Lifu Zhang

List of Publications by Year
in descending order

113 papers	3,122 citations	172457 29 h-index	168389 53 g-index
116 all docs	116 docs citations	116 times ranked	3531 citing authors

#	ARTICLE	IF	CITATIONS
1	Derivation of a tasselled cap transformation based on Landsat 8 at-satellite reflectance. Remote Sensing Letters, 2014, 5, 423-431.	1.4	462
2	Artificial intelligence: A powerful paradigm for scientific research. Innovation(China), 2021, 2, 100179.	9.1	200
3	Studying drought phenomena in the Continental United States in 2011 and 2012 using various drought indices. Remote Sensing of Environment, 2017, 190, 96-106.	11.0	182
4	Progress in Hyperspectral Remote Sensing Science and Technology in China Over the Past Three Decades. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 70-91.	4.9	172
5	Land Use/Land Cover Dynamics and Modeling of Urban Land Expansion by the Integration of Cellular Automata and Markov Chain. ISPRS International Journal of Geo-Information, 2018, 7, 154.	2.9	153
6	Monitoring and Modeling of Spatiotemporal Urban Expansion and Land-Use/Land-Cover Change Using Integrated Markov Chain Cellular Automata Model. ISPRS International Journal of Geo-Information, 2017, 6, 288.	2.9	119
7	Crop Classification Based on Feature Band Set Construction and Object-Oriented Approach Using Hyperspectral Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 4117-4128.	4.9	110
8	Evaluating an Enhanced Vegetation Condition Index (VCI) Based on VIUPD for Drought Monitoring in the Continental United States. Remote Sensing, 2016, 8, 224.	4.0	85
9	Monitoring and Assessing the 2012 Drought in the Great Plains: Analyzing Satellite-Retrieved Solar-Induced Chlorophyll Fluorescence, Drought Indices, and Gross Primary Production. Remote Sensing, 2016, 8, 61.	4.0	85
10	Laboratory Calibration of a Field Imaging Spectrometer System. Sensors, 2011, 11, 2408-2425.	3.8	76
11	Use of UAV oblique imaging for the detection of individual trees in residential environments. Urban Forestry and Urban Greening, 2015, 14, 404-412.	5.3	72
12	Urban Expansion Occurred at the Expense of Agricultural Lands in the Tarai Region of Nepal from 1989 to 2016. Sustainability, 2018, 10, 1341.	3.2	71
13	Analysis of the Urban Heat Island Effect in Shijiazhuang, China Using Satellite and Airborne Data. Remote Sensing, 2015, 7, 4804-4833.	4.0	63
14	Predicting cadmium concentration in soils using laboratory and field reflectance spectroscopy. Science of the Total Environment, 2019, 650, 321-334.	8.0	62
15	An Analysis of Shadow Effects on Spectral Vegetation Indexes Using a Ground-Based Imaging Spectrometer. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 2188-2192.	3.1	61
16	Comparison of the Continuity of Vegetation Indices Derived from Landsat 8 OLI and Landsat 7 ETM+ Data among Different Vegetation Types. Remote Sensing, 2015, 7, 13485-13506.	4.0	50
17	Enhancement of Spectral Resolution for Remotely Sensed Multispectral Image. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2198-2211.	4.9	49
18	A Simple Enhanced Water Index (EWI) for Percent Surface Water Estimation Using Landsat Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 90-97.	4.9	48

