Erik NÃ¦sset

List of Publications by Year
in descending order

130 papers	8,644 citations	50276 46 h-index	45317 90 g-index
131 all docs	131 docs citations	131 times ranked	4830 citing authors

#	Article	IF	Citations
1	In-situ calibration of stand level merchantable and sawlog volumes using cut-to-length harvester measurements and airborne laser scanning data. Forestry, 2022, 95, 105-117.	2.3	0
2	Accommodating heteroscedasticity in allometric biomass models. Forest Ecology and Management, 2022, 505, 119865.	3.2	5
3	Aboveground biomass density models for NASAâ€™s Global Ecosystem Dynamics Investigation (GEDI) lidar mission. Remote Sensing of Environment, 2022, 270, 112845.	11.0	108
4	A framework for a forest ecological base map â€“ An example from Norway. Ecological Indicators, 2022, 136, 108636.	6.3	9
5	Detection of Root, Butt, and Stem Rot presence in Norway spruce with hyperspectral imagery. Silva Fennica, 2022, 56, .	1.3	6
6	Fine-Spatial Borealâ€“Alpine Single-Tree Albedo Measured by UAV: Experiences and Challenges. Remote Sensing, 2022, 14, 1482.	4.0	2
7	Wood Decay Detection in Norway Spruce Forests Based on Airborne Hyperspectral and ALS Data. Remote Sensing, 2022, 14, 1892.	4.0	3
8	Comparing frameworks for biomass prediction for the Global Ecosystem Dynamics Investigation. Remote Sensing of Environment, 2022, 278, 113074.	11.0	16
9	Comparison of linear regression, k-nearest neighbour and random forest methods in airborne laser-scanning-based prediction of growing stock. Forestry, 2021, 94, 311-323.	2.3	20
10	Economic utility of 3D remote sensing data for estimation of site index in Nordic commercial forest inventories: a comparison of airborne laser scanning, digital aerial photogrammetry and conventional practices. Scandinavian Journal of Forest Research, 2021, 36, 55-67.	1.4	6
11	Coupling a differential global navigation satellite system to a cut-to-length harvester operating system enables precise positioning of harvested trees. International Journal of Forest Engineering, 2021, 32, 119-127.	0.8	10
12	Comparing 3D Point Cloud Data from Laser Scanning and Digital Aerial Photogrammetry for Height Estimation of Small Trees and Other Vegetation in a Borealâ€“Alpine Ecotone. Remote Sensing, 2021, 13, 2469.	4.0	3
13	Relationships between single-tree mountain birch summertime albedo and vegetation properties. Agricultural and Forest Meteorology, 2021, 307, 108470.	4.8	12
14	Modeling tree species diversity by combining ALS data and digital aerial photogrammetry. Science of Remote Sensing, 2020, 2, 100011.	4.8	3
15	Use of Remotely Sensed Data to Enhance Estimation of Aboveground Biomass for the Dry Afromontane Forest in South-Central Ethiopia. Remote Sensing, 2020, 12, 3335.	4.0	12
16	Use of local and global maps of forest canopy height and aboveground biomass to enhance local estimates of biomass in miombo woodlands in Tanzania. International Journal of Applied Earth Observation and Geoinformation, 2020, 89, 102109.	2.8	5
17	Remote Sensing Support for the Gain-Loss Approach for Greenhouse Gas Inventories. Remote Sensing, 2020, 12, 1891.	4.0	11
18	The relative role of climate and herbivory in driving treeline dynamics along a latitudinal gradient. Journal of Vegetation Science, 2020, 31, 392-402.	2.2	10

