Shaomin Liu

List of Publications by Year
in descending order

113 papers	5,752 citations	81743 39 h-index	79541 73 g-index
114 all docs	114 docs citations	114 times ranked	3966 citing authors

#	Article	IF	Citations
1	Assessment and improvement of Noah-MP for simulating water and heat exchange over alpine grassland in growing season. Science China Earth Sciences, 2022, 65, 536-552.	2.3	9
2	Applications of a thermal-based two-source energy balance model coupled to surface soil moisture. Remote Sensing of Environment, 2022, 271, 112923.	4.6	18
3	Applying a Wavelet Transform Technique to Optimize General Fitting Models for SM Analysis: A Case Study in Downscaling over the Qinghaiâ€"Tibet Plateau. Remote Sensing, 2022, 14, 3063.	1.8	9
4	Application of the two-source energy balance model with microwave-derived soil moisture in a semi-arid agricultural region. International Journal of Applied Earth Observation and Geoinformation, 2022, 112, 102879.	0.9	0
5	Improving predictions of evapotranspiration by integrating multi-source observations and land surface model. Agricultural Water Management, 2022, 272, 107827.	2.4	12
6	Physiological and environmental control on ecosystem water use efficiency in response to drought across the northern hemisphere. Science of the Total Environment, 2021, 758, 143599.	3.9	48
7	Modeling Transpiration with Sun-Induced Chlorophyll Fluorescence Observations via Carbon-Water Coupling Methods. Remote Sensing, 2021, 13, 804.	1.8	8
8	Uncertainty analysis of eleven multisource soil moisture products in the third pole environment based on the three-corned hat method. Remote Sensing of Environment, 2021, 255, 112225.	4.6	41
9	Diagnosing the Temperature Sensitivity of Ecosystem Respiration in Northern Highâ€"Latitude Regions. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005998.	1.3	3
10	Improve the Performance of the Noahâ€"MPâ€"Crop Model by Jointly Assimilating Soil Moisture and Vegetation Phenology Data. Journal of Advances in Modeling Earth Systems, 2021, 13, e2020MS002394.	1.3	15
11	Evapotranspiration partitioning for multiple ecosystems within a dryland watershed: Seasonal variations and controlling factors. Journal of Hydrology, 2021, 598, 126483.	2.3	24
12	Simulating Airflow Around Flexible Vegetative Windbreaks. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034578.	1.2	3
13	Reconstruction of remotely sensed daily evapotranspiration data in cloudy-sky conditions. Agricultural Water Management, 2021, 255, 107000.	2.4	3
14	Estimating Corn Canopy Water Content From Normalized Difference Water Index (NDWI): An Optimized NDWI-Based Scheme and Its Feasibility for Retrieving Corn VWC. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 8168-8181.	2.7	12
15	Continuous evaluation of the spatial representativeness of land surface temperature validation sites. Remote Sensing of Environment, 2021, 265, 112669.	4.6	21
16	Upscaling Evapotranspiration from a Single-Site to Satellite Pixel Scale. Remote Sensing, 2021, 13, 4072.	1.8	12
17	A Satellite-Based Method for National Winter Wheat Yield Estimating in China. Remote Sensing, 2021, 13, 4680.	1.8	13
18	Responses of Water Use Efficiency to Drought in Southwest China. Remote Sensing, 2020, 12, 199.	1.8	45