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19	A new vegetation index based on the universal pattern decomposition method. International Journal of Remote Sensing, 2007, 28, 107-124.	2.9	43
20	Simulation of EO-1 Hyperion Data from ALI Multispectral Data Based on the Spectral Reconstruction Approach. Sensors, 2009, 9, 3090-3108.	3.8	41
21	Quantifying the Spatiotemporal Pattern of Urban Expansion and Hazard and Risk Area Identification in the Kaski District of Nepal. Land, 2018, 7, 37.	2.9	40
22	Selecting photovoltaic generation sites in Tibet using remote sensing and geographic analysis. Solar Energy, 2016, 133, 85-93.	6.1	39
23	A Modified Locality-Preserving Projection Approach for Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1059-1063.	3.1	38
24	Monitoring Drought Effects on Vegetation Productivity Using Satellite Solar-Induced Chlorophyll Fluorescence. Remote Sensing, 2019, 11, 378.	4.0	38
25	Automatic Estimation of Crop Disease Severity Levels Based on Vegetation Index Normalization. Remote Sensing, 2020, 12, 1930.	4.0	35
26	Polarized Spectral Measurement and Analysis of Sedum Spectabile Boreau Using a Field Imaging Spectrometer System. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 724-730.	4.9	33
27	An Abundance Characteristic-Based Independent Component Analysis for Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 416-428.	6.3	33
28	Shortwave Infrared Imaging Spectroscopy for Analysis of Ancient Paintings. Applied Spectroscopy, 2017, 71, 977-987.	2.2	33
29	Adaptive Change Detection With Significance Test. IEEE Access, 2018, 6, 27442-27450.	4.2	33
30	Evaluation of the Chinese Fine Spatial Resolution Hyperspectral Satellite TianGong-1 in Urban Land-Cover Classification. Remote Sensing, 2016, 8, 438.	4.0	29
31	Sensorâ€independent analysis method for hyperspectral data based on the pattern decomposition method. International Journal of Remote Sensing, 2006, 27, 4899-4910.	2.9	27
32	Monitoring Urban Growth and the Nepal Earthquake 2015 for Sustainability of Kathmandu Valley, Nepal. Land, 2017, 6, 42.	2.9	27
33	Estimation of Cotton Leaf Area Index (LAI) Based on Spectral Transformation and Vegetation Index. Remote Sensing, 2022, 14, 136.	4.0	27
34	An NDVI-Based Vegetation Phenology Is Improved to be More Consistent with Photosynthesis Dynamics through Applying a Light Use Efficiency Model over Boreal High-Latitude Forests. Remote Sensing, 2017, 9, 695.	4.0	26
35	A Spectral Angle Distance-Weighting Reconstruction Method for Filled Pixels of the MODIS Land Surface Temperature Product. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1514-1518.	3.1	23
36	Hyperspectral signal unmixing based on constrained non-negative matrix factorization approach. Neurocomputing, 2016, 204, 153-161.	5.9	23

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37	Monitoring vegetation dynamics using the universal normalized vegetation index (UNVI): An optimized vegetation index-VIUPD. Remote Sensing Letters, 2019, 10, 629-638.	1.4	22
38	Development of a Portable Field Imaging Spectrometer: Application for the Identification of Sun-Dried and Sulfur-Fumigated Chinese Herbals. Applied Spectroscopy, 2016, 70, 879-887.	2.2	19
39	Assessment of the universal pattern decomposition method using MODIS and ETM+ data. International Journal of Remote Sensing, 2007, 28, 125-142.	2.9	18
40	Detection and location of fouling on photovoltaic panels using a drone-mounted infrared thermography system. Journal of Applied Remote Sensing, 2017, 11, 016026.	1.3	17
41	Spatial–Temporal Wetland Landcover Changes of Poyang Lake Derived from Landsat and HJ-1A/B Data in the Dry Season from 1973–2019. Remote Sensing, 2020, 12, 1595.	4.0	17
42	Fast Real-Time Causal Linewise Progressive Hyperspectral Anomaly Detection via Cholesky Decomposition. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 4614-4629.	4.9	16
43	Automatic Crop Classification in Northeastern China by Improved Nonlinear Dimensionality Reduction for Satellite Image Time Series. Remote Sensing, 2020, 12, 2726.	4.0	16
44	Hyperspectral Feature Extraction Based On The Reference Spectral Background Removal Method. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2832-2844.	4.9	14
45	Hyperspectral Imagery Denoising Based on Oblique Subspace Projection. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 2468-2480.	4.9	13
46	Real-Time Constrained Energy Minimization for Subpixel Detection. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 2545-2559.	4.9	13
47	Retrieval of Chemical Oxygen Demand through Modified Capsule Network Based on Hyperspectral Data. Applied Sciences (Switzerland), 2019, 9, 4620.	2.5	13
48	Using a Remote Sensing Driven Model to Analyze Effect of Land Use on Soil Moisture in the Weihe River Basin, China. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3892-3902.	4.9	12
49	Crop Cycles and Crop Land Classification in Nepal Using MODIS NDVI. Remote Sensing in Earth Systems Sciences, 2018, 1, 14-28.	1.8	11
50	Automatic Cotton Mapping Using Time Series of Sentinel-2 Images. Remote Sensing, 2021, 13, 1355.	4.0	11
51	A Radiometric Calibration Model for the Field Imaging Spectrometer System. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 2465-2475.	6.3	10
52	Satellite Observed Positive Impacts of Fog on Vegetation. Geophysical Research Letters, 2020, 47, e2020GL088428.	4.0	10
53	Evaluation of spectral scale effects in estimation of vegetation leaf area index using spectral indices methods. Chinese Geographical Science, 2016, 26, 731-744.	3.0	9
54	Cloud removal for hyperspectral remotely sensed images based on hyperspectral information fusion. International Journal of Remote Sensing, 2018, 39, 6646-6656.	2.9	9

