Guang-Xing Wang

List of Publications by Year
in descending order

82	2,655	218381	205818
papers	citations	26 h-index	48 g-index

84	84	84	2377
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A survey of remote sensing-based aboveground biomass estimation methods in forest ecosystems. International Journal of Digital Earth, 2016, 9, 63-105.	1.6	465
2	Examining Spectral Reflectance Saturation in Landsat Imagery and Corresponding Solutions to Improve Forest Aboveground Biomass Estimation. Remote Sensing, 2016, 8, 469.	1.8	156
3	Aboveground Forest Biomass Estimation with Landsat and LiDAR Data and Uncertainty Analysis of the Estimates. International Journal of Forestry Research, 2012, 2012, 1-16.	0.2	141
4	Comparative Analysis of Modeling Algorithms for Forest Aboveground Biomass Estimation in a Subtropical Region. Remote Sensing, 2018, 10, 627.	1.8	119
5	A Regional Comparison of Factors Affecting Global Sorghum Production: The Case of North America, Asia and Africaâ€™s Sahel. Sustainability, 2019, 11, 2135.	1.6	98
6	Mapping Paddy Rice Using a Convolutional Neural Network (CNN) with Landsat 8 Datasets in the Dongting Lake Area, China. Remote Sensing, 2018, 10, 1840.	1.8	90
7	Deep Learning Segmentation and Classification for Urban Village Using a Worldview Satellite Image Based on U-Net. Remote Sensing, 2020, 12, 1574.	1.8	88
8	Forest aboveground biomass estimation in Zhejiang Province using the integration of Landsat TM and ALOS PALSAR data. International Journal of Applied Earth Observation and Geoinformation, 2016, 53, 1-15.	1.4	85
9	Phenology-based classification of vegetation cover types in Northeast China using MODIS NDVI and EVI time series. International Journal of Remote Sensing, 2015, 36, 489-512.	1.3	72
10	Mapping and spatial uncertainty analysis of forest vegetation carbon by combining national forest inventory data and satellite images. Forest Ecology and Management, 2009, 258, 1275-1283.	1.4	63
11	A generalized nonlinear mixed-effects height to crown base model for Mongolian oak in northeast China. Forest Ecology and Management, 2017, 384, 34-43.	1.4	61
12	Estimation Methods for Soil Mercury Content Using Hyperspectral Remote Sensing. Sustainability, 2018, 10, 2474.	1.6	46
13	Uncertainties of mapping aboveground forest carbon due to plot locations using national forest inventory plot and remotely sensed data. Scandinavian Journal of Forest Research, 2011, 26, 360-373.	0.5	44
14	Mapping and uncertainty of predictions based on multiple primary variables from joint co-simulation with Landsat TM image and polynomial regression. Remote Sensing of Environment, 2002, 83, 498-510.	4.6	42
15	Soil Organic Carbon and its Fractions in Relation to Degradation and Restoration of Wetlands on the ZoigÃª Plateau, China. Wetlands, 2014, 34, 235-241.	0.7	42
16	Comparison of seemingly unrelated regressions with error-in-variable models for developing a system of nonlinear additive biomass equations. Trees - Structure and Function, 2016, 30, 839-857.	0.9	42
17	Estimation of Soil Heavy Metal Content Using Hyperspectral Data. Remote Sensing, 2019, 11, 1464.	1.8	40
18	Prediction of Soil Nutrient Contents Using Visible and Near-Infrared Reflectance Spectroscopy. ISPRS International Journal of Geo-Information, 2019, 8, 437.	1.4	40