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19	Impact of Lake/Reservoir Expansion and Shrinkage on Energy and Water Vapor Fluxes in the Surrounding Area. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032833.	1.2	18
20	Evaluating Spatial Heterogeneity of Land Surface Hydrothermal Conditions in the Heihe River Basin. Chinese Geographical Science, 2020, 30, 855-875.	1.2	8
21	Investigating microclimate effects in an oasis-desert interaction zone. Agricultural and Forest Meteorology, 2020, 290, 107992.	1.9	13
22	Estimation of Daily Terrestrial Latent Heat Flux with High Spatial Resolution from MODIS and Chinese GF-1 Data. Sensors, 2020, 20, 2811.	2.1	10
23	Mapping regional evapotranspiration in cloudy skies via variational assimilation of all-weather land surface temperature observations. Journal of Hydrology, 2020, 585, 124790.	2.3	24
24	A Bayesian Three-Cornered Hat (BTCH) Method: Improving the Terrestrial Evapotranspiration Estimation. Remote Sensing, 2020, 12, 878.	1.8	24
25	Estimation of surface heat fluxes using multi-angular observations of radiative surface temperature. Remote Sensing of Environment, 2020, 239, 111674.	4.6	14
26	Exploring evapotranspiration changes in a typical endorheic basin through the integrated observatory network. Agricultural and Forest Meteorology, 2020, 290, 108010.	1.9	34
27	Integrating Latent Heat Flux Products from MODIS and Landsat Data Using Multi-Resolution Kalman Filter Method in the Midstream of Heihe River Basin of Northwest China. Remote Sensing, 2019, 11, 1787.	1.8	2
28	Evaluation of twelve evapotranspiration products from machine learning, remote sensing and land surface models over conterminous United States. Journal of Hydrology, 2019, 578, 124105.	2.3	92
29	Evaluation of a satellite-derived model parameterized by three soil moisture constraints to estimate terrestrial latent heat flux in the Heihe River basin of Northwest China. Science of the Total Environment, 2019, 695, 133787.	3.9	17
30	Component radiative temperatures over sparsely vegetated surfaces and their potential for upscaling land surface temperature. Agricultural and Forest Meteorology, 2019, 276-277, 107600.	1.9	11
31	Rebuilding a Microwave Soil Moisture Product Using Random Forest Adopting AMSR-E/AMSR2 Brightness Temperature and SMAP over the Qinghaiâ€"Tibet Plateau, China. Remote Sensing, 2019, 11, 683.	1.8	43
32	Evaluation of SMAP, SMOS-IC, FY3B, JAXA, and LPRM Soil Moisture Products over the Qinghai-Tibet Plateau and Its Surrounding Areas. Remote Sensing, 2019, 11, 792.	1.8	49
33	Micrometeorological Methods to Determine Evapotranspiration. Ecohydrology, 2019, , 201-239.	0.2	0
34	A Method Based on Temporal Component Decomposition for Estimating 1-km All-Weather Land Surface Temperature by Merging Satellite Thermal Infrared and Passive Microwave Observations. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 4670-4691.	2.7	97
35	Correction to â€œA Method Based on Temporal Component Decomposition for Estimating 1-km All-Weather Land Surface Temperature by Merging Satellite Thermal Infrared and Passive Microwave Observationsâ€•[Feb 19 4670-4691]. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 6254-6254.	2.7	3
36	Mapping Regional Turbulent Heat Fluxes via Assimilation of MODIS Land Surface Temperature Data into an Ensemble Kalman Smoother Framework. Earth and Space Science, 2019, 6, 2423-2442.	1.1	10

