Stephen Stehman

List of Publications by Year
in descending order

107 papers	14,816 citations	28190 55 h-index	29081 104 g-index
111 all docs	111 docs citations	111 times ranked	14216 citing authors

#	Article	IF	Citations
1	Good practices for estimating area and assessing accuracy of land change. Remote Sensing of Environment, 2014, 148, 42-57.	4.6	1,793
2	Selecting and interpreting measures of thematic classification accuracy. Remote Sensing of Environment, 1997, 62, 77-89.	4.6	1,237
3	Global land change from 1982 to 2016. Nature, 2018, 560, 639-643.	13.7	1,213
4	Making better use of accuracy data in land change studies: Estimating accuracy and area and quantifying uncertainty using stratified estimation. Remote Sensing of Environment, 2013, 129, 122-131.	4.6	780
5	Quantification of global gross forest cover loss. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8650-8655.	3.3	709
6	Design and Analysis for Thematic Map Accuracy Assessment. Remote Sensing of Environment, 1998, 64, 331-344.	4.6	573
7	Humid tropical forest clearing from 2000 to 2005 quantified by using multitemporal and multiresolution remotely sensed data. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9439-9444.	3.3	568
8	A meta-analysis of remote sensing research on supervised pixel-based land-cover image classification processes: General guidelines for practitioners and future research. Remote Sensing of Environment, 2016, 177, 89-100.	4.6	412
9	Conterminous United States land cover change patterns 2001â€“2016 from the 2016 National Land Cover Database. ISPRS Journal of Photogrammetry and Remote Sensing, 2020, 162, 184-199.	4.9	391
10	Accuracy assessment of NLCD 2006 land cover and impervious surface. Remote Sensing of Environment, 2013, 130, 294-304.	4.6	308
11	Key issues in rigorous accuracy assessment of land cover products. Remote Sensing of Environment, 2019, 231, 111199.	4.6	300
12	Sampling designs for accuracy assessment of land cover. International Journal of Remote Sensing, 2009, 30, 5243-5272.	1.3	294
13	Mapping and sampling to characterize global inland water dynamics from 1999 to 2018 with full Landsat time-series. Remote Sensing of Environment, 2020, 243, 111792.	4.6	221
14	Forest disturbance across the conterminous United States from 1985â€“2012: The emerging dominance of forest decline. Forest Ecology and Management, 2016, 360, 242-252.	1.4	212
15	Surface water extent dynamics from three decades of seasonally continuous Landsat time series at subcontinental scale in a semi-arid region. Remote Sensing of Environment, 2016, 178, 142-157.	4.6	209
16	Mapping forest change using stacked generalization: An ensemble approach. Remote Sensing of Environment, 2018, 204, 717-728.	4.6	193
17	Thematic accuracy assessment of the 2011 National Land Cover Database (NLCD). Remote Sensing of Environment, 2017, 191, 328-341.	4.6	181
18	Congo Basin forest loss dominated by increasing smallholder clearing. Science Advances, 2018, 4, eaat2993.	4.7	171

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19	National-scale soybean mapping and area estimation in the United States using medium resolution satellite imagery and field survey. Remote Sensing of Environment, 2017, 190, 383-395.	4.6	168
20	Land-cover change in the conterminous United States from 1973 to 2000. Global Environmental Change, 2013, 23, 733-748.	3.6	165
21	Effects of landscape characteristics on land-cover class accuracy. Remote Sensing of Environment, 2003, 84, 342-349.	4.6	164
22	Estimating area and map accuracy for stratified random sampling when the strata are different from the map classes. International Journal of Remote Sensing, 2014, 35, 4923-4939.	1.3	155
23	Combining MODIS and Landsat imagery to estimate and map boreal forest cover loss. Remote Sensing of Environment, 2008, 112, 3708-3719.	4.6	154
24	Comparing the accuracies of remote sensing global burned area products using stratified random sampling and estimation. Remote Sensing of Environment, 2015, 160, 114-121.	4.6	154
25	Massive soybean expansion in South America since 2000 and implications for conservation. Nature Sustainability, 2021, 4, 784-792.	11.5	153
26	Types and rates of forest disturbance in Brazilian Legal Amazon, 2000â€“2013. Science Advances, 2017, 3, e1601047.	4.7	147
27	The fate of tropical forest fragments. Science Advances, 2020, 6, eaax8574.	4.7	146
28	Near doubling of Brazilâ€™s intensive row crop area since 2000. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 428-435.	3.3	139
29	Thematic accuracy assessment of the NLCD 2016 land cover for the conterminous United States. Remote Sensing of Environment, 2021, 257, 112357.	4.6	132
30	A global land-cover validation data set, part I: fundamental design principles. International Journal of Remote Sensing, 2012, 33, 5768-5788.	1.3	129
31	How Similar Are Forest Disturbance Maps Derived from Different Landsat Time Series Algorithms?. Forests, 2017, 8, 98.	0.9	129
32	Pixels, blocks of pixels, and polygons: Choosing a spatial unit for thematic accuracy assessment. Remote Sensing of Environment, 2011, 115, 3044-3055.	4.6	125
33	Lessons learned implementing an operational continuous United States national land change monitoring capability: The Land Change Monitoring, Assessment, and Projection (LCMAP) approach. Remote Sensing of Environment, 2020, 238, 111356.	4.6	123
34	Estimating area from an accuracy assessment error matrix. Remote Sensing of Environment, 2013, 132, 202-211.	4.6	117
35	Practical Implications of Design-Based Sampling Inference for Thematic Map Accuracy Assessment. Remote Sensing of Environment, 2000, 72, 35-45.	4.6	113
36	Using remotely sensed data to construct and assess forest attribute maps and related spatial products. Scandinavian Journal of Forest Research, 2010, 25, 340-367.	0.5	108

