Song S Qian

List of Publications by Year
in descending order

107 papers	3,207 citations	159525 30 h-index	182361 51 g-index
108 all docs	108 docs citations	108 times ranked	4784 citing authors

#	Article	IF	Citations
1	Photoperiodic regulation of the seasonal pattern of photosynthetic capacity and the implications for carbon cycling. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8612-8617.	3.3	247
2	Two statistical methods for the detection of environmental thresholds. Ecological Modelling, 2003, 166, 87-97.	1.2	169
3	On Monte Carlo methods for Bayesian inference. Ecological Modelling, 2003, 159, 269-277.	1.2	144
4	On the application of multilevel modeling in environmental and ecological studies. Ecology, 2010, 91, 355-361.	1.5	133
5	Eutrophication risk assessment using Bayesian calibration of process-based models: Application to a mesotrophic lake. Ecological Modelling, 2007, 208, 215-229.	1.2	126
6	Recent Water Level Declines in the Lake Michiganâ˘'Huron System. Environmental Science & Technology, 2008, 42, 367-373.	4.6	92
7	Estimating Ecological Thresholds for Phosphorus in the Everglades. Environmental Science & Technology, 2007, 41, 8084-8091.	4.6	87
8	Long-Term Phosphorus Assimilative Capacity in Freshwater Wetlands:Â A New Paradigm for Sustaining Ecosystem Structure and Function. Environmental Science & Technology, 1999, 33, 1545-1551.	4.6	86
9	ECOLOGICAL APPLICATIONS OF MULTILEVEL ANALYSIS OF VARIANCE. Ecology, 2007, 88, 2489-2495.	1.5	75
10	First direct confirmation of grass carp spawning in a Great Lakes tributary. Journal of Great Lakes Research, 2016, 42, 899-903.	0.8	74
11	Comparative analysis of discretization methods in Bayesian networks. Environmental Modelling and Software, 2017, 87, 64-71.	1.9	72
12	Seasonal and Long-Term Nutrient Trend Decomposition along a Spatial Gradient in the Neuse River Watershed. Environmental Science & Technology, 2000, 34, 4474-4482.	4.6	70
13	Estimating Nutrients and ChlorophyllaRelationships in Finnish Lakes. Environmental Science & Technology, 2006, 40, 7848-7853.	4.6	70
14	Nonlinear regression modeling of nutrient loads in streams: A Bayesian approach. Water Resources Research, 2005, 41, .	1.7	57
15	The MANAGE Database: Nutrient Load and Site Characteristic Updates and Runoff Concentration Data. Journal of Environmental Quality, 2008, 37, 2403-2406.	1.0	53
16	A continuous variable Bayesian networks model for water quality modeling: A case study of setting nitrogen criterion for small rivers and streams in Ohio, USA. Environmental Modelling and Software, 2015, 69, 14-22.	1.9	52
17	Seasonal overturn and stratification changes drive deep-water warming in one of Earthâ€™s largest lakes. Nature Communications, 2021, 12, 1688.	5.8	50
18	Examining conservation attitudes, perspectives, and challenges in India. Biological Conservation, 2008, 141, 2357-2367.	1.9	48

