Sheng Nie

List of Publications by Year
in descending order

49 papers	1,398 citations	304743 22 h-index	345221 36 g-index
49 all docs	49 docs citations	49 times ranked	1220 citing authors

#	Article	IF	Citations
1	Fusion of airborne LiDAR data and hyperspectral imagery for aboveground and belowground forest biomass estimation. Ecological Indicators, 2017, 73, 378-387.	6.3	93
2	Estimation of wetland vegetation height and leaf area index using airborne laser scanning data. Ecological Indicators, 2015, 48, 550-559.	6.3	90
3	Airborne LiDAR technique for estimating biomass components of maize: A case study in Zhangye City, Northwest China. Ecological Indicators, 2015, 57, 486-496.	6.3	81
4	Estimating the vegetation canopy height using micro-pulse photon-counting LiDAR data. Optics Express, 2018, 26, A520.	3.4	72
5	Design of supercontinuum laser hyperspectral light detection and ranging (LiDAR) (SCLaHS LiDAR). International Journal of Remote Sensing, 2021, 42, 3731-3755.	2.9	71
6	Estimating the Biomass of Maize with Hyperspectral and LiDAR Data. Remote Sensing, 2017, 9, 11.	4.0	70
7	Above-ground biomass estimation using airborne discrete-return and full-waveform LiDAR data in a coniferous forest. Ecological Indicators, 2017, 78, 221-228.	6.3	54
8	A Noise Removal Algorithm Based on OPTICS for Photon-Counting LiDAR Data. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 1471-1475.	3.1	54
9	A revised progressive TIN densification for filtering airborne LiDAR data. Measurement: Journal of the International Measurement Confederation, 2017, 104, 70-77.	5.0	53
10	A Ground Elevation and Vegetation Height Retrieval Algorithm Using Micro-Pulse Photon-Counting Lidar Data. Remote Sensing, 2018, 10, 1962.	4.0	53
11	Ground elevation accuracy verification of ICESat-2 data: a case study in Alaska, USA. Optics Express, 2019, 27, 38168.	3.4	53
12	Retrieving leaf area index using ICESat/GLAS full-waveform data. Remote Sensing Letters, 2013, 4, 745-753.	1.4	45
13	Effects of LiDAR point density, sampling size and height threshold on estimation accuracy of crop biophysical parameters. Optics Express, 2016, 24, 11578.	3.4	44
14	Combined Use of Airborne LiDAR and Satellite GF-1 Data to Estimate Leaf Area Index, Height, and Aboveground Biomass of Maize During Peak Growing Season. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 4489-4501.	4.9	41
15	Wavelet Analysis for ICESat/GLAS Waveform Decomposition and Its Application in Average Tree Height Estimation. IEEE Geoscience and Remote Sensing Letters, 2013, 10, 115-119.	3.1	39
16	Comparative Performances of Airborne LiDAR Height and Intensity Data for Leaf Area Index Estimation. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 300-310.	4.9	38
17	Estimating FPAR of maize canopy using airborne discrete-return LiDAR data. Optics Express, 2014, 22, 5106.	3.4	31
18	Combining hyperspectral imagery and LiDAR pseudo-waveform for predicting crop LAI, canopy height and above-ground biomass. Ecological Indicators, 2019, 102, 801-812.	6.3	31

