estimation using MAIAC AOD in the Yangtze River Delta of China. Remote Sensing of Environment, 2017, 199, 437-446.	11.0	239
14	The Potential Impact of Satellite-Retrieved Cloud Parameters on Ground-Level PM2.5 Mass and Composition. International Journal of Environmental Research and Public Health, 2017, 14, 1244.	2.6	15
15	Analysis of aggregated cell-cell statistical distances within pathways unveils therapeutic-resistance mechanisms in circulating tumor cells. Bioinformatics, 2016, 32, i80-i89.	4.1	15
16	Bayesian benchmark dose analysis. Environmetrics, 2015, 26, 373-382.	1.4	8
17	Nonparametric Benchmark Dose Estimation with Continuous Dose-Response Data. Scandinavian Journal of Statistics, 2015, 42, 713-731.	1.4	4
18	Bayesian Model-Averaged Benchmark Dose Analysis via Reparameterized Quantal-Response Models. Biometrics, 2015, 71, 1168-1175.	1.4	5

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19	Dynamic changes of RNA-sequencing expression for precision medicine: N-of-1-pathways Mahalanobis distance within pathways of single subjects predicts breast cancer survival. <i>Bioinformatics</i> , 2015, 31, i293-i302.	4.1	30
20	Bayesian model averaging for benchmark dose estimation. <i>Environmental and Ecological Statistics</i> , 2015, 22, 5-16.	3.5	16
21	Model Uncertainty in Environmental Dose-Response Risk Analysis. <i>Statistics and Public Policy (Philadelphia, Pa )</i> , 2014, 1, 78-85.	1.6	9
22	Estimation of multivariate conditional-tail-expectation using Kendall's process. <i>Journal of Nonparametric Statistics</i> , 2014, 26, 241-267.	0.9	7
23	Calibrating MODIS aerosol optical depth for predicting daily PM2.5 concentrations via statistical downscaling. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2014, 24, 398-404.	3.9	59
24	A pool-adjacent-violators-algorithm approach to detect infinite parameter estimates in one-regressor dose-response models with asymptotes. <i>Journal of Statistical Computation and Simulation</i> , 2014, 84, 2545-2556.	1.2	0
25	Twenty-five years of <i>Environmetrics</i> . <i>Environmetrics</i> , 2014, 25, 1-1.	1.4	2
26	On multivariate extensions of Conditional-Tail-Expectation. <i>Insurance: Mathematics and Economics</i> , 2014, 55, 272-282.	1.2	24
27	Benchmark Dose Analysis via Nonparametric Regression Modeling. <i>Risk Analysis</i> , 2014, 34, 135-151.	2.7	21
28	<i>Environmetrics</i> Silver Anniversary Special Issue. <i>Environmetrics</i> , 2014, 25, 559-559.	1.4	1
29	Information-theoretic model-averaged benchmark dose analysis in environmental risk assessment. <i>Environmetrics</i> , 2013, 24, 143-157.	1.4	32
30	Estimating a bivariate tail: A copula based approach. <i>Journal of Multivariate Analysis</i> , 2013, 119, 81-100.	1.0	6
31	Plug-in estimation of level sets in a non-compact setting with applications in multivariate risk theory. <i>ESAIM - Probability and Statistics</i> , 2013, 17, 236-256.	0.5	16
32	In Memory of George Casella. <i>Environmetrics</i> , 2013, 24, 279-280.	1.4	1
33	Benchmark dose profiles for joint-action continuous data in quantitative risk assessment. <i>Biometrical Journal</i> , 2013, 55, 741-754.	1.0	4
34	On certain transformations of Archimedean copulas: Application to the non-parametric estimation of their generators. <i>Dependence Modeling</i> , 2013, 1, 1-36.	0.5	17
35	Nonparametric estimation of benchmark doses in environmental risk assessment. <i>Environmetrics</i> , 2012, 23, 717-728.	1.4	18
36	The impact of model uncertainty on benchmark dose estimation. <i>Environmetrics</i> , 2012, 23, 706-716.	1.4	26

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37	Benchmark Dose Profiles for Joint Action Quantal Data in Quantitative Risk Assessment. <i>Biometrics</i> , 2012, 68, 1313-1322.	1.4	11
38	Translational benchmark risk analysis. <i>Journal of Risk Research</i> , 2010, 13, 653-667.	2.6	5
39	Maximum likelihood estimation with binary-data regression models: small-sample and large-sample features. <i>Advances and Applications in Statistics</i> , 2010, 14, 101-116.	0.1	5
