Walter W Piegorsch

List of Publications by Year
in descending order

141	3,486	218677	175258
papers	citations	26 h-index	52 g-index

162	162	162	3381
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nonâ€hierarchical logistic models and caseâ€only designs for assessing susceptibility in populationâ€based caseâ€control studies. Statistics in Medicine, 1994, 13, 153-162.	1.6	441
2	A Sensitivity Analysis of the Social Vulnerability Index. Risk Analysis, 2008, 28, 1099-1114.	2.7	292
3	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
4	Risk management with expectiles. European Journal of Finance, 2017, 23, 487-506.	3.1	138
5	Maximum Likelihood Estimation for the Negative Binomial Dispersion Parameter. Biometrics, 1990, 46, 863.	1.4	135
6	Vulnerability of U.S. Cities to Environmental Hazards. Journal of Homeland Security and Emergency Management, 2007, 4, .	0.5	110
7	Some comments on potency measures in mutagenicity research.. Environmental Health Perspectives, 1994, 102, 91-94.	6.0	98
8	Study design and sample sizes for alacl transgenic mouse mutation assay. Environmental and Molecular Mutagenesis, 1995, 25, 231-245.	2.2	75
9	Sources of variability in data from alacl transgenic mouse mutation assay. Environmental and Molecular Mutagenesis, 1994, 23, 17-31.	2.2	67
10	The Ames test: The two-fold rule revisited. Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure, 1996, 369, 23-31.	1.2	60
11	Lifeâ€stageâ€specific toxicity of sedimentâ€associated chlorpyrifos to a marine, infaunal copepod. Environmental Toxicology and Chemistry, 1996, 15, 1182-1188.	4.3	59
12	Calibrating MODIS aerosol optical depth for predicting daily PM2.5 concentrations via statistical downscaling. Journal of Exposure Science and Environmental Epidemiology, 2014, 24, 398-404.	3.9	59
13	Statistical approaches for analyzing mutational spectra: some recommendations for categorical data.. Genetics, 1994, 136, 403-416.	2.9	54
14	Detection of induced mitotic chromosome loss in Saccharomyces cerevisiae â€" an interlaboratory study. Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure, 1989, 224, 31-78.	1.2	49
15	Detection of oxidative DNA damage in isolated marine bivalve hemocytes using the comet assay and formamidopyrimidine glycosylase (Fpg). Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2003, 542, 15-22.	1.7	44
16	Benchmark Analysis for Quantifying Urban Vulnerability to Terrorist Incidents. Risk Analysis, 2007, 27, 1411-1425.	2.7	42
17	Confidence Bands for Lowâ€Dose Risk Estimation with Quantal Response Data. Biometrics, 2003, 59, 1056-1062.	1.4	39
18	Statistical methods for analyzing developmental toxicity data. Teratogenesis, Carcinogenesis, and Mutagenesis, 1991, 11, 115-133.	0.8	36

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19	Developmental response of zygotes exposed to similar mutagens. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1991, 250, 439-446.	1.0	34
20	Construction of Exact Simultaneous Confidence Bands for a Simple Linear Regression Model. International Statistical Review, 2008, 76, 39-57.	1.9	33
21	Informationâ€theoretic modelâ€averaged benchmark dose analysis in environmental risk assessment. Environmetrics, 2013, 24, 143-157.	1.4	32
22	Sample sizes for improved binomial confidence intervals. Computational Statistics and Data Analysis, 2004, 46, 309-316.	1.2	31
23	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
24	Low dose risk estimation via simultaneous statistical inferences. Journal of the Royal Statistical Society Series C: Applied Statistics, 2005, 54, 245-258.	1.0	30
25	Dynamic changes of RNA-sequencing expression for precision medicine: N-of-1-pathways Mahalanobis distance within pathways of single subjects predicts breast cancer survival. Bioinformatics, 2015, 31, i293-i302.	4.1	30
26	Exploring relationships between mutagenic and carcinogenic potencies. Mutation Research - Reviews in Genetic Toxicology, 1988, 196, 161-175.	2.9	29
27	Sources of variability in data from a positive selection lacZ transgenic mouse mutation assay: An interlaboratory study. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 1997, 388, 249-289.	1.7	28
28	The impact of model uncertainty on benchmark dose estimation. Environmetrics, 2012, 23, 706-716.	1.4	26
29	Maximum likelihood estimation for the negative binomial dispersion parameter. Biometrics, 1990, 46, 863-7.	1.4	25
30	The Existence of the First Negative Moment. American Statistician, 1985, 39, 60-62.	1.6	24
31	Influence of viral infections on body weight, survival, and tumor prevalence of B6C3F1 (C57BL/6N ï¿½) Tj ETQq1 1 0.784314 rgBT /Ov	1.8	24
32	Multiplicity-Adjusted Inferences in Risk Assessment: Benchmark Analysis with Quantal Response Data. Biometrics, 2005, 61, 277-286.	1.4	24
33	Ergonomic decision-making: A conceptual framework for experienced practitioners from backgrounds in industrial engineering and physical therapy. Applied Ergonomics, 2006, 37, 587-598.	3.1	24
34	On multivariate extensions of Conditional-Tail-Expectation. Insurance: Mathematics and Economics, 2014, 55, 272-282.	1.2	24
35	Statistical advances in environmental science. Statistical Science, 1998, 13, .	2.8	23
36	COMBINING ENVIRONMENTAL INFORMATION. II: ENVIRONMENTAL EPIDEMIOLOGY AND TOXICOLOGY. Environmetrics, 1996, 7, 309-324.	1.4	22