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37	Merging the MODIS and Landsat Terrestrial Latent Heat Flux Products Using the Multiresolution Tree Method. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 2811-2823.	2.7	11
38	Mapping regional turbulent heat fluxes via variational assimilation of land surface temperature data from polar orbiting satellites. Remote Sensing of Environment, 2019, 221, 444-461.	4.6	59
39	Uneven winter snow influence on tree growth across temperate China. Global Change Biology, 2019, 25, 144-154.	4.2	39
40	Integrated hydrometeorological, snow and frozen-ground observations in the alpine region of the Heihe River Basin, China. Earth System Science Data, 2019, 11, 1483-1499.	3.7	79
41	Estimation of Turbulent Heat Fluxes by Assimilation of Land Surface Temperature Observations From GOES Satellites Into an Ensemble Kalman Smoother Framework. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2409-2423.	1.2	24
42	Hydrological Cycle in the Heihe River Basin and Its Implication for Water Resource Management in Endorheic Basins. Journal of Geophysical Research D: Atmospheres, 2018, 123, 890-914.	1.2	189
43	Weakening Relationship Between Vegetation Growth Over the Tibetan Plateau and Large‐Scale Climate Variability. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 1247-1259.	1.3	19
44	Differentiating drought legacy effects on vegetation growth over the temperate Northern Hemisphere. Global Change Biology, 2018, 24, 504-516.	4.2	233
45	Evaluation of the Weak Constraint Data Assimilation Approach for Estimating Turbulent Heat Fluxes at Six Sites. Remote Sensing, 2018, 10, 1994.	1.8	16
46	The Heihe Integrated Observatory Network: A Basin‐Scale Land Surface Processes Observatory in China. Vadose Zone Journal, 2018, 17, 1-21.	1.3	258
47	A long-term 0.01° surface air temperature dataset of Tibetan Plateau. Data in Brief, 2018, 20, 748-752.	0.5	6
48	Monitoring and validating spatially and temporally continuous daily evaporation and transpiration at river basin scale. Remote Sensing of Environment, 2018, 219, 72-88.	4.6	82
49	Satellite Detection of Water Stress Effects on Terrestrial Latent Heat Flux With MODIS Shortwave Infrared Reflectance Data. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,410.	1.2	10
50	A Parameterized Multiangular Microwave Emission Model of L-, C-, and X-Bands for Corn Considering Multiple-Scattering Effects. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 1249-1253.	1.4	2
51	Downscaling of surface air temperature over the Tibetan Plateau based on DEM. International Journal of Applied Earth Observation and Geoinformation, 2018, 73, 136-147.	1.4	32
52	Intercomparison of Six Upscaling Evapotranspiration Methods: From Site to the Satellite Pixel. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6777-6803.	1.2	50
53	Wind Dynamics Over a Highly Heterogeneous Oasis Area: An Experimental and Numerical Study. Journal of Geophysical Research D: Atmospheres, 2018, 123, 8418-8440.	1.2	11
54	Evaluating Different Machine Learning Methods for Upscaling Evapotranspiration from Flux Towers to the Regional Scale. Journal of Geophysical Research D: Atmospheres, 2018, 123, 8674-8690.	1.2	141

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55	Micrometeorological Methods to Determine Evapotranspiration. Ecohydrology, 2018, , 1-39.	0.2	5
56	Estimation of daily evapotranspiration and irrigation water efficiency at a Landsat-like scale for an arid irrigation area using multi-source remote sensing data. Remote Sensing of Environment, 2018, 216, 715-734.	4.6	120
57	Micrometeorological Methods to Determine Evapotranspiration. Ecohydrology, 2018, , 1-39.	0.2	1
58	Improving global terrestrial evapotranspiration estimation using support vector machine by integrating three process-based algorithms. Agricultural and Forest Meteorology, 2017, 242, 55-74.	1.9	96
59	A simple temperature domain two‐source model for estimating agricultural field surface energy fluxes from Landsat images. Journal of Geophysical Research D: Atmospheres, 2017, 122, 5211-5236.	1.2	43
60	A multiscale dataset for understanding complex eco-hydrological processes in a heterogeneous oasis system. Scientific Data, 2017, 4, 170083.	2.4	109
61	Assessment of the Energy Balance Closure under Advective Conditions and Its Impact Using Remote Sensing Data. Journal of Applied Meteorology and Climatology, 2017, 56, 127-140.	0.6	79
62	Quantification of the Scale Effect in Downscaling Remotely Sensed Land Surface Temperature. Remote Sensing, 2016, 8, 975.	1.8	37
63	Validation of Regional-Scale Remote Sensing Products in China: From Site to Network. Remote Sensing, 2016, 8, 980.	1.8	25
64	A framework for validating remotely sensed evapotranspiration. , 2016, , .		1
65	Upscaling evapotranspiration measurements from multi-site to the satellite pixel scale over heterogeneous land surfaces. Agricultural and Forest Meteorology, 2016, 230-231, 97-113.	1.9	180
66	Applications of a thermal-based two-source energy balance model using Priestley-Taylor approach for surface temperature partitioning under advective conditions. Journal of Hydrology, 2016, 540, 574-587.	2.3	64
67	A new model for the automatic relative radiometric normalization of multiple images with pseudo-invariant features. International Journal of Remote Sensing, 2016, 37, 4554-4573.	1.3	27
68	Partitioning Evapotranspiration into Soil Evaporation and Canopy Transpiration via a Two-Source Variational Data Assimilation System. Journal of Hydrometeorology, 2016, 17, 2353-2370.	0.7	41
69	Retrieving high-resolution surface solar radiation with cloud parameters derived by combining MODIS and MTSAT data. Atmospheric Chemistry and Physics, 2016, 16, 2543-2557.	1.9	78
70	Application of remote sensing-based two-source energy balance model for mapping field surface fluxes with composite and component surface temperatures. Agricultural and Forest Meteorology, 2016, 230-231, 8-19.	1.9	80
71	Assessment and simulation of global terrestrial latent heat flux by synthesis of CMIP5 climate models and surface eddy covariance observations. Agricultural and Forest Meteorology, 2016, 223, 151-167.	1.9	25
72	Scaling Flux Tower Observations of Sensible Heat Flux Using Weighted Area-to-Area Regression Kriging. Atmosphere, 2015, 6, 1032-1044.	1.0	13