40	Comparison of hyperbolic and constant width simultaneous confidence bands in multiple linear regression under MVCS criterion. <i>Journal of Multivariate Analysis</i> , 2009, 100, 1432-1439.	1.0	6
41	Bootstrap methods for simultaneous benchmark analysis with quantal response data. <i>Environmental and Ecological Statistics</i> , 2009, 16, 63-73.	3.5	8
42	Introduction: modern benchmark analysis for environmental risk assessment. <i>Environmental and Ecological Statistics</i> , 2009, 16, 1-2.	3.5	1
43	Confidence limits on one-stage model parameters in benchmark risk assessment. <i>Environmental and Ecological Statistics</i> , 2009, 16, 53-62.	3.5	13
44	Combining information. <i>Wiley Interdisciplinary Reviews: Computational Statistics</i> , 2009, 1, 354-360.	3.9	3
45	Response. <i>Risk Analysis</i> , 2009, 29, 1201-1202.	2.7	1
46	Simultaneous confidence bands for Abbott-adjusted quantal response models in benchmark analysis. <i>Statistical Methodology</i> , 2008, 5, 209-219.	0.5	14
47	Construction of Exact Simultaneous Confidence Bands for a Simple Linear Regression Model. <i>International Statistical Review</i> , 2008, 76, 39-57.	1.9	33
48	A Sensitivity Analysis of the Social Vulnerability Index. <i>Risk Analysis</i> , 2008, 28, 1099-1114.	2.7	292
49	Communicating the risks, and the benefits, of nanotechnology. <i>International Journal of Risk Assessment and Management</i> , 2008, 10, 57.	0.1	2
50	Vulnerability of U.S. Cities to Environmental Hazards. <i>Journal of Homeland Security and Emergency Management</i> , 2007, 4, .	0.5	110
51	Benchmark Analysis for Quantifying Urban Vulnerability to Terrorist Incidents. <i>Risk Analysis</i> , 2007, 27, 1411-1425.	2.7	42
52	On use of the multistage dose-response model for assessing laboratory animal carcinogenicity. <i>Regulatory Toxicology and Pharmacology</i> , 2007, 48, 135-147.	2.7	10
53	Excess risk estimation under multistage model misspecification. <i>Journal of Statistical Computation and Simulation</i> , 2006, 76, 423-430.	1.2	5
54	Ergonomic decision-making: A conceptual framework for experienced practitioners from backgrounds in industrial engineering and physical therapy. <i>Applied Ergonomics</i> , 2006, 37, 587-598.	3.1	24

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55	Multiplicity-adjusted Inferences in Risk Assessment: Benchmark Analysis with Continuous Response Data. <i>Environmental and Ecological Statistics</i> , 2006, 13, 125-141.	3.5	9
56	Benchmark Analysis: Shopping with Proper Confidence. <i>Risk Analysis</i> , 2005, 25, 913-920.	2.7	15
57	Low dose risk estimation via simultaneous statistical inferences. <i>Journal of the Royal Statistical Society Series C: Applied Statistics</i> , 2005, 54, 245-258.	1.0	30
58	Multiplicity-Adjusted Inferences in Risk Assessment: Benchmark Analysis with Quantal Response Data. <i>Biometrics</i> , 2005, 61, 277-286.	1.4	24
59	SIMULTANEOUS CONFIDENCE BOUNDS FOR LOW-DOSE RISK ASSESSMENT WITH NONQUANTAL DATA. <i>Journal of Biopharmaceutical Statistics</i> , 2004, 15, 17-31.	0.8	12
60	Sample sizes for improved binomial confidence intervals. <i>Computational Statistics and Data Analysis</i> , 2004, 46, 309-316.	1.2	31
61	Exact one-sided simultaneous confidence bands via Uusipaikka's method. <i>Annals of the Institute of Statistical Mathematics</i> , 2003, 55, 243-250.	0.8	16
62	Combining environmental information via hierarchical modeling: an example using mutagenic potencies. <i>Environmetrics</i> , 2003, 14, 159-168.	1.4	7
63	Empirical Bayes analysis for a hierarchical Poisson generalized linear model. <i>Journal of Statistical Planning and Inference</i> , 2003, 111, 235-248.	0.6	7
64	Confidence Bands for Low-Dose Risk Estimation with Quantal Response Data. <i>Biometrics</i> , 2003, 59, 1056-1062.	1.4	39
65	Detection of oxidative DNA damage in isolated marine bivalve hemocytes using the comet assay and formamidopyrimidine glycosylase (Fpg). <i>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</i> , 2003, 542, 15-22.	1.7	44