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37	Model-assisted estimation as a unifying framework for estimating the area of land cover and land-cover change from remote sensing. Remote Sensing of Environment, 2009, 113, 2455-2462.	4.6	107
38	Validation of the 2008 MODIS-MCD45 global burned area product using stratified random sampling. Remote Sensing of Environment, 2014, 144, 187-196.	4.6	105
39	Monitoring of wetland inundation dynamics in the Delmarva Peninsula using Landsat time-series imagery from 1985 to 2011. Remote Sensing of Environment, 2017, 190, 26-41.	4.6	95
40	Detecting Change in Forest Floor Carbon. Soil Science Society of America Journal, 2003, 67, 1583-1593.	1.2	92
41	Global Trends of Forest Loss Due to Fire From 2001 to 2019. Frontiers in Remote Sensing, 2022, 3, .	1.3	91
42	Thematic accuracy of MRLC land cover for the eastern United States. Remote Sensing of Environment, 2001, 76, 418-422.	4.6	83
43	A stratified random sampling design in space and time for regional to global scale burned area product validation. Remote Sensing of Environment, 2016, 186, 465-478.	4.6	80
44	A global land-cover validation data set, II: augmenting a stratified sampling design to estimate accuracy by region and land-cover class. International Journal of Remote Sensing, 2012, 33, 6975-6993.	1.3	75
45	Landscape Trends in Mid-Atlantic and Southeastern United States Ecoregions. Environmental Management, 2003, 32, 572-588.	1.2	73
46	Impact of training and validation sample selection on classification accuracy and accuracy assessment when using reference polygons in object-based classification. International Journal of Remote Sensing, 2013, 34, 6914-6930.	1.3	71
47	Rapid expansion of human impact on natural land in South America since 1985. Science Advances, 2021, 7, .	4.7	71
48	Public perceptions of the USDA Forest Service public participation process. Forest Policy and Economics, 2001, 3, 113-124.	1.5	66
49	Impact of sample size allocation when using stratified random sampling to estimate accuracy and area of land-cover change. Remote Sensing Letters, 2012, 3, 111-120.	0.6	65
50	Mapping per-pixel predicted accuracy of classified remote sensing images. Remote Sensing of Environment, 2017, 191, 156-167.	4.6	62
51	Estimating standard errors of accuracy assessment statistics under cluster sampling. Remote Sensing of Environment, 1997, 60, 258-269.	4.6	61
52	Assessing the impact of training sample selection on accuracy of an urban classification: a case study in Denver, Colorado. International Journal of Remote Sensing, 2014, 35, 2067-2081.	1.3	60
53	A global reference database from very high resolution commercial satellite data and methodology for application to Landsat derived 30 m continuous field tree cover data. Remote Sensing of Environment, 2015, 165, 234-248.	4.6	60
54	A comparison of sampling designs for estimating deforestation from Landsat imagery: A case study of the Brazilian Legal Amazon. Remote Sensing of Environment, 2009, 113, 2448-2454.	4.6	57

