John David Armston

List of Publications by Year
in descending order

60 papers	4,944 citations	117625 34 h-index	155660 55 g-index
60 all docs	60 docs citations	60 times ranked	5734 citing authors

#	Article	IF	Citations
1	Global canopy height regression and uncertainty estimation from GEDI LIDAR waveforms with deep ensembles. Remote Sensing of Environment, 2022, 268, 112760.	11.0	89
2	Aboveground biomass density models for NASAâ€™s Global Ecosystem Dynamics Investigation (GEDI) lidar mission. Remote Sensing of Environment, 2022, 270, 112845.	11.0	108
3	Assessing Amazon rainforest regrowth with GEDI and ICESat-2 data. Science of Remote Sensing, 2022, 5, 100051.	4.8	8
4	Mapping global forest canopy height through integration of GEDI and Landsat data. Remote Sensing of Environment, 2021, 253, 112165.	11.0	436
5	Fusing simulated GEDI, ICESat-2 and NISAR data for regional aboveground biomass mapping. Remote Sensing of Environment, 2021, 253, 112234.	11.0	99
6	The NASA AfriSAR campaign: Airborne SAR and lidar measurements of tropical forest structure and biomass in support of current and future space missions. Remote Sensing of Environment, 2021, 264, 112533.	11.0	33
7	The impact of geolocation uncertainty on GEDI tropical forest canopy height estimation and change monitoring. Science of Remote Sensing, 2021, 4, 100024.	4.8	38
8	Challenges to aboveground biomass prediction from waveform lidar. Environmental Research Letters, 2021, 16, 125013.	5.2	9
9	Comprehensive comparison of airborne and spaceborne SAR and LiDAR estimates of forest structure in the tallest mangrove forest on earth. Science of Remote Sensing, 2021, 4, 100034.	4.8	7
10	3D Imaging Insights into Forests and Coral Reefs. Trends in Ecology and Evolution, 2020, 35, 6-9.	8.7	36
11	Modelling canopy gap probability, foliage projective cover and crown projective cover from airborne lidar metrics in Australian forests and woodlands. Remote Sensing of Environment, 2020, 237, 111520.	11.0	19
12	Terrestrial laser scanning in forest ecology: Expanding the horizon. Remote Sensing of Environment, 2020, 251, 112102.	11.0	208
13	New 3D measurements of large redwood trees for biomass and structure. Scientific Reports, 2020, 10, 16721.	3.3	22
14	Evaluating the potential of fullâ€waveform lidar for mapping panâ€tropical tree species richness. Global Ecology and Biogeography, 2020, 29, 1799-1816.	5.8	31
15	Detecting Change in Forest Structure with Simulated GEDI Lidar Waveforms: A Case Study of the Hemlock Woolly Adelgid (HWA; Adelges tsugae) Infestation. Remote Sensing, 2020, 12, 1304.	4.0	25
16	Regional Tropical Aboveground Biomass Mapping with L-Band Repeat-Pass Interferometric Radar, Sparse Lidar, and Multiscale Superpixels. Remote Sensing, 2020, 12, 2048.	4.0	7
17	The Global Ecosystem Dynamics Investigation: High-resolution laser ranging of the Earthâ€™s forests and topography. Science of Remote Sensing, 2020, 1, 100002.	4.8	429
18	Rapid and robust monitoring of flood events using Sentinel-1 and Landsat data on the Google Earth Engine. Remote Sensing of Environment, 2020, 240, 111664.	11.0	224

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19	Biomass estimation from simulated GEDI, ICESat-2 and NISAR across environmental gradients in Sonoma County, California. Remote Sensing of Environment, 2020, 242, 111779.	11.0	152
20	Statistical properties of hybrid estimators proposed for GEDIâ€"NASAâ€™s global ecosystem dynamics investigation. Environmental Research Letters, 2019, 14, 065007.	5.2	56
21	New Opportunities for Forest Remote Sensing Through Ultra-High-Density Drone Lidar. Surveys in Geophysics, 2019, 40, 959-977.	4.6	82
22	Early Lessons on Combining Lidar and Multi-baseline SAR Measurements for Forest Structure Characterization. Surveys in Geophysics, 2019, 40, 803-837.	4.6	16
23	Forest biomass estimation over three distinct forest types using TanDEM-X InSAR data and simulated GEDI lidar data. Remote Sensing of Environment, 2019, 232, 111283.	11.0	79
24	Characterizing global forest canopy cover distribution using spaceborne lidar. Remote Sensing of Environment, 2019, 231, 111262.	11.0	79
25	The GEDI Simulator: A Largeâ€Footprint Waveform Lidar Simulator for Calibration and Validation of Spaceborne Missions. Earth and Space Science, 2019, 6, 294-310.	2.6	140
26	Ground Data are Essential for Biomass Remote Sensing Missions. Surveys in Geophysics, 2019, 40, 863-880.	4.6	91
27	A Structural Classification of Australian Vegetation Using ICESat/GLAS, ALOS PALSAR, and Landsat Sensor Data. Remote Sensing, 2019, 11, 147.	4.0	30
28	Improved forest height estimation by fusion of simulated GEDI Lidar data and TanDEM-X InSAR data. Remote Sensing of Environment, 2019, 221, 621-634.	11.0	74
29	Variability and bias in active and passive ground-based measurements of effective plant, wood and leaf area index. Agricultural and Forest Meteorology, 2018, 252, 231-240.	4.8	55
30	Distinguishing vegetation types with airborne waveform lidar data in a tropical forest-savanna mosaic: A case study in LopÃ© National Park, Gabon. Remote Sensing of Environment, 2018, 216, 626-634.	11.0	34
31	Assessing the structural differences between tropical forest types using Terrestrial Laser Scanning. Forest Ecology and Management, 2018, 429, 327-335.	3.2	20
32	Relating foliage and crown projective cover in Australian tree stands. Agricultural and Forest Meteorology, 2018, 259, 39-47.	4.8	12
33	Evaluation of the Range Accuracy and the Radiometric Calibration of Multiple Terrestrial Laser Scanning Instruments for Data Interoperability. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 2716-2724.	6.3	50
34	A method for mapping Australian woody vegetation cover by linking continental-scale field data and long-term Landsat time series. International Journal of Remote Sensing, 2017, 38, 679-705.	2.9	47
35	The 2016 NASA AfriSAR campaign: Airborne SAR and Lidar measurements of tropical forest structure and biomass in support of future satellite missions. , 2017, , .		13
36	An Accuracy Assessment of Derived Digital Elevation Models from Terrestrial Laser Scanning in a Sub-Tropical Forested Environment. Remote Sensing, 2017, 9, 843.	4.0	12