66	Title is missing!. <i>Annals of the Institute of Statistical Mathematics</i> , 2003, 55, 243-250.	0.8	7
67	What shall we teach in environmental statistics?. <i>Environmental and Ecological Statistics</i> , 2002, 9, 125-150.	3.5	0
68	Large-sample pairwise comparisons among multinomial proportions with an application to analysis of mutant spectra. <i>Journal of Agricultural, Biological, and Environmental Statistics</i> , 2001, 6, 305-325.	1.4	13
69	Bootstrap goodness-of-fit test for the beta-binomial model. <i>Journal of Applied Statistics</i> , 2001, 28, 561-571.	1.3	13
70	Parametric empirical Bayes estimation for a class of extended log-linear regression models. , 2000, 11, 271-285.		1
71	Asymmetric confidence bands for simple linear regression over bounded intervals. <i>Computational Statistics and Data Analysis</i> , 2000, 34, 193-217.	1.2	7
72	Estimation and Testing with Overdispersed Proportions Using the Beta-Logistic Regression Model of Heckman and Willis. <i>Biometrics</i> , 2000, 56, 125-133.	1.4	7

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73	From Quantal Counts to Mechanisms and Systems: The Past, Present, and Future of Biometrics in Environmental Toxicology. <i>Biometrics</i> , 2000, 56, 327-336.	1.4	10
74	On a Likelihood-Based Goodness-of-Fit Test of the Beta-Binomial Model. <i>Biometrics</i> , 2000, 56, 947-949.	1.4	12
75	14 Quantitative potency estimation to measure risk with bio-environmental hazards. <i>Handbook of Statistics</i> , 2000, 18, 441-463.	0.6	0
76	Statistical modeling and analyses of a base-specific Salmonella mutagenicity assay. <i>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</i> , 2000, 467, 11-19.	1.7	20
77	Statistical aspects for combining information and meta-analysis in environmental toxicology. <i>Journal of Environmental Science and Health, Part C: Environmental Carcinogenesis and Ecotoxicology Reviews</i> , 1998, 16, 83-99.	2.9	4
78	Statistical advances in environmental science. <i>Statistical Science</i> , 1998, 13, .	2.8	23
79	Optimal statistical design for toxicokinetic studies. <i>Statistical Methods in Medical Research</i> , 1997, 6, 359-376.	1.5	11
80	Sources of variability in data from a positive selection lacZ transgenic mouse mutation assay: An interlaboratory study. <i>Mutation Research - Genetic Toxicology and Environmental Mutagenesis</i> , 1997, 388, 249-289.	1.7	28
81	The Ames test: The two-fold rule revisited. <i>Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure</i> , 1996, 369, 23-31.	1.2	60
82	Life-stage-specific toxicity of sediment-associated chlorpyrifos to a marine, infaunal copepod. <i>Environmental Toxicology and Chemistry</i> , 1996, 15, 1182-1188.	4.3	59
83	COMBINING ENVIRONMENTAL INFORMATION. I: ENVIRONMENTAL MONITORING, MEASUREMENT AND ASSESSMENT. <i>Environmetrics</i> , 1996, 7, 299-308.	1.4	19
84	COMBINING ENVIRONMENTAL INFORMATION. II: ENVIRONMENTAL EPIDEMIOLOGY AND TOXICOLOGY. <i>Environmetrics</i> , 1996, 7, 309-324.	1.4	22
85	Empirical Bayes Estimation for Logistic Regression and Extended Parametric Regression Models. <i>Journal of Agricultural, Biological, and Environmental Statistics</i> , 1996, 1, 231.	1.4	10
86	Study design and sample sizes for a lacI transgenic mouse mutation assay. <i>Environmental and Molecular Mutagenesis</i> , 1995, 25, 231-245.	2.2	75
87	Some comments on potency measures in mutagenicity research.. <i>Environmental Health Perspectives</i> , 1994, 102, 91-94.	6.0	98
88	Statistical models for genetic susceptibility in toxicological and epidemiological investigations.. <i>Environmental Health Perspectives</i> , 1994, 102, 77-82.	6.0	4
89	Empirical Bayes calculations of concordance between endpoints in environmental toxicity experiments. <i>Environmental and Ecological Statistics</i> , 1994, 1, 153-162.	3.5	4
90	Non-hierarchical logistic models and case-only designs for assessing susceptibility in population-based case-control studies. <i>Statistics in Medicine</i> , 1994, 13, 153-162.	1.6	441

