Zhengyuan Zhu

List of Publications by Year
in descending order

65 papers	1,277 citations	361413 20 h-index	395702 33 g-index
67 all docs	67 docs citations	67 times ranked	1375 citing authors

#	ARTICLE	IF	CITATIONS
1	Spatial sampling design for prediction with estimated parameters. Journal of Agricultural, Biological, and Environmental Statistics, 2006, 11, 24-44.	1.4	158
2	Creating a seamless 1 km resolution daily land surface temperature dataset for urban and surrounding areas in the conterminous United States. Remote Sensing of Environment, 2018, 206, 84-97.	11.0	102
3	Mapping annual urban dynamics (1985â€"2015) using time series of Landsat data. Remote Sensing of Environment, 2018, 216, 674-683.	11.0	101
4	Spatial sampling design for parameter estimation of the covariance function. Journal of Statistical Planning and Inference, 2005, 134, 583-603.	0.6	74
5	Developing a 1â€‾km resolution daily air temperature dataset for urban and surrounding areas in the conterminous United States. Remote Sensing of Environment, 2018, 215, 74-84.	11.0	62
6	Spatial scan statistics. , 2006, , .		61
7	A global seamless 1â€‰km resolution daily land surface temperature dataset (2003â€"2020). Earth System Science Data, 2022, 14, 651-664.	9.9	54
8	Accounting for spatial correlation in the scan statistic. Annals of Applied Statistics, 2007, 1, .	1.1	39
9	Partially Linear Functional Additive Models for Multivariate Functional Data. Journal of the American Statistical Association, 2019, 114, 406-418.	3.1	38
10	Spatial sampling design under the infill asymptotic framework. Environmetrics, 2006, 17, 323-337.	1.4	37
11	Associations between ozone and morbidity using the Spatial Synoptic Classification system. Environmental Health, 2011, 10, 49.	4.0	37
12	Efficient mean estimation in log-normal linear models. Journal of Statistical Planning and Inference, 2008, 138, 552-567.	0.6	36
13	Long-range dependence analysis of Internet traffic. Journal of Applied Statistics, 2011, 38, 1407-1433.	1.3	33
14	Regional soil erosion assessment based on a sample survey and geostatistics. Hydrology and Earth System Sciences, 2018, 22, 1695-1712.	4.9	33
15	A national dataset of 30â€‰m annual urban extent dynamics (1985â€"2015) in the conterminous United States. Earth System Science Data, 2020, 12, 357-371.	9.9	31
16	Singular Value Decomposition and Its Visualization. Journal of Computational and Graphical Statistics, 2007, 16, 833-854.	1.7	28
17	Semiparametric Estimation of Spectral Density With Irregular Observations. Journal of the American Statistical Association, 2007, 102, 726-735.	3.1	26
18	Estimation and prediction for spatial generalized linear mixed models using high order Laplace approximation. Journal of Statistical Planning and Inference, 2011, 141, 3564-3577.	0.6	24

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19	Robust estimation of the self-similarity parameter in network traffic using wavelet transform. Signal Processing, 2007, 87, 2111-2124.	3.7	22
20	Conditional Causal Mediation Analysis of Factors Associated With Cover Crop Adoption in Iowa, USA. Water Resources Research, 2018, 54, 9566-9584.	4.2	22
21	Estimation and Prediction of a Class of Convolution-Based Spatial Nonstationary Models for Large Spatial Data. Journal of Computational and Graphical Statistics, 2010, 19, 74-95.	1.7	21
22	Estimating spatial covariance using penalised likelihood with weighted L_1 penalty. Journal of Nonparametric Statistics, 2009, 21, 925-942.	0.9	18
23	Modelling multiple fishing gear efficiencies and abundance for aggregated populations using fishery or survey data. ICES Journal of Marine Science, 2014, 71, 2436-2447.	2.5	15
24	Intra-Storm Temporal Patterns of Rainfall in China Using Huff Curves. Transactions of the ASABE, 2016, 59, 1619-1632.	1.1	15
25	Adaptive data center activation with user request prediction. Computer Networks, 2017, 122, 191-204.	5.1	14
26	Compressed Distributed Gradient Descent: Communication-Efficient Consensus over Networks. , 2019, , .		14
27	Using Kriging with a heterogeneous measurement error to improve the accuracy of extreme precipitation return level estimation. Journal of Hydrology, 2018, 562, 518-529.	5.4	13
28	Gap-filling MODIS daily aerosol optical depth products by developing a spatiotemporal fitting algorithm. GIScience and Remote Sensing, 2022, 59, 762-781.	5.9	12
29	Optimal predictive design augmentation for spatial generalised linear mixed models. Journal of Statistical Planning and Inference, 2012, 142, 3242-3253.	0.6	11
30	Spatio€temporal functional data analysis for wireless sensor networks data. Environmetrics, 2015, 26, 354-362.	1.4	11
31	Efficient Estimation and Prediction for the Bayesian Binary Spatial Model with Flexible Link Functions. Biometrics, 2016, 72, 289-298.	1.4	11
32	Modeling nonstationary covariance function with convolution on sphere. Computational Statistics and Data Analysis, 2016, 104, 233-246.	1.2	8
33	Small Area Estimation of Proportions with Constraint for National Resources Inventory Survey. Journal of Agricultural, Biological, and Environmental Statistics, 2018, 23, 509-528.	1.4	8
34	Parametric fractional imputation for mixed models with nonignorable missing data. Statistics and Its Interface, 2013, 6, 339-347.	0.3	8
35	Private and communication-efficient edge learning. , 2020, , .		8
36	Requests Prediction in Cloud with a Cyclic Window Learning Algorithm. , 2016, , .		7

