Yaxing Wei

List of Publications by Year
in descending order

82 papers	4,172 citations	147801 31 h-index	118850 62 g-index
95 all docs	95 docs citations	95 times ranked	6238 citing authors

#	Article	IF	Citations
1	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
2	The Terrestrial Biosphere Model Farm. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	5
3	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
4	Gridded daily weather data for North America with comprehensive uncertainty quantification. Scientific Data, 2021, 8, 190.	5.3	85
5	Atmospheric Carbon and Transport – America (ACT–America) Data Sets: Description, Management, and Delivery. Earth and Space Science, 2021, 8, e2020EA001634.	2.6	15
6	The Atmospheric Carbon and Transport (ACT)-America Mission. Bulletin of the American Meteorological Society, 2021, 102, E1714-E1734.	3.3	17
7	Global vegetation biomass production efficiency constrained by models and observations. Global Change Biology, 2020, 26, 1474-1484.	9.5	15
8	Evaluation of simulated soil carbon dynamics in Arctic-Boreal ecosystems. Environmental Research Letters, 2020, 15, 025005.	5.2	19
9	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
10	Impacts of land use change and elevated CO_2 on the interannual variations and seasonal cycles of gross primary productivity in China. Earth System Dynamics, 2020, 11, 235-249.	7.1	16
11	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
12	Divergence in land surface modeling: linking spread to structure. Environmental Research Communications, 2019, 1, 111004.	2.3	13
13	Field-experiment constraints on the enhancement of the terrestrial carbon sink by CO2 fertilization. Nature Geoscience, 2019, 12, 809-814.	12.9	58
14	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
15	Land carbon models underestimate the severity and duration of drought's impact on plant productivity. Scientific Reports, 2019, 9, 2758.	3.3	42
16	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
17	Preserve: Protecting Data for Long-Term Use. , 2018, , 89-113.		0
18	Enhanced peak growth of global vegetation and its key mechanisms. Nature Ecology and Evolution, 2018, 2, 1897-1905.	7.8	169

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19	Forests dominate the interannual variability of the North American carbon sink. Environmental Research Letters, 2018, 13, 084015.	5.2	23
20	Global land carbon sink response to temperature and precipitation varies with ENSO phase. Environmental Research Letters, 2017, 12, 064007.	5.2	39
21	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
22	Uncertainty in the response of terrestrial carbon sink to environmental drivers undermines carbon-climate feedback predictions. Scientific Reports, 2017, 7, 4765.	3.3	156
23	Global patterns of drought recovery. Nature, 2017, 548, 202-205.	27.8	560
24	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
25	Observed positive vegetation-rainfall feedbacks in the Sahel dominated by a moisture recycling mechanism. Nature Communications, 2017, 8, 1873.	12.8	48
26	Reduced North American terrestrial primary productivity linked to anomalous Arctic warming. Nature Geoscience, 2017, 10, 572-576.	12.9	54
27	Grid, Geospatial. , 2017, , 829-834.		0
28	A Semi-Automated Workflow Solution for Data Set Publication. ISPRS International Journal of Geo-Information, 2016, 5, 30.	2.9	1
29	Uncertainty analysis of terrestrial net primary productivity and net biome productivity in China during 1901–2005. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1372-1393.	3.0	35
30	Accessing and distributing large volumes of NetCDF data. , 2016, , .		1
31	Implementation of data citations and persistent identifiers at the ORNL DAAC. Ecological Informatics, 2016, 33, 10-16.	5.2	6
32	Toward more realistic projections of soil carbon dynamics by Earth system models. Global Biogeochemical Cycles, 2016, 30, 40-56.	4.9	343
33	DataONE: A Data Federation with Provenance Support. Lecture Notes in Computer Science, 2016, , 230-234.	1.3	8
34	Grid, Geospatial. , 2016, , 1-7.		0
35	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
36	Toward "optimal" integration of terrestrial biosphere models. Geophysical Research Letters, 2015, 42, 4418-4428.	4.0	48