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91	Sources of variability in data from a lacI transgenic mouse mutation assay. Environmental and Molecular Mutagenesis, 1994, 23, 17-31.	2.2	67
92	15 Environmental biometry: Assessing impacts of environmental stimuli via animal and microbial laboratory studies. Handbook of Statistics, 1994, , 535-559.	0.6	3
93	Statistical approaches for analyzing mutational spectra: some recommendations for categorical data.. Genetics, 1994, 136, 403-416.	2.9	54
94	Environmental biometrics summary of papers presented at the international conference on environmental biometrics, Sydney, Australia, 14-15 December 1992. Environmetrics, 1993, 4, 369-379.	1.4	1
95	Biometrical methods for testing dose effects of environmental stimuli in laboratory studies. Environmetrics, 1993, 4, 483-505.	1.4	12
96	Statistical methods for analyzing developmental toxicity data, author's reply. Teratogenesis, Carcinogenesis, and Mutagenesis, 1993, 13, 195-197.	0.8	0
97	Minimum mean-square error quadrature. Journal of Statistical Computation and Simulation, 1993, 46, 217-234.	1.2	3
98	Complementary Log Regression for Generalized Linear Models. American Statistician, 1992, 46, 94-99.	1.6	20
99	Acrylamide: Dermal Exposure Produces Genetic Damage in Male Mouse Germ Cells. Toxicological Sciences, 1992, 18, 189-192.	3.1	0
100	Concordance of Carcinogenic Response between Rodent Species: Potency Dependence and Potential Underestimation. Risk Analysis, 1992, 12, 115-121.	2.7	18
101	Assessing overdispersion and dose-response in the male dominant lethal assay. Mutation Research - Environmental Mutagenesis and Related Subjects Including Methodology, 1992, 272, 35-58.	0.4	30
102	Statistical methods for assessing environmental effects on human genetic disorders. Environmetrics, 1992, 3, 369-384.	1.4	2
103	Developmental response of zygotes exposed to similar mutagens. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1991, 250, 439-446.	1.0	34
104	Statistical methods for analyzing developmental toxicity data. Teratogenesis, Carcinogenesis, and Mutagenesis, 1991, 11, 115-133.	0.8	36
105	Multiple comparisons for analyzing dichotomous response. Biometrics, 1991, 47, 45-52.	1.4	2
106	Maximum Likelihood Estimation for the Negative Binomial Dispersion Parameter. Biometrics, 1990, 46, 863.	1.4	135
107	Fisher's Contributions to Genetics and Heredity, with Special Emphasis on the Gregor Mendel Controversy. Biometrics, 1990, 46, 915.	1.4	11
108	Detection of induced mitotic chromosome loss in Saccharomyces cerevisiae - An interlaboratory assessment of 12 chemicals. Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure, 1990, 241, 225-242.	1.2	15

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109	The detection of mitotic and meiotic chromosome gain in the yeast <i>Saccharomyces cerevisiae</i> : Effects of methyl benzimidazol-2-yl carbamate, methyl methanesulfonate, ethyl methanesulfonate, dimethyl sulfoxide, propionitrile and cyclophosphamide monohydrate. <i>Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure</i> , 1990, 242, 231-258.	1.2	13
110	Fisher's contributions to genetics and heredity, with special emphasis on the Gregor Mendel controversy. <i>Biometrics</i> , 1990, 46, 915-24.	1.4	4
111	Maximum likelihood estimation for the negative binomial dispersion parameter. <i>Biometrics</i> , 1990, 46, 863-7.	1.4	25
112	One-sided significance tests for generalized linear models under dichotomous response. <i>Biometrics</i> , 1990, 46, 309-16.	1.4	2
113	Quantification of Toxic Response and the Development of the Median Effective Dose (Ed 50)â€™a Historical Perspective. <i>Toxicology and Industrial Health</i> , 1989, 5, 55-62.	1.4	15
114	Influence of Viral Infections on Body Weight, Survival, and Tumor Prevalence of B6C3F1 (C57BL/6N $\times$ Tj) ETQq0 0 0 rgBT /Overlock 10 T	3.1	1
115	Quantitative methods for assessing a synergistic or potentiated genotoxic response. <i>Mutation Research - Environmental Mutagenesis and Related Subjects Including Methodology</i> , 1989, 216, 1-8.	0.4	12