#	Article	IF	Citations
19	Generation of Lidar-Predicted Forest Biomass Maps from Radar Backscatter with Conditional Generative Adversarial Networks. , 2020, , .		4
20	A Model-Dependent Method for Monitoring Subtle Changes in Vegetation Height in the Borealâ€“Alpine Ecotone Using Bi-Temporal, Three Dimensional Point Data from Airborne Laser Scanning. Remote Sensing, 2019, 11, 1804.	4.0	7
21	Modelling Site Index in Forest Stands Using Airborne Hyperspectral Imagery and Bi-Temporal Laser Scanner Data. Remote Sensing, 2019, 11, 1020.	4.0	9
22	Effects of UAV Image Resolution, Camera Type, and Image Overlap on Accuracy of Biomass Predictions in a Tropical Woodland. Remote Sensing, 2019, 11, 948.	4.0	36
23	Optimizing Field Data Collection for Individual Tree Attribute Predictions Using Active Learning Methods. Remote Sensing, 2019, 11, 949.	4.0	2
24	Comparing the accuracies of forest attributes predicted from airborne laser scanning and digital aerial photogrammetry in operational forest inventories. Remote Sensing of Environment, 2019, 226, 26-37.	11.0	39
25	Using a Finer Resolution Biomass Map to Assess the Accuracy of a Regional, Map-Based Estimate of Forest Biomass. Surveys in Geophysics, 2019, 40, 1001-1015.	4.6	14
26	The Role and Need for Space-Based Forest Biomass-Related Measurements in Environmental Management and Policy. Surveys in Geophysics, 2019, 40, 757-778.	4.6	92
27	Classifications of Forest Change by Using Bitemporal Airborne Laser Scanner Data. Remote Sensing, 2019, 11, 2145.	4.0	18
28	Assessing components of the model-based mean square error estimator for remote sensing assisted forest applications. Canadian Journal of Forest Research, 2018, 48, 642-649.	1.7	40
29	Tree species classification in Norway from airborne hyperspectral and airborne laser scanning data. European Journal of Remote Sensing, 2018, 51, 336-351.	3.5	48
30	Remote sensing and forest inventories in Nordic countries â€“ roadmap for the future. Scandinavian Journal of Forest Research, 2018, 33, 397-412.	1.4	111
31	Effects of terrain slope and aspect on the error of ALS-based predictions of forest attributes. Forestry, 2018, 91, 225-237.	2.3	13
32	Monitoring small pioneer trees in the forest-tundra ecotone: using multi-temporal airborne laser scanning data to model height growth. Environmental Monitoring and Assessment, 2018, 190, 12.	2.7	10
33	Estimation of biomass change in montane forests in Norway along a 1200â€…km latitudinal gradient using airborne laser scanning: a comparison of direct and indirect prediction of change under a model-based inferential approach. Scandinavian Journal of Forest Research, 2018, 33, 155-165.	1.4	16
34	Combining UAV and Sentinel-2 auxiliary data for forest growing stock volume estimation through hierarchical model-based inference. Remote Sensing of Environment, 2018, 204, 485-497.	11.0	120
35	Predicting stem diameters and aboveground biomass of individual trees using remote sensing data. Ecological Indicators, 2018, 85, 367-376.	6.3	49
36	Prediction of Forest Attributes with Multispectral Lidar Data. , 2018, , .		0

#	Article	IF	Citations
37	Generalized Hierarchical Model-Based Estimation for Aboveground Biomass Assessment Using GEDI and Landsat Data. Remote Sensing, 2018, 10, 1832.	4.0	53
38	Multi-sensor forest vegetation height mapping methods for Tanzania. European Journal of Remote Sensing, 2018, 51, 587-606.	3.5	13
39	Utilizing accurately positioned harvester data: modelling forest volume with airborne laser scanning. Canadian Journal of Forest Research, 2018, 48, 913-922.	1.7	13
40	A new approach with DTM-independent metrics for forest growing stock prediction using UAV photogrammetric data. Remote Sensing of Environment, 2018, 213, 195-205.	11.0	79
41	Estimation of Forest Area and Canopy Cover Based on Visual Interpretation of Satellite Images in Ethiopia. Land, 2018, 7, 92.	2.9	14
42	Predicting Selected Forest Stand Characteristics with Multispectral ALS Data. Remote Sensing, 2018, 10, 586.	4.0	25
43	Direct and indirect site index determination for Norway spruce and Scots pine using bitemporal airborne laser scanner data. Forest Ecology and Management, 2018, 428, 104-114.	3.2	33
44	Assessing 3D point clouds from aerial photographs for species-specific forest inventories. Scandinavian Journal of Forest Research, 2017, 32, 68-79.	1.4	65
45	Accurate single-tree positions from a harvester: a test of two global satellite-based positioning systems. Scandinavian Journal of Forest Research, 2017, 32, 774-781.	1.4	22
46	A new prediction-based variance estimator for two-stage model-assisted surveys of forest resources. Remote Sensing of Environment, 2017, 192, 1-11.	11.0	5
47	Modeling biophysical properties of broad-leaved stands in the hyrcanian forests of Iran using fused airborne laser scanner data and ultraCam-D images. International Journal of Applied Earth Observation and Geoinformation, 2017, 61, 32-45.	2.8	13
48	Digital aerial photogrammetry can efficiently support large-area forest inventories in Norway. Forestry, 2017, 90, 710-718.	2.3	32
49	Individual tree crown approach for predicting site index in boreal forests using airborne laser scanning and hyperspectral data. International Journal of Applied Earth Observation and Geoinformation, 2017, 60, 72-82.	2.8	25
50	Post-stratified change estimation for large-area forest biomass using repeated ALS strip sampling. Canadian Journal of Forest Research, 2017, 47, 839-847.	1.7	14
51	The efficiency of poststratification compared with model-assisted estimation. Canadian Journal of Forest Research, 2017, 47, 515-526.	1.7	16
52	Combining airborne laser scanning and Landsat data for statistical modeling of soil carbon and tree biomass in Tanzanian Miombo woodlands. Carbon Balance and Management, 2017, 12, 8.	3.2	9
53	Large-scale estimation of change in aboveground biomass in miombo woodlands using airborne laser scanning and national forest inventory data. Remote Sensing of Environment, 2017, 188, 106-117.	11.0	46
54	Automatic Estimation of Tree Position and Stem Diameter Using a Moving Terrestrial Laser Scanner. Remote Sensing, 2017, 9, 350.	4.0	35