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37	An integrated panâ€tropical biomass map using multiple reference datasets. Global Change Biology, 2016, 22, 1406-1420.	9.5	469
38	Assessing the repeatability of terrestrial laser scanning for monitoring gully topography: A case study from Aratula, Queensland, Australia. Geomorphology, 2016, 262, 24-36.	2.6	36
39	Contribution of ALOS PALSAR data to forest characterization and monitoring in Australia. , 2015, , .		0
40	Monitoring spring phenology with high temporal resolution terrestrial LiDAR measurements. Agricultural and Forest Meteorology, 2015, 203, 158-168.	4.8	79
41	Understanding the variability in ground-based methods for retrieving canopy openness, gap fraction, and leaf area index in diverse forest systems. Agricultural and Forest Meteorology, 2015, 205, 83-95.	4.8	68
42	Waveform lidar over vegetation: An evaluation of inversion methods for estimating return energy. Remote Sensing of Environment, 2015, 164, 208-224.	11.0	60
43	Measurement of Forest Above-Ground Biomass Using Active and Passive Remote Sensing at Large (Subnational to Global) Scales. Current Forestry Reports, 2015, 1, 162-177.	7.4	34
44	Nondestructive estimates of aboveâ€ground biomass using terrestrial laser scanning. Methods in Ecology and Evolution, 2015, 6, 198-208.	5.2	449
45	Multi-resolution time series imagery for forest disturbance and regrowth monitoring in Queensland, Australia. Remote Sensing of Environment, 2015, 158, 156-168.	11.0	89
46	A Python-Based Open Source System for Geographic Object-Based Image Analysis (GEOBIA) Utilizing Raster Attribute Tables. Remote Sensing, 2014, 6, 6111-6135.	4.0	59
47	Implications of sensor configuration and topography on vertical plant profiles derived from terrestrial LiDAR. Agricultural and Forest Meteorology, 2014, 194, 104-117.	4.8	80
48	Mapping forest growth and degradation stage in the Brigalow Belt Bioregion of Australia through integration of ALOS PALSAR and Landsat-derived foliage projective cover data. Remote Sensing of Environment, 2014, 155, 42-57.	11.0	27
49	Sorted pulse data (SPD) libraryâ€"Part II: A processing framework for LiDAR data from pulsed laser systems in terrestrial environments. Computers and Geosciences, 2013, 56, 207-215.	4.2	33
50	Sorted pulse data (SPD) library. Part I: A generic file format for LiDAR data from pulsed laser systems in terrestrial environments. Computers and Geosciences, 2013, 56, 197-206.	4.2	44
51	Direct retrieval of canopy gap probability using airborne waveform lidar. Remote Sensing of Environment, 2013, 134, 24-38.	11.0	102
52	The impact of sensor characteristics for obtaining accurate ground-based measurements of LAI. , 2013, , .		0
53	An Approach to Mapping Forest Growth Stages in Queensland, Australia through Integration of ALOS PALSAR and Landsat Sensor Data. Remote Sensing, 2012, 4, 2236-2255.	4.0	18
54	Alternatives to Landsat-5 Thematic Mapper for operational monitoring of vegetation cover: considerations for natural resource management agencies. Canadian Journal of Remote Sensing, 2010, 36, 682-698.	2.4	3

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55	Estimation of pasture biomass and soil-moisture using dual-polarimetric X and L band SAR - accuracy assessment with field data. , 2010, , .		1
56	An Evaluation of the ALOS PALSAR L-Band Backscatterâ€"Above Ground Biomass Relationship Queensland, Australia: Impacts of Surface Moisture Condition and Vegetation Structure. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2010, 3, 576-593.	4.9	216
57	Integration of LiDAR and QuickBird imagery for mapping riparian biophysical parameters and land cover types in Australian tropical savannas. Forest Ecology and Management, 2010, 259, 598-606.	3.2	79
58	Mapping riparian condition indicators in a sub-tropical savanna environment from discrete return LiDAR data using object-based image analysis. Ecological Indicators, 2010, 10, 796-807.	6.3	59
59	Assessing Human Impacts on Australian Forests through Integration of Remote Sensing Data. , 2008, , 213-239.		6
60	Integration of radar and Landsat-derived foliage projected cover for woody regrowth mapping, Queensland, Australia. Remote Sensing of Environment, 2006, 100, 388-406.	11.0	63