#	Article	IF	Citations
19	Mapping Forest Ecosystem Biomass Density for Xiangjiang River Basin by Combining Plot and Remote Sensing Data and Comparing Spatial Extrapolation Methods. Remote Sensing, 2017, 9, 241.	1.8	38
20	Improving Aboveground Biomass Estimation of Pinus densata Forests in Yunnan Using Landsat 8 Imagery by Incorporating Age Dummy Variable and Method Comparison. Remote Sensing, 2019, 11, 738.	1.8	37
21	Integrating a Hybrid Back Propagation Neural Network and Particle Swarm Optimization for Estimating Soil Heavy Metal Contents Using Hyperspectral Data. Sustainability, 2019, 11, 419.	1.6	35
22	Increasing the Accuracy of Mapping Urban Forest Carbon Density by Combining Spatial Modeling and Spectral Unmixing Analysis. Remote Sensing, 2015, 7, 15114-15139.	1.8	33
23	Development of a System of Compatible Individual Tree Diameter and Aboveground Biomass Prediction Models Using Error-In-Variable Regression and Airborne LiDAR Data. Remote Sensing, 2018, 10, 325.	1.8	30
24	A climate-sensitive aboveground biomass model for three larch species in northeastern and northern China. Trees - Structure and Function, 2017, 31, 557-573.	0.9	28
25	Optimizing kNN for Mapping Vegetation Cover of Arid and Semi-Arid Areas Using Landsat images. Remote Sensing, 2018, 10, 1248.	1.8	28
26	Prediction of soil properties using a hyperspectral remote sensing method. Archives of Agronomy and Soil Science, 2018, 64, 546-559.	1.3	27
27	Characterizing urban redevelopment process by quantifying thermal dynamic and landscape analysis. Habitat International, 2019, 86, 61-70.	2.3	26
28	Examining soil organic carbon distribution and dynamic change in a hickory plantation region with Landsat and ancillary data. Catena, 2018, 165, 576-589.	2.2	24
29	Estimating aboveground biomass of Pinus densata-dominated forests using Landsat time series and permanent sample plot data. Journal of Forestry Research, 2019, 30, 1689-1706.	1.7	24
30	Estimating the Growing Stem Volume of Coniferous Plantations Based on Random Forest Using an Optimized Variable Selection Method. Sensors, 2020, 20, 7248.	2.1	24
31	Multilevel Nonlinear Mixed-Effect Crown Ratio Models for Individual Trees of Mongolian Oak (Quercus mongolica) in Northeast China. PLoS ONE, 2015, 10, e0133294.	1.1	23
32	Estimation of Vegetation Productivity Using a Landsat 8 Time Series in a Heavily Urbanized Area, Central China. Remote Sensing, 2019, 11, 133.	1.8	23
33	A Modified KNN Method for Mapping the Leaf Area Index in Arid and Semi-Arid Areas of China. Remote Sensing, 2020, 12, 1884.	1.8	23
34	Estimating the Growing Stem Volume of Chinese Pine and Larch Plantations based on Fused Optical Data Using an Improved Variable Screening Method and Stacking Algorithm. Remote Sensing, 2020, 12, 871.	1.8	23
35	Spatial-variability-based algorithms for scaling-up spatial data and uncertainties. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 2004-2015.	2.7	21
36	The GA-BPNN-Based Evaluation of Cultivated Land Quality in the PSR Framework Using Gaofen-1 Satellite Data. Sensors, 2019, 19, 5127.	2.1	21

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37	Crop Growth Stage GPP-Driven Spectral Model for Evaluation of Cultivated Land Quality Using GA-BPNN. Agriculture (Switzerland), 2020, 10, 318.	1.4	21
38	Generic linear mixed-effects individual-tree biomass models forPinus massonianain southern China. Southern Forests, 2014, 76, 47-56.	0.2	19
39	Prediction of Individual Tree Diameter Using a Nonlinear Mixed-Effects Modeling Approach and Airborne LiDAR Data. Remote Sensing, 2020, 12, 1066.	1.8	19
40	Can Î´13C abundance, water-soluble carbon, and light fraction carbon be potential indicators of soil organic carbon dynamics in ZoigÃª wetland?. Catena, 2014, 119, 21-27.	2.2	18
41	Comparison of methods toward multi-scale forest carbon mapping and spatial uncertainty analysis: combining national forest inventory plot data and landsat TM images. European Journal of Forest Research, 2015, 134, 125-137.	1.1	18
42	Estimation of net primary productivity of forests by modified CASA models and remotely sensed data. International Journal of Remote Sensing, 2018, 39, 1092-1116.	1.3	18
43	Mapping Growing Stem Volume of Chinese Fir Plantation Using a Saturation-based Multivariate Method and Quad-polarimetric SAR Images. Remote Sensing, 2019, 11, 1872.	1.8	18
44	Impacts of Plot Location Errors on Accuracy of Mapping and Scaling Up Aboveground Forest Carbon Using Sample Plot and Landsat TM Data. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 1483-1487.	1.4	17
45	Improvement of Forest Carbon Estimation by Integration of Regression Modeling and Spectral Unmixing of Landsat Data. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 2003-2007.	1.4	16
46	Optimal spatial resolution for collection of ground data and multi-sensor image mapping of a soil erosion cover factor. Journal of Environmental Management, 2008, 88, 1088-1098.	3.8	15
47	Landscape metrics and change analysis of a national wildlife refuge at different spatial resolutions. International Journal of Remote Sensing, 2014, 35, 3109-3134.	1.3	14
48	Combining stratification and up-scaling method-block cokriging with remote sensing imagery for sampling and mapping an erosion cover factor. Ecological Informatics, 2007, 2, 373-386.	2.3	13
49	Detection of gullies in Fort Riley military installation using LiDAR derived high resolution DEM. Journal of Terramechanics, 2018, 77, 15-22.	1.4	13
50	Improving Estimation of Forest Canopy Cover by Introducing Loss Ratio of Laser Pulses Using Airborne LiDAR. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 567-585.	2.7	13
51	Prediction of Individual Tree Diameter and Height to Crown Base Using Nonlinear Simultaneous Regression and Airborne LiDAR Data. Remote Sensing, 2020, 12, 2238.	1.8	13
52	Examining phenological variation of on-year and off-year bamboo forests based on the vegetation and environment monitoring on a New Micro-Satellite (VENÂµS) time-series data. International Journal of Remote Sensing, 2021, 42, 2203-2219.	1.3	13
53	Environmental Condition Assessment of US Military Installations Using GIS Based Spatial Multi-Criteria Decision Analysis. Environmental Management, 2012, 50, 329-340.	1.2	12
54	Improving Selection of Spectral Variables for Vegetation Classification of East Dongting Lake, China, Using a Gaofen-1 Image. Remote Sensing, 2018, 10, 50.	1.8	12