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73	Temporal Upscaling and Reconstruction of Thermal Remotely Sensed Instantaneous Evapotranspiration. Remote Sensing, 2015, 7, 3400-3425.	1.8	47
74	Using the Surface Temperature-Albedo Space to Separate Regional Soil and Vegetation Temperatures from ASTER Data. Remote Sensing, 2015, 7, 5828-5848.	1.8	14
75	Validation and Performance Evaluations of Methods for Estimating Land Surface Temperatures from ASTER Data in the Middle Reach of the Heihe River Basin, Northwest China. Remote Sensing, 2015, 7, 7126-7156.	1.8	29
76	A dual-pass data assimilation scheme for estimating surface fluxes with FY3A-VIRR land surface temperature. Science China Earth Sciences, 2015, 58, 211-230.	2.3	20
77	Estimations of Regional Surface Energy Fluxes Over Heterogeneous Oasisâ€"Desert Surfaces in the Middle Reaches of the Heihe River During HiWATER-MUSOEXE. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 671-675.	1.4	40
78	Characterizing the Footprint of Eddy Covariance System and Large Aperture Scintillometer Measurements to Validate Satellite-Based Surface Fluxes. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 943-947.	1.4	33
79	Upscaling Sensible Heat Fluxes With Area-to-Area Regression Kriging. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 656-660.	1.4	24
80	Estimating and Validating Soil Evaporation and Crop Transpiration During the HiWATER-MUSOEXE. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 334-338.	1.4	21
81	Assessment of Uncertainties in Eddy Covariance Flux Measurement Based on Intensive Flux Matrix of HiWATER-MUSOEXE. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 259-263.	1.4	59
82	Estimation of evapotranspiration over the terrestrial ecosystems in China. Ecohydrology, 2014, 7, 139-149.	1.1	45
83	Estimating the spatial distribution of soil moisture based on Bayesian maximum entropy method with auxiliary data from remote sensing. International Journal of Applied Earth Observation and Geoinformation, 2014, 32, 54-66.	1.4	53
84	Improvements in land surface temperature retrieval based on atmospheric water vapour content and atmospheric temperature. International Journal of Remote Sensing, 2014, 35, 4881-4904.	1.3	2
85	Satellite-Based Analysis of Evapotranspiration and Water Balance in the Grassland Ecosystems of Dryland East Asia. PLoS ONE, 2014, 9, e97295.	1.1	26
86	MODIS-driven estimation of terrestrial latent heat flux in China based on a modified Priestleyâ€"Taylor algorithm. Agricultural and Forest Meteorology, 2013, 171-172, 187-202.	1.9	193
87	Preliminary validation of GLASS-DSSR products using surface measurements collected in arid and semi-arid regions of China. International Journal of Digital Earth, 2013, 6, 50-68.	1.6	16
88	Heihe Watershed Allied Telemetry Experimental Research (HiWATER): Scientific Objectives and Experimental Design. Bulletin of the American Meteorological Society, 2013, 94, 1145-1160.	1.7	705
89	Intercomparison of evapotranspiration models using remote sensing date and ground measurements during the MUSOEXE-12 campaign. , 2013, , .		1
90	Intercomparison of surface energy flux measurement systems used during the HiWATERâ€"MUSOEXE. Journal of Geophysical Research D: Atmospheres, 2013, 118, 13,140.	1.2	239

