

# Xihan Mu

## List of Publications by Year in descending order

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Version: 2024-02-01

81  
papers

1,930  
citations

331670

21  
h-index

265206

42  
g-index

81  
all docs

81  
docs citations

81  
times ranked

1678  
citing authors

#	ARTICLE	IF	CITATIONS
1	Review of indirect optical measurements of leaf area index: Recent advances, challenges, and perspectives. <i>Agricultural and Forest Meteorology</i> , 2019, 265, 390-411.	4.8	277
2	Remote sensing algorithms for estimation of fractional vegetation cover using pure vegetation index values: A review. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2020, 159, 364-377.	11.1	187
3	Indirect measurement of leaf area index on the basis of path length distribution. <i>Remote Sensing of Environment</i> , 2014, 155, 239-247.	11.0	119
4	A novel method for extracting green fractional vegetation cover from digital images. <i>Journal of Vegetation Science</i> , 2012, 23, 406-418.	2.2	99
5	LESS: LargE-Scale remote sensing data and image simulation framework over heterogeneous 3D scenes. <i>Remote Sensing of Environment</i> , 2019, 221, 695-706.	11.0	99
6	Estimating fractional vegetation cover and the vegetation index of bare soil and highly dense vegetation with a physically based method. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2017, 58, 168-176.	2.8	89
7	Fractional vegetation cover estimation by using multi-angle vegetation index. <i>Remote Sensing of Environment</i> , 2018, 216, 44-56.	11.0	68
8	Extracting the Green Fractional Vegetation Cover from Digital Images Using a Shadow-Resistant Algorithm (SHAR-LABFVC). <i>Remote Sensing</i> , 2015, 7, 10425-10443.	4.0	66
9	Improving the estimation of fractional vegetation cover from UAV RGB imagery by colour unmixing. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2019, 158, 23-34.	11.1	61
10	Topographic radiation modeling and spatial scaling of clear-sky land surface longwave radiation over rugged terrain. <i>Remote Sensing of Environment</i> , 2016, 172, 15-27.	11.0	55
11	Validating GEOV1 Fractional Vegetation Cover Derived From Coarse-Resolution Remote Sensing Images Over Croplands. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2015, 8, 439-446.	4.9	53
12	Angular Normalization of Land Surface Temperature and Emissivity Using Multiangular Middle and Thermal Infrared Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2014, 52, 4913-4931.	6.3	43
13	Evaluation of Sampling Methods for Validation of Remotely Sensed Fractional Vegetation Cover. <i>Remote Sensing</i> , 2015, 7, 16164-16182.	4.0	40
14	A half-Gaussian fitting method for estimating fractional vegetation cover of corn crops using unmanned aerial vehicle images. <i>Agricultural and Forest Meteorology</i> , 2018, 262, 379-390.	4.8	39
15	Toward operational shortwave radiation modeling and retrieval over rugged terrain. <i>Remote Sensing of Environment</i> , 2018, 205, 419-433.	11.0	38
16	Temporal Extrapolation of Daily Downward Shortwave Radiation Over Cloud-Free Rugged Terrains. Part 1: Analysis of Topographic Effects. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2018, 56, 6375-6394.	6.3	34
17	Modeling surface longwave radiation over high-relief terrain. <i>Remote Sensing of Environment</i> , 2020, 237, 111556.	11.0	32
18	Quantifying Understorey and Overstorey Vegetation Cover Using UAV-Based RGB Imagery in Forest Plantation. <i>Remote Sensing</i> , 2020, 12, 298.	4.0	31

