Yaxing Wei

List of Publications by Year
in descending order

82	4,172	147801	118850
papers	citations	31	62
		h-index	g-index

95	95	95	6238
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Global patterns of drought recovery. Nature, 2017, 548, 202-205.	27.8	560
2	Toward more realistic projections of soil carbon dynamics by Earth system models. Global Biogeochemical Cycles, 2016, 30, 40-56.	4.9	343
3	Global patterns and controls of soil organic carbon dynamics as simulated by multiple terrestrial biosphere models: Current status and future directions. Global Biogeochemical Cycles, 2015, 29, 775-792.	4.9	241
4	The North American Carbon Program Multi-Scale Synthesis and Terrestrial Model Intercomparison Project â€" Part 1: Overview and experimental design. Geoscientific Model Development, 2013, 6, 2121-2133.	3.6	212
5	North American Carbon Program (NACP) regional interim synthesis: Terrestrial biospheric model intercomparison. Ecological Modelling, 2012, 232, 144-157.	2.5	207
6	The North American Carbon Program Multi-scale Synthesis and Terrestrial Model Intercomparison Project â€" Part 2: Environmental driver data. Geoscientific Model Development, 2014, 7, 2875-2893.	3.6	207
7	Impact of largeâ€scale climate extremes on biospheric carbon fluxes: An intercomparison based on MsTMIP data. Global Biogeochemical Cycles, 2014, 28, 585-600.	4.9	181
8	Enhanced peak growth of global vegetation and its key mechanisms. Nature Ecology and Evolution, 2018, 2, 1897-1905.	7.8	169
9	Uncertainty in the response of terrestrial carbon sink to environmental drivers undermines carbon-climate feedback predictions. Scientific Reports, 2017, 7, 4765.	3.3	156
10	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. Environmental Research Letters, 2015, 10, 094008.	5.2	119
11	Reconciling estimates of the contemporary North American carbon balance among terrestrial biosphere models, atmospheric inversions, and a new approach for estimating net ecosystem exchange from inventoryâ€based data. Global Change Biology, 2012, 18, 1282-1299.	9.5	116
12	Gridded daily weather data for North America with comprehensive uncertainty quantification. Scientific Data, 2021, 8, 190.	5.3	85
13	Projecting changes in annual hydropower generation using regional runoff data: An assessment of the United States federal hydropower plants. Energy, 2015, 80, 239-250.	8.8	82
14	Response of Water Use Efficiency to Global Environmental Change Based on Output From Terrestrial Biosphere Models. Global Biogeochemical Cycles, 2017, 31, 1639-1655.	4.9	63
15	Integrating semantic web technologies and geospatial catalog services for geospatial information discovery and processing in cyberinfrastructure. GeoInformatica, 2011, 15, 273-303.	2.7	60
16	Field-experiment constraints on the enhancement of the terrestrial carbon sink by CO2 fertilization. Nature Geoscience, 2019, 12, 809-814.	12.9	58
17	The Unified North American Soil Map and its implication on the soil organic carbon stock in North America. Biogeosciences, 2013, 10, 2915-2930.	3.3	55
18	North America's net terrestrial CO&lt;sub&gt;2&lt;/sub&gt; exchange with the atmosphere 1990â€"2009. Biogeosciences, 2015, 12, 399-414.	3.3	54