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91	Satellite detection of increases in global land surface evapotranspiration during 1984–2007. International Journal of Digital Earth, 2012, 5, 299-318.	1.6	19
92	Estimation of net surface shortwave radiation from MODIS data. International Journal of Remote Sensing, 2012, 33, 804-825.	1.3	34
93	Validation of remotely sensed evapotranspiration over the Hai River Basin, China. Journal of Geophysical Research, 2012, 117, .	3.3	167
94	Estimating turbulent fluxes through assimilation of geostationary operational environmental satellites data using ensemble Kalman filter. Journal of Geophysical Research, 2011, 116, .	3.3	39
95	A LUT-based approach to estimate surface solar irradiance by combining MODIS and MTSAT data. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	56
96	Evaluation of EDI derived from the exponential evapotranspiration model for monitoring China's surface drought. Environmental Earth Sciences, 2011, 63, 425-436.	1.3	22
97	Improving Predictions of Water and Heat Fluxes by Assimilating MODIS Land Surface Temperature Products into the Common Land Model. Journal of Hydrometeorology, 2011, 12, 227-244.	0.7	56
98	The characteristics and parameterization of aerodynamic roughness length over heterogeneous surfaces. Advances in Atmospheric Sciences, 2009, 26, 180-190.	1.9	24
99	Watershed Allied Telemetry Experimental Research. Journal of Geophysical Research, 2009, 114, .	3.3	295
100	Turbulent Flux Transfer over Bare-Soil Surfaces: Characteristics and Parameterization. Journal of Applied Meteorology and Climatology, 2008, 47, 276-290.	0.6	163
101	Estimation of Regional Evapotranspiration by TM/ETM+ Data over Heterogeneous Surfaces. Photogrammetric Engineering and Remote Sensing, 2007, 73, 1169-1178.	0.3	31
102	Evaluating parameterizations of aerodynamic resistance to heat transfer using field measurements. Hydrology and Earth System Sciences, 2007, 11, 769-783.	1.9	139
103	Application of ensemble kalman filter to geophysical parameters retrieval in remote sensing: A case study of kernel-driven BRDF model inversion. Science in China Series D: Earth Sciences, 2006, 49, 632-640.	0.9	8
104	Study on NDVI-T s space by combining LAI and evapotranspiration. Science in China Series D: Earth Sciences, 2006, 49, 747-754.	0.9	22
105	Evaluation of three complementary relationship approaches for evapotranspiration over the Yellow River basin. Hydrological Processes, 2006, 20, 2347-2361.	1.1	38
106	A conception of digital agriculture. , 0, , .		15
107	An intercomparison study on models of estimating the aerodynamic resistance. , 0, , .		1
108	Studies on methods for quality assessment of crop spectral data. , 0, , .		0

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109	A simple interpretation of NDVI-Ts space combining LAI and evapotranspiration. , 0, , .		0
110	Comparison of different complementary relationship models for estimating regional evapotranspiration. , 0, , .		1
111	Estimation of regional evapotranspiration in the mu us sandland. , 0, , .		0
112	A study of soil heat flux. , 0, , .		0
113	Estimation of Turbulent Heat Fluxes and Gross Primary Productivity by Assimilating Land Surface Temperature and Leaf Area Index. Water Resources Research, 0, , .	1.7	5