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19	Geospatial web services within a scientific workflow: Predicting marine mammal habitats in a dynamic environment. Ecological Informatics, 2007, 2, 210-223.	2.3	47
20	To threshold or not to threshold? That's the question. Ecological Indicators, 2012, 15, 1-9.	2.6	45
21	Support of Total Maximum Daily Load Programs Using Spatially Referenced Regression Models. Journal of Water Resources Planning and Management - ASCE, 2003, 129, 315-329.	1.3	42
22	A BAYESIAN APPROACH TO RETRANSFORMATION BIAS IN TRANSFORMED REGRESSION. Ecology, 2006, 87, 1472-1477.	1.5	41
23	Approaches to Evaluate Water Quality Model Parameter Uncertainty for Adaptive TMDL Implementation¹. Journal of the American Water Resources Association, 2007, 43, 1499-1507.	1.0	40
24	Calibrating and validating bacterial water quality models: A Bayesian approach. Water Research, 2009, 43, 2688-2698.	5.3	38
25	A Predictive Model of Mercury Fish Tissue Concentrations for the Southeastern United States. Environmental Science & Technology, 2001, 35, 941-947.	4.6	37
26	Ultraviolet light inactivation of protozoa in drinking water: a Bayesian meta-analysis. Water Research, 2004, 38, 317-326.	5.3	36
27	Multilevel regression models describing regional patterns of invertebrate and algal responses to urbanization across the USA. Journal of the North American Benthological Society, 2011, 30, 797-819.	3.0	35
28	Exploring Factors Controlling the Variability of Pesticide Concentrations in the Willamette River Basin Using Tree-Based Models. Environmental Science & Technology, 1999, 33, 3332-3340.	4.6	34
29	Declining Threshold for Hypoxia in the Gulf of Mexico. Environmental Science & Technology, 2005, 39, 716-723.	4.6	34
30	Quantifying and Reducing Uncertainty in Estimated Microcystin Concentrations from the ELISA Method. Environmental Science & Technology, 2015, 49, 14221-14229.	4.6	34
31	Combining Model Results and Monitoring Data for Water Quality Assessment. Environmental Science & Technology, 2007, 41, 5008-5013.	4.6	31
32	Phosphorus targets and eutrophication objectives in Saginaw Bay: A 35year assessment. Journal of Great Lakes Research, 2014, 40, 4-10.	0.8	31
33	Metaâ€Analysis Constrained by Data: Recommendations to Improve Relevance of Nutrient Management Research. Agronomy Journal, 2017, 109, 2441-2449.	0.9	31
34	Will Lake Michigan Lake Trout Meet the Great Lakes Strategy 2002 PCB Reduction Goal?. Environmental Science & Technology, 2004, 38, 359-363.	4.6	30
35	A Bayesian changepointâ€"threshold model to examine the effect of TMDL implementation on the flowâ€"nitrogen concentration relationship in the Neuse River basin. Water Research, 2011, 45, 51-62.	5.3	30
36	Response to <scp>CO</scp>₂ enrichment of understory vegetation in the shade of forests. Global Change Biology, 2016, 22, 944-956.	4.2	29

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37	Soil total phosphorus threshold in the Everglades: a Bayesian changepoint analysis for multinomial response data. Ecological Indicators, 2004, 4, 29-37.	2.6	28
38	Ecological threshold and environmental management: A note on statistical methods for detecting thresholds. Ecological Indicators, 2014, 38, 192-197.	2.6	28
39	Total phosphorus-precipitation and Chlorophyll a-phosphorus relationships of lakes and reservoirs mediated by soil iron at regional scale. Water Research, 2019, 154, 136-143.	5.3	28
40	Effects of climate and land-use changes on fish catches across lakes at a global scale. Nature Communications, 2020, 11, 2526.	5.8	28
41	Reciprocally transplanted lizards along an elevational gradient match light environment use of local lizards via phenotypic plasticity. Functional Ecology, 2018, 32, 1227-1236.	1.7	26
42	Determinants of coastal treeline and the role of abiotic and biotic interactions. Plant Ecology, 2009, 202, 55-66.	0.7	25
43	A Hierarchical Modeling Approach for Estimating National Distributions of Chemicals in Public Drinking Water Systems. Environmental Science & Technology, 2004, 38, 1176-1182.	4.6	24
44	Implications of Steinâ€™s Paradox for Environmental Standard Compliance Assessment. Environmental Science & Technology, 2015, 49, 5913-5920.	4.6	23
45	Modeling phosphorus trapping in wetlands using generalized additive models. Water Resources Research, 1994, 30, 3105-3114.	1.7	22
46	Title is missing!. Environmental and Ecological Statistics, 1997, 4, 1-29.	1.9	22
47	Modeling framework to estimate spawning and hatching locations of pelagically spawned eggs. Canadian Journal of Fisheries and Aquatic Sciences, 2019, 76, 597-607.	0.7	22
48	Environmental and Ecological Statistics with R. , 0, , .		22
49	Tolerance of <i>Pinus taeda</i> and <i>Pinus serotina</i> to low salinity and flooding: Implications for equilibrium vegetation dynamics. Journal of Vegetation Science, 2008, 19, 15-22.	1.1	21
50	Regional Scale Stressor-Response Models in Aquatic Ecosystems. Journal of the American Water Resources Association, 2008, 44, 771-781.	1.0	21
51	Modeling Contaminant Concentration Distributions in Chinaâ€™s Centralized Source Waters. Environmental Science & Technology, 2011, 45, 6041-6048.	4.6	20
52	The effects of prey demography on humpback whale (Megaptera novaeangliae) abundance around Anvers Island, Antarctica. Polar Biology, 2008, 31, 1217-1224.	0.5	19
53	Improving estimates of built-up area from night time light across globally distributed cities through hierarchical modeling. Science of the Total Environment, 2019, 647, 1266-1280.	3.9	18
54	Multinomial regression for analyzing macroinvertebrate assemblage composition data. Freshwater Science, 2012, 31, 681-694.	0.9	17