#	Article	IF	Citations
19	Reduced North American terrestrial primary productivity linked to anomalous Arctic warming. Nature Geoscience, 2017, 10, 572-576.	12.9	54
20	Sensitivity of global terrestrial gross primary production to hydrologic states simulated by the Community Land Model using two runoff parameterizations. Journal of Advances in Modeling Earth Systems, 2014, 6, 658-679.	3.8	48
21	Toward â€œoptimalâ€·integration of terrestrial biosphere models. Geophysical Research Letters, 2015, 42, 4418-4428.	4.0	48
22	Observed positive vegetation-rainfall feedbacks in the Sahel dominated by a moisture recycling mechanism. Nature Communications, 2017, 8, 1873.	12.8	48
23	Land carbon models underestimate the severity and duration of droughtâ€™s impact on plant productivity. Scientific Reports, 2019, 9, 2758.	3.3	42
24	Global land carbon sink response to temperature and precipitation varies with ENSO phase. Environmental Research Letters, 2017, 12, 064007.	5.2	39
25	Towards a Geospatial Catalogue Federation Service. Photogrammetric Engineering and Remote Sensing, 2007, 73, 699-708.	0.6	38
26	Vegetation Functional Properties Determine Uncertainty of Simulated Ecosystem Productivity: A Traceability Analysis in the East Asian Monsoon Region. Global Biogeochemical Cycles, 2019, 33, 668-689.	4.9	38
27	Use of ebRIM-based CSW with sensor observation services for registry and discovery of remote-sensing observations. Computers and Geosciences, 2009, 35, 360-372.	4.2	37
28	Bridging Theory with Practice: An Exploratory Study of Visualization Use and Design for Climate Model Comparison. IEEE Transactions on Visualization and Computer Graphics, 2015, 21, 996-1014.	4.4	36
29	Use of grid computing for modeling virtual geospatial products. International Journal of Geographical Information Science, 2009, 23, 581-604.	4.8	35
30	Sharing geospatial provenance in a service-oriented environment. Computers, Environment and Urban Systems, 2011, 35, 333-343.	7.1	35
31	Uncertainty analysis of terrestrial net primary productivity and net biome productivity in China during 1901â€"2005. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1372-1393.	3.0	35
32	Intelligent services for discovery of complex geospatial features from remote sensing imagery. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 83, 151-164.	11.1	32
33	Decadal trends in the seasonal-cycle amplitude of terrestrial CO_2 exchange resulting from the ensemble of terrestrial biosphere models. Tellus, Series B: Chemical and Physical Meteorology, 2022, 68, 28968.	1.6	31
34	Semantic Web-based geospatial knowledge transformation. Computers and Geosciences, 2009, 35, 798-808.	4.2	30
35	SimilarityExplorer: A Visual Interâ€·Comparison Tool for Multifaceted Climate Data. Computer Graphics Forum, 2014, 33, 341-350.	3.0	29
36	A taxonomy of geospatial services for global service discovery and interoperability. Computers and Geosciences, 2009, 35, 783-790.	4.2	28

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37	The development of a geospatial data Grid by integrating OGC Web services with Globus-based Grid technology. Concurrency Computation Practice and Experience, 2008, 20, 1617-1635.	2.2	27
38	UV-CDAT: Analyzing Climate Datasets from a User's Perspective. Computing in Science and Engineering, 2013, 15, 94-103.	1.2	26
39	Forests dominate the interannual variability of the North American carbon sink. Environmental Research Letters, 2018, 13, 084015.	5.2	23
40	Transformation of HDF-EOS metadata from the ECS model to ISO 19115-based XML. Computers and Geosciences, 2007, 33, 238-247.	4.2	22
41	Global simulation of bioenergy crop productivity: analytical framework and case study for switchgrass. GCB Bioenergy, 2014, 6, 14-25.	5.6	22
42	Visual Reconciliation of Alternative Similarity Spaces in Climate Modeling. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 1923-1932.	4.4	20
43	Semantic Augmentations for Geospatial Catalogue Service. , 2006, , .		19
44	Evaluation of simulated soil carbon dynamics in Arctic-Boreal ecosystems. Environmental Research Letters, 2020, 15, 025005.	5.2	19
45	The PBase Scientific Workflow Provenance Repository. International Journal of Digital Curation, 2014, 9, 28-38.	0.2	18
46	The Atmospheric Carbon and Transport (ACT)-America Mission. Bulletin of the American Meteorological Society, 2021, 102, E1714-E1734.	3.3	17
47	An Optimized Grid-Based, OGC Standards-Compliant Collaborative Software System for Serving NASA Geospatial Data. , 2006, , .		16
48	GEOSS Component and Service Registry: Design, Implementation and Lessons Learned. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 1678-1686.	4.9	16
49	Impacts of land use change and elevated CO&lt;sub&gt;2&lt;/sub&gt; on the interannual variations and seasonal cycles of gross primary productivity in China. Earth System Dynamics, 2020, 11, 235-249.	7.1	16
50	Global vegetation biomass production efficiency constrained by models and observations. Global Change Biology, 2020, 26, 1474-1484.	9.5	15
51	Atmospheric Carbon and Transport â€" America (ACTâ€America) Data Sets: Description, Management, and Delivery. Earth and Space Science, 2021, 8, e2020EA001634.	2.6	15
52	A Multiyear Gridded Data Ensemble of Surface Biogenic Carbon Fluxes for North America: Evaluation and Analysis of Results. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005314.	3.0	14
53	Validation of a Statistical Methodology for Extracting Vegetation Feedbacks: Focus on North African Ecosystems in the Community Earth System Model. Journal of Climate, 2018, 31, 1565-1586.	3.2	13
54	Divergence in land surface modeling: linking spread to structure. Environmental Research Communications, 2019, 1, 111004.	2.3	13