#	ARTICLE	IF	CITATIONS
19	Using Airborne Laser Scanner and Path Length Distribution Model to Quantify Clumping Effect and Estimate Leaf Area Index. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 3196-3209.	6.3	29
20	A Radiative Transfer Model for Heterogeneous Agro-Forestry Scenarios. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 4613-4628.	6.3	27
21	Estimating structural parameters of agricultural crops from ground-based multi-angular digital images with a fractional model of sun and shade components. Agricultural and Forest Meteorology, 2017, 246, 162-177.	4.8	24
22	Characterizing reflectance anisotropy of background soil in open-canopy plantations using UAV-based multiangular images. ISPRS Journal of Photogrammetry and Remote Sensing, 2021, 177, 263-278.	11.1	23
23	Evaluation of Four Sky View Factor Algorithms Using Digital Surface and Elevation Model Data. Earth and Space Science, 2019, 6, 222-237.	2.6	22
24	Evaluation of the Vegetation-Index-Based Dimidiate Pixel Model for Fractional Vegetation Cover Estimation. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14.	6.3	22
25	Improved Methods for Spectral Calibration of On-Orbit Imaging Spectrometers. IEEE Transactions on Geoscience and Remote Sensing, 2010, , .	6.3	19
26	The Complicate Observations and Multi-Parameter Land Information Constructions on Allied Telemetry Experiment (COMPLICATE). PLoS ONE, 2015, 10, e0137545.	2.5	19
27	Analysis Ready Data of the Chinese GaoFen Satellite Data. Remote Sensing, 2021, 13, 1709.	4.0	17
28	Implications of Whole-Disc DSCOVR EPIC Spectral Observations for Estimating Earth's Spectral Reflectivity Based on Low-Earth-Orbiting and Geostationary Observations. Remote Sensing, 2018, 10, 1594.	4.0	16
29	Extracting Leaf Area Index by Sunlit Foliage Component from Downward-Looking Digital Photography under Clear-Sky Conditions. Remote Sensing, 2015, 7, 13410-13435.	4.0	15
30	Estimating Leaf Angle Distribution From Smartphone Photographs. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1190-1194.	3.1	15
31	An Operational Method for Validating the Downward Shortwave Radiation Over Rugged Terrains. IEEE Transactions on Geoscience and Remote Sensing, 2020, , 1-18.	6.3	15
32	Modeling the radiation regime of a discontinuous canopy based on the stochastic radiative transport theory: Modification, evaluation and validation. Remote Sensing of Environment, 2021, 267, 112728.	11.0	15
33	Reconstruction of Single Tree with Leaves Based on Terrestrial LiDAR Point Cloud Data. Remote Sensing, 2018, 10, 686.	4.0	14
34	Quantitative Evaluation of Leaf Inclination Angle Distribution on Leaf Area Index Retrieval of Coniferous Canopies. Journal of Remote Sensing, 2021, 2021, .	6.7	14
35	An Iterative-Mode Scan Design of Terrestrial Laser Scanning in Forests for Minimizing Occlusion Effects. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 3547-3566.	6.3	13
36	Study of the Remote Sensing Model of FAPAR over Rugged Terrains. Remote Sensing, 2016, 8, 309.	4.0	11

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37	Modeling of Land Surface Thermal Anisotropy Based on Directional and Equivalent Brightness Temperatures Over Complex Terrain. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 410-423.	4.9	11
38	Quantitative Analysis of Terrain Reflected Solar Radiation in Snow-Covered Mountains: A Case Study in Southeastern Tibetan Plateau. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034294.	3.3	11
39	Using fractal dimension to correct clumping effect in leaf area index measurement by digital cover photography. Agricultural and Forest Meteorology, 2021, 311, 108695.	4.8	11
40	Global validation of clear-sky models for retrieving land-surface downward longwave radiation from MODIS data. Remote Sensing of Environment, 2022, 271, 112903.	11.0	11
41	Estimation of Daily Average Downward Shortwave Radiation over Antarctica. Remote Sensing, 2018, 10, 422.	4.0	10
42	Quantitative Analysis of Aerosol Influence on Suomi-NPP VIIRS Nighttime Light in China. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2020, 13, 3557-3568.	4.9	9
43	High Spatial Resolution and High Temporal Frequency (30-m/15-day) Fractional Vegetation Cover Estimation over China Using Multiple Remote Sensing Datasets: Method Development and Validation. Journal of Meteorological Research, 2021, 35, 128-147.	2.4	9
44	Global quasi-daily fractional vegetation cover estimated from the DSCOVRE EPIC directional hotspot dataset. Remote Sensing of Environment, 2022, 269, 112835.	11.0	9
45	Ultrahigh-resolution boreal forest canopy mapping: Combining UAV imagery and photogrammetric point clouds in a deep-learning-based approach. International Journal of Applied Earth Observation and Geoinformation, 2022, 107, 102686.	2.8	9
46	Clumping Effects in Leaf Area Index Retrieval From Large-Footprint Full-Waveform LiDAR. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-20.	6.3	7
47	Indirect Measurement of Forest Leaf Area Index Using Path Length Distribution Model and Multispectral Canopy Imager. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2532-2539.	4.9	6
48	Fractional vegetation cover estimation based on soil and vegetation lines in a corn-dominated area. Geocarto International, 2017, 32, 531-540.	3.5	6
49	A strategy to integrate <i>a priori</i> knowledge for an improved inversion of the LAI from BRDF modelling. International Journal of Remote Sensing, 2008, 29, 4927-4941.	2.9	5
50	Analysis on the inversion accuracy of LAI based on simulated point clouds of terrestrial LiDAR of tree by ray tracing algorithm. , 2013, , .		5
51	Extending a Linear Kernel-Driven BRDF Model to Realistically Simulate Reflectance Anisotropy Over Rugged Terrain. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	6.3	5
52	Influencing Factors in Estimation of Leaf Angle Distribution of an Individual Tree from Terrestrial Laser Scanning Data. Remote Sensing, 2021, 13, 1159.	4.0	5
53	Correcting Crown-Level Clumping Effect for Improving Leaf Area Index Retrieval From Large-Footprint LiDAR: A Study Based on the Simulated Waveform and GLAS Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 12386-12402.	4.9	4
54	Revisiting the Performance of the Kernel-Driven BRDF Model Using Filtered High-Quality POLDER Observations. Forests, 2022, 13, 435.	2.1	4