116	Optimal design allocations for estimating area under curves for studies employing destructive sampling. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 1989, 17, 493-507.	0.6	11
117	Durand's rules for approximate integration. <i>Historia Mathematica</i> , 1989, 16, 324-333.	0.3	0
118	Influence of viral infections on body weight, survival, and tumor prevalence of B6C3F1 (C57BL/6N $\times$ Tj) ETQq0 0 0 rgBT /Overlock 10 T	1.85	24
119	Quantitative approaches for assessing chromosome loss in <i>Saccharomyces cerevisiae</i> : general methods for analyzing downturns in dose response. <i>Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure</i> , 1989, 224, 11-29.	1.2	14
120	Detection of induced mitotic chromosome loss in <i>Saccharomyces cerevisiae</i> â€™ an interlaboratory study. <i>Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure</i> , 1989, 224, 31-78.	1.2	49
121	Respiratory tract lesions in F344/N rats and B6C3F1 mice after inhalation exposure to 1,2-epoxybutane. <i>Toxicology</i> , 1988, 50, 69-82.	4.2	20
122	Exploring relationships between mutagenic and carcinogenic potencies. <i>Mutation Research - Reviews in Genetic Toxicology</i> , 1988, 196, 161-175.	2.9	29
123	Exploring Simple Independent Action in Multifactor Tables of Proportions. <i>Biometrics</i> , 1988, 44, 595.	1.4	12
124	Confidence bands for logistic regression with restricted predictor variables. <i>Biometrics</i> , 1988, 44, 739-50.	1.4	1
125	Exploring simple independent action in multifactor tables of proportions. <i>Biometrics</i> , 1988, 44, 595-603.	1.4	2
126	Response to A. P. Grieve. <i>Technometrics</i> , 1987, 29, 505-506.	1.9	0



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127	Performance of Likelihood Based Interval Estimates for Two Parameter Exponential Samples Subject to Type I Censoring. <i>Technometrics</i> , 1987, 29, 41-49.	1.9	4
128	Model Robustness for Simultaneous Confidence Bands. <i>Journal of the American Statistical Association</i> , 1987, 82, 879-885.	3.1	2
129	Morphologic Alteration of Mouse Clara Cells Induced by Glycerol: Ultrastructural and Morphometric Studies. <i>Experimental Lung Research</i> , 1987, 12, 281-302.	1.2	20
130	Model Robustness for Simultaneous Confidence Bands. <i>Journal of the American Statistical Association</i> , 1987, 82, 879.	3.1	3
131	Testing for Simple Independent Action between Two Factors for Dichotomous Response Data. <i>Biometrics</i> , 1986, 42, 413.	1.4	10
132	Confidence Bands for Polynomial Regression With Fixed Intercepts. <i>Technometrics</i> , 1986, 28, 241-246.	1.9	2
133	A Note on the Use of Prior Interval Information in Constructing Interval Estimates for a Gamma Mean. <i>Technometrics</i> , 1986, 28, 269-273.	1.9	5
134	The Gregor Mendel Controversy: Early Issues of Goodness-of-Fit and Recent Issues of Genetic Linkage. <i>History of Science</i> , 1986, 24, 173-182.	0.5	7
135	Confidence Bands for Polynomial Regression with Fixed Intercepts. <i>Technometrics</i> , 1986, 28, 241.	1.9	1
136	Admissible and Optimal Confidence Bands in Simple Linear Regression. <i>Annals of Statistics</i> , 1985, 13, 801.	2.6	9
137	Average-Width Optimality for Confidence Bands in Simple Linear Regression. <i>Journal of the American Statistical Association</i> , 1985, 80, 692-697.	3.1	12
138	The Existence of the First Negative Moment. <i>American Statistician</i> , 1985, 39, 60-62.	1.6	24
139	Average-Width Optimality for Confidence Bands in Simple Linear Regression. <i>Journal of the American Statistical Association</i> , 1985, 80, 692.	3.1	3
140	The questions of fit in the gregor mendel controversy. <i>Communications in Statistics - Theory and Methods</i> , 1983, 12, 2289-2304.	1.0	5
141	Adjusting statistical benchmark risk analysis to account for non-spatial autocorrelation, with application to natural hazard risk assessment. <i>Journal of Applied Statistics</i> , 0, , 1-21.	1.3	0