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55	Modeling suggests fossil fuel emissions have been driving increased land carbon uptake since the turn of the 20th Century. Scientific Reports, 2020, 10, 9059.	3.3	11
56	The design and implementation of a grid-enabled catalogue service. , 0, , .		10
57	Grid computing enhances standards-compatible geospatial catalogue service. Computers and Geosciences, 2010, 36, 411-421.	4.2	10
58	Design and Implementation of GeoBrain Online Analysis System (GeOnAS). Lecture Notes in Computer Science, 2008, , 27-36.	1.3	10
59	Toward verifying fossil fuel CO_2 emissions with the CMAQ model: Motivation, model description and initial simulation. Journal of the Air and Waste Management Association, 2014, 64, 419-435.	1.9	9
60	How well do terrestrial biosphere models simulate coarse-scale runoff in the contiguous United States?. Ecological Modelling, 2015, 303, 87-96.	2.5	9
61	Advancing a Model-Validated Statistical Method for Decomposing the Key Oceanic Drivers of Regional Climate: Focus on Northern and Tropical African Climate Variability in the Community Earth System Model (CESM). Journal of Climate, 2017, 30, 8517-8537.	3.2	9
62	DataONE: A Data Federation with Provenance Support. Lecture Notes in Computer Science, 2016, , 230-234.	1.3	8
63	Development of mpi_EPIC model for global agroecosystem modeling. Computers and Electronics in Agriculture, 2015, 111, 48-54.	7.7	6
64	Implementation of data citations and persistent identifiers at the ORNL DAAC. Ecological Informatics, 2016, 33, 10-16.	5.2	6
65	Effective Acquisition of Geospatial Data Products in a Collaborative Grid Environment. , 2006, , .		5
66	Stream-Reach Identification for New Run-of-River Hydropower Development through a Merit Matrix–Based Geospatial Algorithm. Journal of Water Resources Planning and Management - ASCE, 2014, 140, 04014016.	2.6	5
67	Call to Action for Global Access to and Harmonization of Quality Information of Individual Earth Science Datasets. Data Science Journal, 2021, 20, .	1.3	5
68	The Terrestrial Biosphere Model Farm. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	5
69	Grid-enabled OGC environment for EO data and services in support of Canada&#x2019;s forest applications. , 2007, , .		4
70	Discover, visualize, and deliver geospatial data through OGC standards-based WebGIS system. , 2009, , .		4
71	Sharing of Distributed Geospatial Data through Grid Technology. , 2009, , 222-228.		3
72	Grid-enabled Standard-compliant Open Computing Environment for Earth Science Exploration and Applications. , 2006, , .		2

#	Article	IF	Citations
73	Semantic feature catalogue service. , 2012, , .		1
74	A Semi-Automated Workflow Solution for Data Set Publication. ISPRS International Journal of Geo-Information, 2016, 5, 30.	2.9	1
75	Accessing and distributing large volumes of NetCDF data. , 2016, , .		1
76	Preparing, storing, and distributing multi-dimensional scientific data. , 2015, , .		0
77	Preserve: Protecting Data for Long-Term Use. , 2018, , 89-113.		0
78	Grid, Geospatial. , 2008, , 419-424.		0
79	Geospatial Image Metadata Catalog Services. , 2009, , 171-177.		0
80	Grid Computing and its Application to Geoinformatics. , 2009, , 213-221.		0
81	Grid, Geospatial. , 2016, , 1-7.		0
82	Grid, Geospatial. , 2017, , 829-834.		0