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37	Combining Survey and Non-survey Data for Improved Sub-area Prediction Using a Multi-level Model. Journal of Agricultural, Biological, and Environmental Statistics, 2018, 23, 175-189.	1.4	7
38	A Submonthly Surface Water Classification Framework via Gap-Fill Imputation and Random Forest Classifiers of Landsat Imagery. Remote Sensing, 2021, 13, 1742.	4.0	6
39	Impact of the Sampling Rate on the Estimation of the Parameters of Fractional Brownian Motion. Journal of Time Series Analysis, 2006, 27, 367-380.	1.2	5
40	Nonparametric spectral density estimation with missing observations. , 2009, , .		5
41	Optimal Stratification and Allocation for the June Agricultural Survey. Journal of Official Statistics, 2018, 34, 121-148.	0.4	5
42	Estimating 1 km gridded daily air temperature using a spatially varying coefficient model with sign preservation. Remote Sensing of Environment, 2022, 277, 113072.	11.0	5
43	Multiresolution anomaly detection method for fractional Gaussian noise. Journal of Applied Statistics, 2014, 41, 769-784.	1.3	3
44	A new algorithm to estimate monotone nonparametric link functions and a comparison with parametric approach. Statistics and Computing, 2018, 28, 1083-1094.	1.5	3
45	Spatiotemporal Balanced Sampling Design for Longitudinal Area Surveys. Journal of Agricultural, Biological, and Environmental Statistics, 2019, 24, 245-263.	1.4	3
46	Modeling Crop Phenology in the US Corn Belt Using Spatially Referenced SMOS Satellite Data. Journal of Agricultural, Biological, and Environmental Statistics, 2020, 25, 657-675.	1.4	3
47	Taming Convergence for Asynchronous Stochastic Gradient Descent with Unbounded Delay in Non-Convex Learning. , 2020, , .		3
48	Multi-Resolution Anomaly Detection for the internet. , 2008, , .		2
49	Ozone, PM10, and Synoptic Circulation Patterns Associated with Asthma/Myocardial Infarction Hospital Admissions. Epidemiology, 2009, 20, S226.	2.7	2
50	Integration of statistical and administrative agricultural data from Namibia. Statistical Journal of the IAOS, 2021, 37, 557-578.	0.4	2
51	GT-STORM. , 2021, , .		2
52	Bivariate small area estimation for binary and gaussian variables based on a conditionally specified model. Biometrics, 2022, 78, 1555-1565.	1.4	2
53	A Parametric Approach to Unmixing Remote Sensing Crop Growth Signatures. Journal of Agricultural, Biological, and Environmental Statistics, 2019, 24, 502-516.	1.4	1
54	Small area estimation with subgroup analysis. Statistical Theory and Related Fields, 2019, 3, 129-135.	0.4	1

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55	Variance function estimation of a one-dimensional nonstationary process. Journal of the Korean Statistical Society, 2019, 48, 327-339.	0.4	1
56	Communication-Efficient Network-Distributed Optimization with Differential-Coded Compressors. , 2020, , .		1
57	Spatial Sampling Design Using Generalized Neyman–Scott Process. Journal of Agricultural, Biological, and Environmental Statistics, 2021, 26, 105-127.	1.4	1
58	Low Sample and Communication Complexities in Decentralized Learning: A Triple Hybrid Approach. , 2021, , .		1
59	REC: fast sparse regression-based multicategory classification. Statistics and Its Interface, 2017, 10, 175-185.	0.3	1
60	Priors on Hypergraphical Models via Simplicial Complexes. , 2015, , 431-454.		0
61	Spatio-temporal modeling of global ozone data using convolution. Japanese Journal of Statistics and Data Science, 2020, 3, 153-166.	1.2	0
62	Spatial multiresolution cluster detection method. Statistics and Its Interface, 2013, 6, 65-77.	0.3	0
63	Variance estimation and kriging prediction for a class of non-stationary spatial models. Statistica Sinica, 2014, , .	0.3	0
64	Empirical likelyhood for irregularly located spatial data. Statistica Sinica, 2015, , .	0.3	0
65	Estimating a Variance Function of a Nonstationary Process. Advances in Geographic Information Science, 2017, , 281-293.	0.6	0