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37	Benchmark Dose Analysis via Nonparametric Regression Modeling. Risk Analysis, 2014, 34, 135-151.	2.7	21
38	Morphologic Alteration of Mouse Clara Cells Induced by Glycerol: Ultrastructural and Morphometric Studies. Experimental Lung Research, 1987, 12, 281-302.	1.2	20
39	Respiratory tract lesions in F344/N rats and B6C3F1 mice after inhalation exposure to 1,2-epoxybutane. Toxicology, 1988, 50, 69-82.	4.2	20
40	Complementary Log Regression for Generalized Linear Models. American Statistician, 1992, 46, 94-99.	1.6	20
41	Statistical modeling and analyses of a base-specific Salmonella mutagenicity assay. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2000, 467, 11-19.	1.7	20
42	COMBINING ENVIRONMENTAL INFORMATION. I: ENVIRONMENTAL MONITORING, MEASUREMENT AND ASSESSMENT. Environmetrics, 1996, 7, 299-308.	1.4	19
43	Concordance of Carcinogenic Response between Rodent Species: Potency Dependence and Potential Underestimation. Risk Analysis, 1992, 12, 115-121.	2.7	18
44	Nonparametric estimation of benchmark doses in environmental risk assessment. Environmetrics, 2012, 23, 717-728.	1.4	18
45	On certain transformations of Archimedean copulas: Application to the non-parametric estimation of their generators. Dependence Modeling, 2013, 1, 1-36.	0.5	17
46	Exact one-sided simultaneous confidence bands via Uusipaikkaâ€™s method. Annals of the Institute of Statistical Mathematics, 2003, 55, 243-250.	0.8	16
47	Plug-in estimation of level sets in a non-compact setting with applications in multivariate risk theory. ESAIM - Probability and Statistics, 2013, 17, 236-256.	0.5	16
48	Bayesian model averaging for benchmark dose estimation. Environmental and Ecological Statistics, 2015, 22, 5-16.	3.5	16
49	Quantification of Toxic Response and the Development of the Median Effective Dose (Ed 50)â€”a Historical Perspective. Toxicology and Industrial Health, 1989, 5, 55-62.	1.4	15
50	Detection of induced mitotic chromosome loss in Saccharomyces cerevisiae â€” 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
51	Benchmark Analysis: Shopping with Proper Confidence. Risk Analysis, 2005, 25, 913-920.	2.7	15
52	Analysis of aggregated cellâ€“cell statistical distances within pathways unveils therapeutic-resistance mechanisms in circulating tumor cells. Bioinformatics, 2016, 32, i80-i89.	4.1	15
53	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
54	Quantitative approaches for assessing chromosome loss in Saccharomyces cerevisiae: general methods for analyzing downturns in dose response. Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure, 1989, 224, 11-29.	1.2	14