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55	Learning-Based Hyperspectral Imagery Compression through Generative Neural Networks. Remote Sensing, 2020, 12, 3657.	4.0	9
56	Study on the Quantitative Relationship Among Canopy Hyperspectral Reflectance, Vegetation Index and Cotton Leaf Nitrogen Content. Journal of the Indian Society of Remote Sensing, 2021, 49, 1787-1799.	2.4	9
57	Comparison of the sensor dependence of vegetation indices based on Hyperion and CHRIS hyperspectral data. International Journal of Remote Sensing, 2013, 34, 2200-2215.	2.9	8
58	Retrieval of Sun-Induced Chlorophyll Fluorescence Using Statistical Method Without Synchronous Irradiance Data. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 384-388.	3.1	8
59	A Fast Three-Dimensional Convolutional Neural Network-Based Spatiotemporal Fusion Method (STF3DCNN) Using a Spatial-Temporal-Spectral Dataset. Remote Sensing, 2020, 12, 3888.	4.0	8
60	UNVI-Based Time Series for Vegetation Discrimination Using Separability Analysis and Random Forest Classification. Remote Sensing, 2020, 12, 529.	4.0	8
61	Hyperspectral UAV Images at Different Altitudes for Monitoring the Leaf Nitrogen Content in Cotton Crops. Remote Sensing, 2022, 14, 2576.	4.0	8
62	Assessing the Effect of Temporal Interval Length on the Blending of Landsat-MODIS Surface Reflectance for Different Land Cover Types in Southwestern Continental United States. ISPRS International Journal of Geo-Information, 2015, 4, 2542-2560.	2.9	7
63	A Global Sensitivity Analysis of Commonly Used Satellite-Derived Vegetation Indices for Homogeneous Canopies Based on Model Simulation and Random Forest Learning. Remote Sensing, 2019, 11, 2547.	4.0	7
64	Crop classification based on the spectrotemporal signature derived from vegetation indices and accumulated temperature. International Journal of Digital Earth, 2022, 15, 626-652.	3.9	7
65	Improved Aerosol Optical Thickness, Columnar Water Vapor, and Surface Reflectance Retrieval from Combined CASI and SASI Airborne Hyperspectral Sensors. Remote Sensing, 2017, 9, 217.	4.0	6
66	A New Time Series Change Detection Method for Landsat Land use and Land Cover Change. , 2019, , .		6
67	Prediction of Total Phosphorus Concentration in Macrophytic Lakes Using Chlorophyll-Sensitive Bands: A Case Study of Lake Baiyangdian. Remote Sensing, 2022, 14, 3077.	4.0	6
68	An evaluation of the effect of the spectral response function of satellite sensors on the precision of the universal pattern decomposition method. International Journal of Remote Sensing, 2010, 31, 2083-2090.	2.9	5
69	Abundance retrieval of hydrous minerals around the Mars Science Laboratory landing site in Gale crater, Mars. Planetary and Space Science, 2016, 121, 76-82.	1.7	5
70	Tree species classification based on stem-related feature parameters derived from static terrestrial laser scanning data. International Journal of Remote Sensing, 2016, 37, 4420-4440.	2.9	5
71	Forest restoration and support for sustainable ecosystems in the Gandaki Basin, Nepal. Environmental Monitoring and Assessment, 2021, 193, 563.	2.7	4
72	Spatially explicit estimation of soil-water resources by coupling of an eco-hydrological model with remote sensing data in the Weihe River Basin of China. Journal of Applied Remote Sensing, 2014, 8, 083653.	1.3	3