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55	Global bare ground gain from 2000 to 2012 using Landsat imagery. Remote Sensing of Environment, 2017, 194, 161-176.	4.6	56
56	A multi-resolution approach to national-scale cultivated area estimation of soybean. Remote Sensing of Environment, 2017, 195, 13-29.	4.6	55
57	The effects of imperfect reference data on remote sensing-assisted estimators of land cover class proportions. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 142, 292-300.	4.9	55
58	Stratification and sample allocation for reference burned area data. Remote Sensing of Environment, 2017, 203, 240-255.	4.6	52
59	Agent-based region growing for individual tree crown delineation from airborne laser scanning (ALS) data. International Journal of Remote Sensing, 2015, 36, 1965-1993.	1.3	50
60	The relationship between land cover and the urban heat island in northeastern Puerto Rico. International Journal of Climatology, 2011, 31, 1222-1239.	1.5	49
61	Quality control and assessment of interpreter consistency of annual land cover reference data in an operational national monitoring program. Remote Sensing of Environment, 2020, 238, 111261.	4.6	48
62	Assessing integration of intensity, polarimetric scattering, interferometric coherence and spatial texture metrics in PALSAR-derived land cover classification. ISPRS Journal of Photogrammetry and Remote Sensing, 2014, 98, 70-84.	4.9	47
63	Thematic accuracy of the National Land Cover Database (NLCD) 2001 land cover for Alaska. Remote Sensing of Environment, 2011, 115, 1401-1407.	4.6	45
64	The Horvitz-Thompson Theorem as a Unifying Perspective for Probability Sampling: With Examples from Natural Resource Sampling. American Statistician, 1995, 49, 261-268.	0.9	43
65	Desirable design characteristics for long-term monitoring of ecological variables. Environmental and Ecological Statistics, 1996, 3, 349-361.	1.9	40
66	Validation of the U.S. Geological Survey's Land Change Monitoring, Assessment and Projection (LCMAP) Collection 1.0 annual land cover products 1985â€“2017. Remote Sensing of Environment, 2021, 265, 112646.	4.6	38
67	9 Environmental sampling and monitoring. Handbook of Statistics, 1994, 12, 263-306.	0.4	35
68	Estimating landscape pattern metrics from a sample of land cover. Landscape Ecology, 2012, 27, 133-149.	1.9	33
69	Contextualizing Landscape-Scale Forest Cover Loss in the Democratic Republic of Congo (DRC) between 2000 and 2015. Land, 2020, 9, 23.	1.2	31
70	Designing a Multi-Objective, Multi-Support Accuracy Assessment of the 2001 National Land Cover Data (NLCD 2001) of the Conterminous United States. Photogrammetric Engineering and Remote Sensing, 2008, 74, 1561-1571.	0.3	30
71	Assessing the Temporal Stability of the Accuracy of a Time Series of Burned Area Products. Remote Sensing, 2014, 6, 2050-2068.	1.8	30
72	Mapping Extent and Change in Surface Mines Within the United States for 2001 to 2006. Land Degradation and Development, 2016, 27, 248-257.	1.8	25

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73	A spatially stratified, multi-stage cluster sampling design for assessing accuracy of the Alaska (USA) National Land Cover Database (NLCD). International Journal of Remote Sensing, 2010, 31, 1877-1896.	1.3	24
74	Evaluating Landsat and RapidEye Data for Winter Wheat Mapping and Area Estimation in Punjab, Pakistan. Remote Sensing, 2018, 10, 489.	1.8	24
75	Comparisons of Ectomycorrhizal Colonization of Transgenic American Chestnut with Those of the Wild Type, a Conventionally Bred Hybrid, and Related Fagaceae Species. Applied and Environmental Microbiology, 2015, 81, 100-108.	1.4	22
76	Monitoring Regional Riparian Forest Cover Change Using Stratified Sampling and Multiresolution Imagery¹. Journal of the American Water Resources Association, 2010, 46, 334-343.	1.0	20
77	Family Forest Owner Preferences for Forest Conservation Programs: A New York Case Study. Forest Science, 2015, 61, 597-603.	0.5	20
78	Selective herbivory by an invasive cyprinid, the rudd <scp>S</scp>cardinius erythrophthalmus. Freshwater Biology, 2014, 59, 2315-2327.	1.2	19
79	Implications of Mayan agroforestry for biodiversity conservation in the Calakmul Biosphere Reserve, Mexico. Agroforestry Systems, 2014, 88, 269-285.	0.9	19
80	Landsat-based wheat mapping in the heterogeneous cropping system of Punjab, Pakistan. International Journal of Remote Sensing, 2016, 37, 1391-1410.	1.3	19
81	Predicting individual pixel error in remote sensing soft classification. Remote Sensing of Environment, 2017, 199, 401-414.	4.6	19
82	Comparison of Variance Estimators of the Horvitz-Thompson Estimator for Randomized Variable Probability Systematic Sampling. Journal of the American Statistical Association, 1994, 89, 30-43.	1.8	17
83	ESTIMATING DENSITY FROM SURVEYS EMPLOYING UNEQUAL-AREA BELT TRANSECTS. Wetlands, 2000, 20, 512-519.	0.7	17
84	Conterminous United States Land-Cover Change (1985â€“2016): New Insights from Annual Time Series. Land, 2022, 11, 298.	1.2	17
85	Design, analysis, and inference for studies comparing thematic accuracy of classified remotely sensed data: a special case of map comparison. Journal of Geographical Systems, 2006, 8, 209-226.	1.9	15
86	Forestland Parcelization in Upstate New York Despite Economic Stagnation and a Declining Population. Northern Journal of Applied Forestry, 2006, 23, 280-287.	0.5	13
87	A Sample-Based Forest Monitoring Strategy Using Landsat, AVHRR and MODIS Data to Estimate Gross Forest Cover Loss in Malaysia between 1990 and 2005. Remote Sensing, 2013, 5, 1842-1855.	1.8	13
88	Remote Sensing Support for the Gain-Loss Approach for Greenhouse Gas Inventories. Remote Sensing, 2020, 12, 1891.	1.8	11
89	Spring fires in Russia: results from participatory burned area mapping with Sentinel-2 imagery. Environmental Research Letters, 2021, 16, 125005.	2.2	11
90	Estimation of shrub willow leaf chlorophyll concentration across different growth stages using a hand-held chlorophyll meter to monitor plant health and production. Biomass and Bioenergy, 2021, 150, 106132.	2.9	10