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55	Simultaneous confidence bands for Abbott-adjusted quantal response models in benchmark analysis. Statistical Methodology, 2008, 5, 209-219.	0.5	14
56	The detection of mitotic and meiotic chromosome gain in the yeast Saccharomyces cerevisiae: Effects of methyl benzimidazol-2-yl carbamate, methyl methanesulfonate, ethyl methanesulfonate, dimethyl sulfoxide, propionitrile and cyclophosphamide monohydrate. Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure, 1990, 242, 231-258.	1.2	13
57	Large-sample pairwise comparisons among multinomial proportions with an application to analysis of mutant spectra. Journal of Agricultural, Biological, and Environmental Statistics, 2001, 6, 305-325.	1.4	13
58	Bootstrap goodness-of-fit test for the beta-binomial model. Journal of Applied Statistics, 2001, 28, 561-571.	1.3	13
59	Confidence limits on one-stage model parameters in benchmark risk assessment. Environmental and Ecological Statistics, 2009, 16, 53-62.	3.5	13
60	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
61	Average-Width Optimality for Confidence Bands in Simple Linear Regression. Journal of the American Statistical Association, 1985, 80, 692-697.	3.1	12
62	Exploring Simple Independent Action in Multifactor Tables of Proportions. Biometrics, 1988, 44, 595.	1.4	12
63	Quantitative methods for assessing a synergistic or potentiated genotoxic response. Mutation Research - Environmental Mutagenesis and Related Subjects Including Methodology, 1989, 216, 1-8.	0.4	12
64	Biometrical methods for testing dose effects of environmental stimuli in laboratory studies. Environmetrics, 1993, 4, 483-505.	1.4	12
65	On a Likelihood-Based Goodness-of-Fit Test of the Beta-Binomial Model. Biometrics, 2000, 56, 947-949.	1.4	12
66	SIMULTANEOUS CONFIDENCE BOUNDS FOR LOW-DOSE RISK ASSESSMENT WITH NONQUANTAL DATA. Journal of Biopharmaceutical Statistics, 2004, 15, 17-31.	0.8	12
67	Spatial cluster detection of regression coefficients in a mixedâ€effects model. Environmetrics, 2020, 31, e2578.	1.4	12
68	Optimal design allocations for estimating area under curves for studies employing destructive sampling. Journal of Pharmacokinetics and Pharmacodynamics, 1989, 17, 493-507.	0.6	11
69	Fisher's Contributions to Genetics and Heredity, with Special Emphasis on the Gregor Mendel Controversy. Biometrics, 1990, 46, 915.	1.4	11
70	Optimal statistical design for toxicokinetic studies. Statistical Methods in Medical Research, 1997, 6, 359-376.	1.5	11
71	Benchmark Dose Profiles for Jointâ€Action Quantal Data in Quantitative Risk Assessment. Biometrics, 2012, 68, 1313-1322.	1.4	11
72	Testing for Simple Independent Action between Two Factors for Dichotomous Response Data. Biometrics, 1986, 42, 413.	1.4	10

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73	Empirical Bayes Estimation for Logistic Regression and Extended Parametric Regression Models. Journal of Agricultural, Biological, and Environmental Statistics, 1996, 1, 231.	1.4	10
74	From Quantal Counts to Mechanisms and Systems: The Past, Present, and Future of Biometrics in Environmental Toxicology. Biometrics, 2000, 56, 327-336.	1.4	10
75	On use of the multistage doseâ€“response model for assessing laboratory animal carcinogenicity. Regulatory Toxicology and Pharmacology, 2007, 48, 135-147.	2.7	10
76	Application of Bayesian Additive Regression Trees for Estimating Daily Concentrations of PM2.5 Components. Atmosphere, 2020, 11, 1233.	2.3	10
77	Admissible and Optimal Confidence Bands in Simple Linear Regression. Annals of Statistics, 1985, 13, 801.	2.6	9
78	Multiplicity-adjusted Inferences in Risk Assessment: Benchmark Analysis with Continuous Response Data. Environmental and Ecological Statistics, 2006, 13, 125-141.	3.5	9
79	Model Uncertainty in Environmental Doseâ€“Response Risk Analysis. Statistics and Public Policy (Philadelphia, Pa), 2014, 1, 78-85.	1.6	9
80	Bootstrap methods for simultaneous benchmark analysis with quantal response data. Environmental and Ecological Statistics, 2009, 16, 63-73.	3.5	8
81	Bayesian benchmark dose analysis. Environmetrics, 2015, 26, 373-382.	1.4	8
82	Quantal Risk Assessment Database: A Database for Exploring Patterns in Quantal Doseâ€Response Data in Risk Assessment and its Application to Develop Priors for Bayesian Doseâ€Response Analysis. Risk Analysis, 2019, 39, 616-629.	2.7	8
83	The Gregor Mendel Controversy: Early Issues of Goodness-of-Fit and Recent Issues of Genetic Linkage. History of Science, 1986, 24, 173-182.	0.5	7
84	Asymmetric confidence bands for simple linear regression over bounded intervals. Computational Statistics and Data Analysis, 2000, 34, 193-217.	1.2	7
85	Estimation and Testing with Overdispersed Proportions Using the Beta-Logistic Regression Model of Heckman and Willis. Biometrics, 2000, 56, 125-133.	1.4	7
86	Combining environmental information via hierarchical modeling: an example using mutagenic potencies. Environmetrics, 2003, 14, 159-168.	1.4	7
87	Empirical Bayes analysis for a hierarchical Poisson generalized linear model. Journal of Statistical Planning and Inference, 2003, 111, 235-248.	0.6	7
88	Estimation of multivariate conditional-tail-expectation using Kendall's process. Journal of Nonparametric Statistics, 2014, 26, 241-267.	0.9	7
89	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
90	Title is missing!. Annals of the Institute of Statistical Mathematics, 2003, 55, 243-250.	0.8	7