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55	Spatial and Temporal Assessment of Cumulative Disturbance Impacts Due to Military Training, Burning, Haying, and Their Interactions on Land Condition of Fort Riley. Environmental Management, 2014, 54, 51-66.	1.2	11
56	Multi-Resolution Mapping and Accuracy Assessment of Forest Carbon Density by Combining Image and Plot Data from a Nested and Clustering Sampling Design. Remote Sensing, 2016, 8, 571.	1.8	11
57	Detection of charcoal rot (Macrophomina phaseolina) toxin effects in soybean (Glycine max) seedlings using hyperspectral spectroscopy. Computers and Electronics in Agriculture, 2018, 150, 188-195.	3.7	11
58	Detection of short-term urban land use changes by combining SAR time series images and spectral angle mapping. Frontiers of Earth Science, 2019, 13, 495-509.	0.9	11
59	Improving Forest Aboveground Biomass Estimation of Pinus densata Forest in Yunnan of Southwest China by Spatial Regression using Landsat 8 Images. Remote Sensing, 2019, 11, 2750.	1.8	11
60	Analysis of the Spatial Differences in Canopy Height Models from UAV LiDAR and Photogrammetry. Remote Sensing, 2020, 12, 2884.	1.8	10
61	A Rice Mapping Method Based on Time-Series Landsat Data for the Extraction of Growth Period Characteristics. Sustainability, 2018, 10, 2570.	1.6	9
62	The Optimal Image Date Selection for Evaluating Cultivated Land Quality Based on Gaofen-1 Images. Sensors, 2019, 19, 4937.	2.1	9
63	Modeling and Prediction of Land Condition for Fort Riley Military Installation. Transactions of the ASABE, 2013, 56, 643-652.	1.1	8
64	Estimating the Growing Stem Volume of the Planted Forest Using the General Linear Model and Time Series Quad-Polarimetric SAR Images. Sensors, 2020, 20, 3957.	2.1	8
65	Improving Estimation of Soil Moisture Content Using a Modified Soil Thermal Inertia Model. Remote Sensing, 2020, 12, 1719.	1.8	7
66	Additive crown width models comprising nonlinear simultaneous equations for Prince Rupprecht larch (Larix principis-rupprechtii) in northern China. Trees - Structure and Function, 2017, 31, 1959-1971.	0.9	6
67	Airborne LIDAR-Derived Aboveground Biomass Estimates Using a Hierarchical Bayesian Approach. Remote Sensing, 2019, 11, 1050.	1.8	5
68	A Probability-Based Spectral Unmixing Analysis for Mapping Percentage Vegetation Cover of Arid and Semi-Arid Areas. Remote Sensing, 2019, 11, 3038.	1.8	5
69	The Impact of Vertical Wavenumber on Forest Height Inversion by PolInSAR. , 2018, , .		3
70	Current development of landscape geochemistry with support of geospatial technologies: A review. Critical Reviews in Environmental Science and Technology, 2019, 49, 745-790.	6.6	3
71	Prediction and analysis of residential house price using a flexible spatiotemporal model. Journal of Applied Economics, 2022, 25, 503-522.	0.6	3
72	Parallel spatiotemporal autocorrelation andÂvisualization system forÂlarge-scale remotely sensedÂimages. Journal of Supercomputing, 2012, 59, 83-103.	2.4	2

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73	Analysis of hyperspectral bands for the health diagnosis of tree species. , 2014, , .		2
74	Modeling Urban PM2.5 Concentration by Combining Regression Models and Spectral Unmixing Analysis in a Region of East China. Water, Air, and Soil Pollution, 2017, 228, 1.	1.1	2
75	Improving the Estimation of Forest Carbon Density in Mountainous Regions Using Topographic Correction and Landsat 8 Images. Remote Sensing, 2019, 11, 2619.	1.8	2
76	Editorial Summary, Remote Sensing Special Issue â€œAdvances in Remote Sensing for Global Forest Monitoringâ€• Remote Sensing, 2021, 13, 597.	1.8	2
77	Assessing the impacts of anthropogenic drainage structures on hydrologic connectivity using highâ€•resolution digital elevation models. Transactions in GIS, 2021, 25, 2596-2611.	1.0	2
78	Classification and Feature Extraction for Hydraulic Structures Data Using Advanced CNN Architectures. , 2021, , .		2
79	Design of an Integrated Remote and Ground Sensing Monitor System for Assessing Farmland Quality. Sensors, 2020, 20, 336.	2.1	1
80	Developing an individual tree diameter increment model of oaks using indicator variables and mixed effects in central China. Scandinavian Journal of Forest Research, 2021, 36, 297-305.	0.5	1
81	Spectral unmixing of MODIS data based on improved endmember purification model: application to forest type identification. , 2014, , .		0
82	Impacts of Position Errors on Accuracy of Single Tree Volume Inversion of Cunninghamia lanceolata based on GF-2 Data. , 2018, , .		0