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91	Contrasting tree-cover loss and subsequent land cover in two neotropical forest regions: sample-based assessment of the Mexican YucatÃ¡n and Argentine Chaco. Journal of Land Use Science, 2018, 13, 549-564.	1.0	9
92	Using Google Earth Engine to Assess Temporal and Spatial Changes in River Geomorphology and Riparian Vegetation. Journal of the American Water Resources Association, 2021, 57, 789-806.	1.0	7
93	Comparison of Variance Estimators of the Horvitz-Thompson Estimator for Randomized Variable Probability Systematic Sampling. , 0, .		7
94	Incorporating interpreter variability into estimation of the total variance of land cover area estimates under simple random sampling. Remote Sensing of Environment, 2022, 269, 112806.	4.6	7
95	Limnological and Statistical Issues for Monitoring the Impact of a Lake Source Cooling Facility: Cayuga Lake, NY. Lake and Reservoir Management, 2002, 18, 239-256.	0.4	6
96	An operational automated mapping algorithm for in-season estimation of wheat area for Punjab, Pakistan. International Journal of Remote Sensing, 2021, 42, 3833-3849.	1.3	6
97	Incorporating the uncertainty of linguistic-scale reference data to assess accuracy of land-cover maps using fuzzy intervals. International Journal of Remote Sensing, 2013, 34, 4008-4024.	1.3	5
98	Harmonization of forest disturbance datasets of the conterminous USA from 1986 to 2011. Environmental Monitoring and Assessment, 2017, 189, 170.	1.3	5
99	Assessing the impacts of human uncertainty in the accuracy assessment of land-cover maps using linguistic scales and fuzzy intervals. International Journal of Remote Sensing, 2015, 36, 2524-2547.	1.3	4
100	Comparison of Simple Averaging and Latent Class Modeling to Estimate the Area of Land Cover in the Presence of Reference Data Variability. Land, 2021, 10, 35.	1.2	3
101	A Landscape Assessment and Associated Dataset of Stream Confluences for the Conterminous U.S.. Journal of the American Water Resources Association, 2021, 57, 315-327.	1.0	3
102	Identifying Factors That Influence Accuracy of Riparian Vegetation Classification and River Channel Delineation Mapped Using 1 m Data. Remote Sensing, 2021, 13, 4645.	1.8	3
103	Title is missing!. Environmental and Ecological Statistics, 2000, 7, 301-321.	1.9	2
104	Sample-Based Estimation of Tree Cover Change in Haiti Using Aerial Photography: Substantial Increase in Tree Cover between 2002 and 2010. Forests, 2021, 12, 1243.	0.9	1
105	A global land-cover validation data set, part I: fundamental design principles. , 0, .		1
106	Ground Verification and Accuracy Assessment. Geographic Information Science & Technology Body of Knowledge, 2020, 2020, .	0.1	0
107	Shrub willow canopy chlorophyll content estimation from unmanned aerial systems (UAS) data: Estimation and uncertainty analysis across time, space, and scales. International Journal of Applied Earth Observation and Geoinformation, 2022, 108, 102737.	1.4	0