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19	A revised terrain correction method for forest canopy height estimation using ICESat/GLAS data. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 108, 183-190.	11.1	30
20	Mapping forest height using photon-counting LiDAR data and Landsat 8 OLI data: A case study in Virginia and North Carolina, USA. Ecological Indicators, 2020, 114, 106287.	6.3	30
21	Retrieving leaf area index in discontinuous forest using ICESat/GLAS full-waveform data based on gap fraction model. ISPRS Journal of Photogrammetry and Remote Sensing, 2019, 148, 54-62.	11.1	28
22	Estimating leaf area index of maize using airborne full-waveform lidar data. Remote Sensing Letters, 2016, 7, 111-120.	1.4	27
23	Retrieving aboveground biomass of wetland Phragmites australis (common reed) using a combination of airborne discrete-return LiDAR and hyperspectral data. International Journal of Applied Earth Observation and Geoinformation, 2017, 58, 107-117.	2.8	24
24	Trend analysis of building height and total floor space in Beijing, China using ICESat/GLAS data. International Journal of Remote Sensing, 2011, 32, 8823-8835.	2.9	18
25	A Novel Model for Terrain Slope Estimation Using ICESat/GLAS Waveform Data. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 217-227.	6.3	17
26	Estimating the height of wetland vegetation using airborne discrete-return LiDAR data. Optik, 2018, 154, 267-274.	2.9	14
27	Estimating forest aboveground biomass using small-footprint full-waveform airborne LiDAR data. International Journal of Applied Earth Observation and Geoinformation, 2019, 83, 101922.	2.8	14
28	Assessing the Impacts of Various Factors on Treetop Detection Using LiDAR-Derived Canopy Height Models. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 10099-10115.	6.3	14
29	Extraction of Multiple Building Heights Using ICESat/GLAS Full-Waveform Data Assisted by Optical Imagery. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1914-1918.	3.1	14
30	Estimating Leaf Area Index of Maize Using Airborne Discrete-Return LiDAR Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 3259-3266.	4.9	13
31	Vegetation Horizontal Occlusion Index (VHOI) from TLS and UAV Image to Better Measure Mangrove LAI. Remote Sensing, 2018, 10, 1739.	4.0	12
32	UAV Laser scanning technology: a potential cost-effective tool for micro-topography detection over wooded areas for archaeological prospection. International Journal of Digital Earth, 2020, 13, 1279-1301.	3.9	12
33	Influence of voxel size on forest canopy height estimates using full-waveform airborne LiDAR data. Forest Ecosystems, 2020, 7, .	3.1	12
34	Estimating Terrain Slope from ICESat-2 Data in Forest Environments. Remote Sensing, 2020, 12, 3300.	4.0	11
35	Retrieving building height in urban areas using ICESat-2 photon-counting LiDAR data. International Journal of Applied Earth Observation and Geoinformation, 2021, 104, 102596.	2.8	11
36	Comprehensive LiDAR simulation with efficient physically-based DART-Lux model (I): Theory, novelty, and consistency validation. Remote Sensing of Environment, 2022, 272, 112952.	11.0	11

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37	Canopy Height Layering Biomass Estimation Model (CHL-BEM) with Full-Waveform LiDAR. Remote Sensing, 2019, 11, 1446.	4.0	10
38	Footprint Size Design of Large-Footprint Full-Waveform LiDAR for Forest and Topography Applications: A Theoretical Study. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 9745-9757.	6.3	10
39	Forest emissions reduction assessment using airborne LiDAR for biomass estimation. Resources, Conservation and Recycling, 2022, 181, 106224.	10.8	10
40	Monitoring and Analysis of Water Level Changes in Mekong River from ICESat-2 Spaceborne Laser Altimetry. Water (Switzerland), 2022, 14, 1613.	2.7	8
41	Integration of Airborne LiDAR and Hyperspectral Data for Maize FPAR Estimation Based on a Physical Model. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 1120-1124.	3.1	7
42	A Continuous Wavelet Transform Based Method for Ground Elevation Estimation Over Mountainous Vegetated Areas Using Satellite Laser Altimetry. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 2945-2956.	4.9	6
43	The Performance of ICESat-2's Strong and Weak Beams in Estimating Ground Elevation and Forest Height. , 2020, , .		6
44	Accuracy Assessment of ICESat-2 Ground Elevation and Canopy Height Estimates in Mangroves. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	5
45	Exploring the Influence of Various Factors on Slope Estimation Using Large-Footprint LiDAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 6611-6621.	6.3	4
46	Application and Validation of a Model for Terrain Slope Estimation Using Space-Borne LiDAR Waveform Data. Remote Sensing, 2018, 10, 1691.	4.0	3
47	Retrieving fPAR of maize canopy using artificial neural networks with airborne LiDAR and hyperspectral data. Remote Sensing Letters, 2020, 11, 1002-1011.	1.4	2
48	A Novel Method Based on Kernel Density for Estimating Crown Base Height Using UAV-Borne LiDAR Data. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	2
49	A Gap-Based Method for LiDAR Point Cloud Division. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	3.1	0