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55	Response and biophysical regulation of carbon dioxide fluxes to climate variability and anomaly in contrasting ecosystems in northwestern Ohio, USA. Agricultural and Forest Meteorology, 2016, 220, 50-68.	1.9	17
56	Inferred fish behavior its implications for hydroacoustic surveys in nearshore habitats. Fisheries Research, 2018, 199, 63-75.	0.9	17
57	Chlorophyll a as an indicator of microcystin: Short-term forecasting and risk assessment in Lake Erie. Ecological Indicators, 2021, 130, 108055.	2.6	17
58	Optimizing an estuarine water quality monitoring program through an entropy-based hierarchical spatiotemporal Bayesian framework. Water Resources Research, 2013, 49, 6933-6945.	1.7	16
59	Rethinking the lake trophic state index. PeerJ, 2019, 7, e7936.	0.9	15
60	Modeling of non-point source nitrogen pollution from 1979 to 2008 in Jiaodong Peninsula, China. Hydrological Processes, 2014, 28, 3264-3275.	1.1	14
61	A critique of the use of indicator-species scores for identifying thresholds in species responses. Freshwater Science, 2013, 32, 471-488.	0.9	13
62	A study of anthropogenic and climatic disturbance of the New River Estuary using a Bayesian belief network. Marine Pollution Bulletin, 2014, 83, 107-115.	2.3	13
63	Using Bayesian change point model to enhance understanding of the shifting nutrients-phytoplankton relationship. Ecological Modelling, 2019, 393, 120-126.	1.2	13
64	Dynamic Bayesian Networks to Assess Anthropogenic and Climatic Drivers of Saltwater Intrusion: A Decision Support Tool Toward Improved Management. Integrated Environmental Assessment and Management, 2021, 17, 202-220.	1.6	13
65	A Bayesian hierarchical modeling approach for analyzing observational data from marine ecological studies. Marine Pollution Bulletin, 2009, 58, 1916-1921.	2.3	12
66	Spatial variability of soil nitrogen and phosphorus of a mixed forest ecosystem in Beijing, China. Environmental Earth Sciences, 2010, 60, 1783-1792.	1.3	12
67	Response to King and Baker: limitations on threshold detection and characterization of community thresholds. , 2011, 21, 2840-2845.		12
68	The effects of nutrients on stream invertebrates: a regional estimation by generalized propensity score. Ecological Processes, 2018, 7, 21.	1.6	12
69	The implications of Simpson's paradox for cross-scale inference among lakes. Water Research, 2019, 163, 114855.	5.3	12
70	AN ILLUSTRATION OF MODEL STRUCTURE IDENTIFICATION. Journal of the American Water Resources Association, 1997, 33, 811-824.	1.0	11
71	A Size-Based Probabilistic Assessment of PCB Exposure from Lake Michigan Fish Consumption. Environmental Science & Technology, 1998, 32, 2325-2330.	4.6	11
72	A Hierarchical Model for Estimating Longâ€Term Trend of Atrazine Concentration in the Surface Water of the Contiguous U.S.. Journal of the American Water Resources Association, 2015, 51, 1128-1137.	1.0	11