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91	Comparison of hyperbolic and constant width simultaneous confidence bands in multiple linear regression under MVCS criterion. Journal of Multivariate Analysis, 2009, 100, 1432-1439.	1.0	6
92	Estimating a bivariate tail: A copula based approach. Journal of Multivariate Analysis, 2013, 119, 81-100.	1.0	6
93	Spatial regression with an informatively missing covariate: Application to mapping fine particulate matter. Environmetrics, 2018, 29, e2499.	1.4	6
94	Estimation of the multivariate conditional tail expectation for extreme risk levels: Illustration on environmental data sets. Environmetrics, 2018, 29, e2510.	1.4	6
95	The questions of fit in the gregor mendel controversy. Communications in Statistics - Theory and Methods, 1983, 12, 2289-2304.	1.0	5
96	A Note on the Use of Prior Interval v2803 Information in Constructing Interval Estimates for a Gamma Mean. Technometrics, 1986, 28, 269-273.	1.9	5
97	Excess risk estimation under multistage model misspecification. Journal of Statistical Computation and Simulation, 2006, 76, 423-430.	1.2	5
98	Translational benchmark risk analysis. Journal of Risk Research, 2010, 13, 653-667.	2.6	5
99	Bayesian Model-Averaged Benchmark Dose Analysis via Reparameterized Quantal-Response Models. Biometrics, 2015, 71, 1168-1175.	1.4	5
100	Maximum likelihood estimation with binary-data regression models: small-sample and large-sample features. Advances and Applications in Statistics, 2010, 14, 101-116.	0.1	5
101	Performance of Likelihood â€“ Based Interval Estimates for Two â€“ Parameter Exponential Samples Subject to Type I Censoring. Technometrics, 1987, 29, 41-49.	1.9	4
102	Statistical models for genetic susceptibility in toxicological and epidemiological investigations.. Environmental Health Perspectives, 1994, 102, 77-82.	6.0	4
103	Empirical Bayes calculations of concordance between endpoints in environmental toxicity experiments. Environmental and Ecological Statistics, 1994, 1, 153-162.	3.5	4
104	Statistical aspects for combining information and metaâ€analysis in environmental toxicologyâˆ—. Journal of Environmental Science and Health, Part C: Environmental Carcinogenesis and Ecotoxicology Reviews, 1998, 16, 83-99.	2.9	4
105	Benchmark dose profiles for jointâ€action continuous data in quantitative risk assessment. Biometrical Journal, 2013, 55, 741-754.	1.0	4
106	Nonparametric Benchmark Dose Estimation with Continuous Doseâ€Response Data. Scandinavian Journal of Statistics, 2015, 42, 713-731.	1.4	4
107	Fisher's contributions to genetics and heredity, with special emphasis on the Gregor Mendel controversy. Biometrics, 1990, 46, 915-24.	1.4	4
108	Minimum mean-square error quadrature. Journal of Statistical Computation and Simulation, 1993, 46, 217-234.	1.2	3