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73	Fast real-time target detection via target-oriented band selection. , 2016, , .		3
74	A mineral feature extraction method based on virtual band simulation. Remote Sensing Letters, 2017, 8, 547-556.	1.4	3
75	Monitoring Spatio-Temporal Dynamics in the Eastern Plain Lakes of China Using Long-Term MODIS UNWI Index. Remote Sensing, 2022, 14, 985.	4.0	3
76	Light weight airborne imaging spectrometer remote sensing system for mineral exploration in China. Proceedings of SPIE, 2014, , .	0.8	2
77	Recursive orthogonal vector projection algorithm for linear spectral unmixing. , 2014, , .		2
78	An analysis of shadow effects on spectral vegetation indices using a ground-based imaging spectrometer. , 2015, , .		2
79	Development and preliminary results of a drilling core spectral imaging and cataloging system. Optical Engineering, 2017, 56, 081810.	1.0	2
80	Blood hyperviscosity identification with reflective spectroscopy of tongue tip based on principal component analysis combining artificial neural network. BioMedical Engineering OnLine, 2018, 17, 60.	2.7	2
81	A Fast Hyperspectral Anomaly Detection Algorithm Based on Greedy Bilateral Smoothing and Extended Multi-Attribute Profile. Remote Sensing, 2021, 13, 3954.	4.0	2
82	Effects on ecosystem services value due to land use and land cover change (1990â€"2020) in the transboundary Karnali River Basin, Central Himalayas. SN Applied Sciences, 2022, 4, 1.	2.9	2
83	Decomposition of volume scattering, polarized light and chlorophyll fluorescence by in-situ polarization measurement. , 2013, , .		1
84	Evaluation of Multiple Spring Phenological Indicators of Yearly GPP and NEP at Three Canadian Forest Sites. Remote Sensing, 2014, 6, 1991-2007.	4.0	1
85	Calculating vegetation index based on the universal pattern decomposition method (VIUPD) using Landsat 8. , 2014, , .		1
86	A combined object-based segmentation and support vector machines approach for classification of Tiangong-01 hyperspectral urban data. , 2014, , .		1
87	Water mapping through Universal Pattern Decomposition Method and Tasseled Cap Transformation. , 2014, , .		1
88	Investigating Fraunhofer line based fluorescence retrieval in O_2-B band with hyperspectral radiative transfer simulations. , 2015, , .		1
89	Sensitivity analysis for Chl-a retrieval of water body using hyperspectral remote sensing data with different spectral indicators. , 2016, , .		1
90	Comparison of hyperspectral vegetation indices based on CASI airborne data. , 2016, , .		1

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91	Mineral Absorption Feature Extraction From High-Density Vegetation Area Using Reference Spectral Background Removal. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1994-1998.	3.1	1
92	A new method of mineral absorption feature extraction from vegetation covered area. , 2016, , .		1
93	A non-negative matrix factorization approach for hyperspectral unmixing with partial known endmembers. , 2016, , .		1
94	Perspectives on Chinese developments in spaceborne imaging spectroscopy: What to expect in the next 5â€"10 years. , 2016, , .		1
95	Airborne light detection and ranging laser return intensity-based investigation into crown-inside? A case study on<i>Quercus robur</i>trees. Journal of Applied Remote Sensing, 2016, 10, 026024.	1.3	1
96	Real-time progressive hyperspectral remote sensing detection methods for crop pest and diseases. Proceedings of SPIE, 2016, , .	0.8	1
97	A Synchronous Long Time-Series Completion Method Using 3-D Fully Convolutional Neural Networks. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	1
98	Sensitivity analysis of radiometrical calibration model to system settings based on field imaging spectrometers. , 2012, , .		0
99	A geometric distortion model for multi-element scanning imaging spectrometer: Some primary experimental results. , 2013, , .		0
100	An evaluation of prediction accuracy and stability of a new vegetation index for estimating vegetation leaf area index. , 2014, , .		0
101	Spatial-temporal information extraction for vegetation phenology variation based on modis ndvi datasets in the Tibetan Plateau. , 2015, , .		0
102	Mineral absorption feature extraction in vegetation covered region based on reference spectral background removal. , 2016, , .		0
103	Applied analysis for canopy nitrogen retrieval of winter wheat using hyperspectral vegetation index. , 2016, , .		0
104	Semi-supervised hyperspectral unmixing approach based on nonnegative matrix factorization. Proceedings of SPIE, 2016, , .	0.8	0
105	Development of multidimensional analysis of remote sensing (MARS) software. , 2016, , .		0
106	Disentangling isotropic fluorescence from the canopy directional reflectance using BRDF models. , 2016, , .		0
107	An algorithm of remotely sensed hyperspectral image fusion based on spectral unmixing and feature reconstruction. Proceedings of SPIE, 2016, , .	0.8	0
108	Perspectives on Chinese developments in spaceborne imaging spectroscopy: What's new in 2016. , 2017, , .		0

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109	Interpretation and implication of canopy diurnal fluorescence by the field automatic measurment system. , 2017, , .		0
110	A method for extracting vegetation information of Urban underlaying surface oriented to ECO-environmental quality assessment. , 2017, , .		0
111	Ground-based long-term remote sensing of solar-induced chlorophyll fluorescence: Methods, challenges and opportunities. , 2017, , .		0
112	An Improved Simplex Maximum Distance Algorithm for Endmember Extraction in Hyperspectral Image. , 2018, , .		0
113	Definition Management Zones of Drip Irrigation Cotton Field Based on the GIS and RS. IFIP Advances in Information and Communication Technology, 2019, , 508-517.	0.7	0