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73	Sparse targets in hydroacoustic surveys: Balancing quantity and quality of in situ target strength data. Fisheries Research, 2017, 188, 173-182.	0.9	11
74	Validation of the model-predicted spawning area of grass carp Ctenopharyngodon idella in the Sandusky River. Journal of Great Lakes Research, 2021, 47, 29-36.	0.8	11
75	Bayesian Hierarchical/Multilevel Models for Inference and Prediction Using Cross-System Lake Data. , 2009, , 111-136.		10
76	The Frequency Component of Water Quality Criterion Compliance AssessmentÂShould be Data Driven. Environmental Management, 2015, 56, 24-33.	1.2	10
77	A cross-scale view of N and P limitation using a Bayesian hierarchical model. Limnology and Oceanography, 2016, 61, 2276-2285.	1.6	10
78	Evaluating catchability in a large-scale gillnet survey using hydroacoustics: Making the case for coupled surveys. Fisheries Research, 2019, 211, 309-318.	0.9	10
79	A global analysis of cladoceran body size and its variation linking to habitat, distribution and taxonomy. Zoological Journal of the Linnean Society, 2019, 187, 1119-1130.	1.0	9
80	A Bayesian analysis of mouse infectivity data to evaluate the effectiveness of using ultraviolet light as a drinking water disinfectant. Water Research, 2005, 39, 4229-4239.	5.3	8
81	Characterization of Background Concentrations of Contaminants Using a Mixture of Normal Distributions. Environmental Science & Technology, 2006, 40, 6021-6025.	4.6	8
82	Bayesian hierarchical modeling of larval walleye (Sander vitreus) abundance and mortality: Accounting for spatial and temporal variability on a large river. Journal of Great Lakes Research, 2014, 40, 29-40.	0.8	8
83	Applying Statistical Causal Analyses to Agricultural Conservation: AÂCase Study Examining P Loss Impacts. Journal of the American Water Resources Association, 2016, 52, 198-208.	1.0	8
84	A Metaâ€Analysis on the Effect of Agricultural Conservation Practices on Nutrient Loss. Journal of Environmental Quality, 2018, 47, 1172-1178.	1.0	8
85	All tests are imperfect: Accounting for false positives and false negatives using Bayesian statistics. Heliyon, 2020, 6, e03571.	1.4	8
86	Evaluating the impact of watershed development and climate change on stream ecosystems: A Bayesian network modeling approach. Water Research, 2021, 205, 117685.	5.3	8
87	A Bayesian hierarchical model to guide development and evaluation of substance objectives under the 2012 Great Lakes Water Quality Agreement. Journal of Great Lakes Research, 2014, 40, 49-55.	0.8	7
88	Ecoregional or site-specific lake nutrient criteria? Evidence from ecological fallacy. Ecological Indicators, 2020, 111, 105989.	2.6	7
89	Using structural equation modeling to better understand microcystis biovolume dynamics in a mediterranean hypereutrophic reservoir. Ecological Modelling, 2020, 435, 109282.	1.2	7
90	Population decline of the Elfin-woods WarblerSetophaga angelaein eastern Puerto Rico. Bird Conservation International, 2013, 23, 136-146.	0.7	6

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91	Trends in the distribution and abundance of Hexagenia spp. in Saginaw Bay, Lake Huron, 1954â€“2012: Moving towards recovery?. Journal of Great Lakes Research, 2014, 40, 156-167.	0.8	6
92	Updating the ELISA standard curve fitting process to reduce uncertainty in estimated microcystin concentrations. MethodsX, 2018, 5, 304-311.	0.7	5
93	On Abandoning Hypothesis Testing in Environmental Standard Compliance Assessment. Environmental Management, 2018, 62, 183-189.	1.2	5
94	Modeling phosphorus trapping in wetlands using nonparametric Bayesian Regression. Water Resources Research, 1998, 34, 1745-1754.	1.7	4
95	Univariate Bayesian nonparametric binary regression with application in environmental management. Environmental and Ecological Statistics, 2000, 7, 77-91.	1.9	4
96	A hierarchical zero-inflated model for species compositional data-from individual taxon responses to community response. Limnology and Oceanography: Methods, 2014, 12, 498-506.	1.0	4
97	Statistics in ecology is for making a â€œprincipledâ€• argument. Landscape Ecology, 2014, 29, 937-939.	1.9	4
98	Setting Standards for Water Quality in the Everglades. Chance, 2003, 16, 10-16.	0.1	3
99	TEMPORAL CHANGES IN THE YADKIN RIVER FLOW VERSUS SUSPENDED SEDIMENT CONCENTRATION RELATIONSHIP. Journal of the American Water Resources Association, 2004, 40, 1219-1229.	1.0	3
100	Response to Comment on â€œEstimating Ecological Thresholds for Phosphorus in the Evergladesâ€• Environmental Science & Technology, 2008, 42, 6772-6773.	4.6	3
101	Embracing uncertainty to reduce bias in hydroacoustic species apportionment. Fisheries Research, 2021, 233, 105750.	0.9	3
102	On model coefficient estimation using Markov chain Monte Carlo simulations: A potential problem and the solution. Ecological Modelling, 2012, 247, 302-306.	1.2	2
103	The multiple-comparison trap and the Ravenâ€™s paradoxâ€”perils of using null hypothesis testing in environmental assessment. Environmental Monitoring and Assessment, 2018, 190, 409.	1.3	2
104	Assessing the Risk of Hydroxybenzene Contamination in Fish Raised on a Chinese Aquaculture Farm. Human and Ecological Risk Assessment (HERA), 2010, 16, 210-222.	1.7	0
105	Analytical options for estimating ecological thresholds â€“ statistical considerations. , 2012, , 279-297.		0
106	Re: M. Song, Y. Guan, â€œThe environmental efficiency of Wanjiang demonstration area: A Bayesian estimation approachâ€•[Ecol. Indic. 36 (2014) 59â€“67]. Ecological Indicators, 2014, 45, 648-649.	2.6	0
107	A hierarchical threshold modeling approach for understanding phenological responses to climate change: when did North American lilacs start to bloom earlier?. SN Applied Sciences, 2020, 2, 1.	1.5	0