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109	15 Environmental biometry: Assessing impacts of environmental stimuli via animal and microbial laboratory studies. Handbook of Statistics, 1994, , 535-559.	0.6	3
110	Combining information. Wiley Interdisciplinary Reviews: Computational Statistics, 2009, 1, 354-360.	3.9	3
111	Are pâ€values under attack? Contribution to the discussion of â€˜A critical evaluation of the current â€œpâ€value controversyâ€â€‰â€™. Biometrical Journal, 2017, 59, 889-891.	1.0	3
112	Average-Width Optimality for Confidence Bands in Simple Linear Regression. Journal of the American Statistical Association, 1985, 80, 692.	3.1	3
113	Model Robustness for Simultaneous Confidence Bands. Journal of the American Statistical Association, 1987, 82, 879.	3.1	3
114	Confidence Bands for Polynomial Regression With Fixed Intercepts. Technometrics, 1986, 28, 241-246.	1.9	2
115	Model Robustness for Simultaneous Confidence Bands. Journal of the American Statistical Association, 1987, 82, 879-885.	3.1	2
116	Statistical methods for assessing environmental effects on human genetic disorders. Environmetrics, 1992, 3, 369-384.	1.4	2
117	Communicating the risks, and the benefits, of nanotechnology. International Journal of Risk Assessment and Management, 2008, 10, 57.	0.1	2
118	Twenty-five years ofEnvironmetrics. Environmetrics, 2014, 25, 1-1.	1.4	2
119	â€˜Single-subject studiesâ€™-derived analyses unveil altered biomechanisms between very small cohorts: implications for rare diseases. Bioinformatics, 2021, 37, i67-i75.	4.1	2
120	Multiple comparisons for analyzing dichotomous response. Biometrics, 1991, 47, 45-52.	1.4	2
121	One-sided significance tests for generalized linear models under dichotomous response. Biometrics, 1990, 46, 309-16.	1.4	2
122	Exploring simple independent action in multifactor tables of proportions. Biometrics, 1988, 44, 595-603.	1.4	2
123	Influence of Viral Infections on Body Weight, Survival, and Tumor Prevalence of B6C3F1 (C57BL/6N Ã—) Tj ETQq1 1 0.784314 rgBT /Ove	3.1	1
124	Environmental biometrics summary of papers presented at the international conference on environmental biometrics, Sydney, Australia, 14â€“15 December 1992. Environmetrics, 1993, 4, 369-379.	1.4	1
125	Parametric empirical Bayes estimation for a class of extended log-linear regression models. , 2000, 11, 271-285.		1
126	Introduction: modern benchmark analysis for environmental risk assessment. Environmental and Ecological Statistics, 2009, 16, 1-2.	3.5	1

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127	Response. Risk Analysis, 2009, 29, 1201-1202.	2.7	1
128	In Memory of George Casella. Environmetrics, 2013, 24, 279-280.	1.4	1
129	EnvironmetricsSilver Anniversary Special Issue. Environmetrics, 2014, 25, 559-559.	1.4	1
130	From terrorism to flooding: How vulnerable is your city?. Significance, 2021, 18, 20-25.	0.4	1
131	Confidence Bands for Polynomial Regression with Fixed Intercepts. Technometrics, 1986, 28, 241.	1.9	1
132	Confidence bands for logistic regression with restricted predictor variables. Biometrics, 1988, 44, 739-50.	1.4	1
133	Response to A. P. Grieve. Technometrics, 1987, 29, 505-506.	1.9	0
134	Durand's rules for approximate integration. Historia Mathematica, 1989, 16, 324-333.	0.3	0
135	Acrylamide: Dermal Exposure Produces Genetic Damage in Male Mouse Germ Cells. Toxicological Sciences, 1992, 18, 189-192.	3.1	0
136	â€œStatistical methods for analyzing developmental toxicity data,â€•author's reply. Teratogenesis, Carcinogenesis, and Mutagenesis, 1993, 13, 195-197.	0.8	0
137	14 Quantitative potency estimation to measure risk with bio-environmental hazards. Handbook of Statistics, 2000, 18, 441-463.	0.6	0
138	What shall we teach in environmental statistics?. Environmental and Ecological Statistics, 2002, 9, 125-150.	3.5	0
139	A pool-adjacent-violators-algorithm approach to detect infinite parameter estimates in one-regressor doseâ€“response models with asymptotes. Journal of Statistical Computation and Simulation, 2014, 84, 2545-2556.	1.2	0
140	Benchmark dose risk analysis with mixedâ€factor quantal data in environmental risk assessment. Environmetrics, 2021, 32, e2677.	1.4	0
141	Adjusting statistical benchmark risk analysis to account for non-spatial autocorrelation, with application to natural hazard risk assessment. Journal of Applied Statistics, 0, , 1-21.	1.3	0