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37	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. Environmental Research Letters, 2015, 10, 094008.	5.2	119
38	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
39	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
40	Preparing, storing, and distributing multi-dimensional scientific data. , 2015, , .		0
41	Development of mpi_EPIC model for global agroecosystem modeling. Computers and Electronics in Agriculture, 2015, 111, 48-54.	7.7	6
42	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
43	How well do terrestrial biosphere models simulate coarse-scale runoff in the contiguous United States?. Ecological Modelling, 2015, 303, 87-96.	2.5	9
44	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
45	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
46	Visual Reconciliation of Alternative Similarity Spaces in Climate Modeling. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 1923-1932.	4.4	20
47	Global simulation of bioenergy crop productivity: analytical framework and case study for switchgrass. GCB Bioenergy, 2014, 6, 14-25.	5.6	22
48	SimilarityExplorer: A Visual Interâ€Comparison Tool for Multifaceted Climate Data. Computer Graphics Forum, 2014, 33, 341-350.	3.0	29
49	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
50	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
51	Stream-Reach Identification for New Run-of-River Hydropower Development through a Merit Matrixâ€"Based Geospatial Algorithm. Journal of Water Resources Planning and Management - ASCE, 2014, 140, 04014016.	2.6	5
52	The PBase Scientific Workflow Provenance Repository. International Journal of Digital Curation, 2014, 9, 28-38.	0.2	18
53	UV-CDAT: Analyzing Climate Datasets from a User's Perspective. Computing in Science and Engineering, 2013, 15, 94-103.	1.2	26
54	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

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55	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
56	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
57	Semantic feature catalogue service. , 2012, , .		1
58	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
59	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
60	North American Carbon Program (NACP) regional interim synthesis: Terrestrial biospheric model intercomparison. Ecological Modelling, 2012, 232, 144-157.	2.5	207
61	Integrating semantic web technologies and geospatial catalog services for geospatial information discovery and processing in cyberinfrastructure. GeoInformatica, 2011, 15, 273-303.	2.7	60
62	Sharing geospatial provenance in a service-oriented environment. Computers, Environment and Urban Systems, 2011, 35, 333-343.	7.1	35
63	Grid computing enhances standards-compatible geospatial catalogue service. Computers and Geosciences, 2010, 36, 411-421.	4.2	10
64	Use of grid computing for modeling virtual geospatial products. International Journal of Geographical Information Science, 2009, 23, 581-604.	4.8	35
65	A taxonomy of geospatial services for global service discovery and interoperability. Computers and Geosciences, 2009, 35, 783-790.	4.2	28
66	Semantic Web-based geospatial knowledge transformation. Computers and Geosciences, 2009, 35, 798-808.	4.2	30
67	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
68	Discover, visualize, and deliver geospatial data through OGC standards-based WebGIS system. , 2009, , .		4
69	Sharing of Distributed Geospatial Data through Grid Technology. , 2009, , 222-228.		3
70	Geospatial Image Metadata Catalog Services. , 2009, , 171-177.		0
71	Grid Computing and its Application to Geoinformatics. , 2009, , 213-221.		0
72	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

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73	Design and Implementation of GeoBrain Online Analysis System (GeOnAS). Lecture Notes in Computer Science, 2008, , 27-36.	1.3	10
74	Grid, Geospatial. , 2008, , 419-424.		0
75	Grid-enabled OGC environment for EO data and services in support of Canada&#x2019;s forest applications. , 2007, , .		4
76	Towards a Geospatial Catalogue Federation Service. Photogrammetric Engineering and Remote Sensing, 2007, 73, 699-708.	0.6	38
77	Transformation of HDF-EOS metadata from the ECS model to ISO 19115-based XML. Computers and Geosciences, 2007, 33, 238-247.	4.2	22
78	An Optimized Grid-Based, OGC Standards-Compliant Collaborative Software System for Serving NASA Geospatial Data. , 2006, , .		16
79	Effective Acquisition of Geospatial Data Products in a Collaborative Grid Environment. , 2006, , .		5
80	Semantic Augmentations for Geospatial Catalogue Service. , 2006, , .		19
81	Grid-enabled Standard-compliant Open Computing Environment for Earth Science Exploration and Applications. , 2006, , .		2
82	The design and implementation of a grid-enabled catalogue service. , 0, , .		10