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55	Using a Vegetation Index-Based Mixture Model to Estimate Fractional Vegetation Cover Products by Jointly Using Multiple Satellite Data: Method and Feasibility Analysis. <i>Forests</i> , 2022, 13, 691.	2.1	4
56	Uncertainty and sensitivity ratio of parameters in estimating and promoting retrieval accuracy. <i>International Journal of Remote Sensing</i> , 2008, 29, 4891-4905.	2.9	3
57	A method for leaf gap fraction estimation based on multispectral digital images from Multispectral Canopy Imager. , 2011, , .		3
58	A comparison of different optimization algorithms for retrieving aerosol optical depths from satellite data: an example of using a dual-angle algorithm. <i>International Journal of Remote Sensing</i> , 2011, 32, 8949-8968.	2.9	3
59	Accuracy evaluation of the ground-based fractional vegetation cover measurement by using simulated images. , 2012, , .		3
60	Spectral Recalibration for In-Flight Broadband Sensor Using Man-Made Ground Targets. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2013, 51, 4316-4329.	6.3	3
61	Human Activity Changes During COVID-19 Lockdown in China—A View From Nighttime Light. <i>GeoHealth</i> , 2022, 6, .	4.0	3
62	Fractional vegetation cover retrieval using multi-spatial resolution data and plant growth model. , 2010, , .		2
63	Clear sky Net Surface Radiative Fluxes over rugged terrain from satellite measurements. , 2011, , .		2
64	Estimation of fractional vegetation cover using mean-based spectral unmixing method. , 2017, , .		2
65	Retrieval of LAI by assimilating remotely sensed data into a simple crop growth model. , 2007, , .		1
66	Retrieval of time series LAI by coupling an empirical crop growth model with a radiative transfer model. , 2010, , .		1
67	A vegetation phenology model for fractional vegetation cover retrieval using time series data. , 2012, , .		1
68	Error analysis for emissivity measurement using FTIR spectrometer. , 2013, , .		1
69	Thermal anomalies detection before 2013 Songyuan earthquake using MODIS LST data. , 2014, , .		1
70	A practical algorithm to inverse land surface component temperatures from ATSR-2 and ASTER data. , 0, , .		0
71	A sensitivity criterion for BRDF model inversion analysis. , 0, , .		0
72	Modeling vegetation cover distribution at different scales based on bayesian statistical inference. , 0, , .		0

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73	Kernel based simplification of canopy reflectance model using partial least square regression. Proceedings of SPIE, 2007, , .	0.8	0
74	A method of intelligent 3-D aided planning for land consolidation. , 2010, , .		0
75	Validation of coarse-resolution Fractional Vegetation Cover product in Heihe basin, China. , 2013, , .		0
76	Topographic correction of retrieved surface shortwave radiative fluxes from space under clear-sky conditions. , 2014, , .		0
77	Validation of the remote sensing products at a watershed scale in China. , 2016, , .		0
78	Modeling Surface Thermal Anisotropy Using Brightness Temperature over Complex Terrains. , 2018, , .		0
79	Monitoring Dynamic Changes of Vegetation Cover in the Tarim River Basin Based with Landsat Imagery and Google Earth Engine. , 2020, , .		0
80	Analyzing Leaf Clumping Effect of Individual Trees Based on Modeled Realistic Structure. , 2020, , .		0
81	Single-footprint retrieval of clear-sky surface longwave radiation from hyperspectral AIRS data. International Journal of Applied Earth Observation and Geoinformation, 2022, 110, 102802.	1.9	0