#	Article	IF	Citations
55	Prediction of Species-Specific Volume Using Different Inventory Approaches by Fusing Airborne Laser Scanning and Hyperspectral Data. Remote Sensing, 2017, 9, 400.	4.0	21
56	Comparing Empirical and Semi-Empirical Approaches to Forest Biomass Modelling in Different Biomes Using Airborne Laser Scanner Data. Forests, 2017, 8, 170.	2.1	10
57	Detection and Segmentation of Small Trees in the Forest-Tundra Ecotone Using Airborne Laser Scanning. Remote Sensing, 2016, 8, 407.	4.0	15
58	Discrimination between Ground Vegetation and Small Pioneer Trees in the Boreal-Alpine Ecotone Using Intensity Metrics Derived from Airborne Laser Scanner Data. Remote Sensing, 2016, 8, 548.	4.0	4
59	Predicting Attributes of Regeneration Forests Using Airborne Laser Scanning. Canadian Journal of Remote Sensing, 2016, 42, 541-553.	2.4	15
60	Methods for evaluating the utilities of local and global maps for increasing the precision of estimates of subtropical forest area. Canadian Journal of Forest Research, 2016, 46, 924-932.	1.7	29
61	Hierarchical model-based inference for forest inventory utilizing three sources of information. Annals of Forest Science, 2016, 73, 895-910.	2.0	55
62	Model-assisted forest inventory with parametric, semiparametric, and nonparametric models. Canadian Journal of Forest Research, 2016, 46, 855-868.	1.7	40
63	Mapping and estimating the total living biomass and carbon in low-biomass woodlands using Landsat 8 CDR data. Carbon Balance and Management, 2016, 11, 13.	3.2	53
64	Large-scale estimation of aboveground biomass in miombo woodlands using airborne laser scanning and national forest inventory data. Remote Sensing of Environment, 2016, 186, 626-636.	11.0	26
65	A poststratified ratio estimator for model-assisted biomass estimation in sample-based airborne laser scanning surveys. Canadian Journal of Forest Research, 2016, 46, 1386-1395.	1.7	8
66	Spatially consistent imputations of forest data under a semivariogram model. Canadian Journal of Forest Research, 2016, 46, 1145-1156.	1.7	7
67	Use of models in large-area forest surveys: comparing model-assisted, model-based and hybrid estimation. Forest Ecosystems, 2016, 3, .	3.1	105
68	The effects of temporal differences between map and ground data on map-assisted estimates of forest area and biomass. Annals of Forest Science, 2016, 73, 839-847.	2.0	12
69	Statistical rigor in LiDAR-assisted estimation of aboveground forest biomass. Remote Sensing of Environment, 2016, 173, 98-108.	11.0	58
70	Conditioning post-stratified inference following two-stage, equal-probability sampling. Environmental and Ecological Statistics, 2016, 23, 141-154.	3.5	6
71	Modelling aboveground forest biomass using airborne laser scanner data in the miombo woodlands of Tanzania. Carbon Balance and Management, 2015, 10, 28.	3.2	24
72	Modeling Aboveground Biomass in Dense Tropical Submontane Rainforest Using Airborne Laser Scanner Data. Remote Sensing, 2015, 7, 788-807.	4.0	65

#	Article	IF	Citations
73	Effects of Pulse Density on Digital Terrain Models and Canopy Metrics Using Airborne Laser Scanning in a Tropical Rainforest. Remote Sensing, 2015, 7, 8453-8468.	4.0	35
74	Vertical Height Errors in Digital Terrain Models Derived from Airborne Laser Scanner Data in a Boreal-Alpine Ecotone in Norway. Remote Sensing, 2015, 7, 4702-4725.	4.0	16
75	Inventory of Small Forest Areas Using an Unmanned Aerial System. Remote Sensing, 2015, 7, 9632-9654.	4.0	269
76	Relative Efficiency of ALS and InSAR for Biomass Estimation in a Tanzanian Rainforest. Remote Sensing, 2015, 7, 9865-9885.	4.0	20
77	Semi-supervised SVM for individual tree crown species classification. ISPRS Journal of Photogrammetry and Remote Sensing, 2015, 110, 77-87.	11.1	51
78	Comparing biophysical forest characteristics estimated from photogrammetric matching of aerial images and airborne laser scanning data. Scandinavian Journal of Forest Research, 2015, 30, 73-86.	1.4	82
79	The effects of field plot size on model-assisted estimation of aboveground biomass change using multitemporal interferometric SAR and airborne laser scanning data. Remote Sensing of Environment, 2015, 168, 252-264.	11.0	49
80	Monitoring forest carbon in a Tanzanian woodland using interferometric SAR: a novel methodology for REDD+. Carbon Balance and Management, 2015, 10, 14.	3.2	21
81	Effects of field plot size on prediction accuracy of aboveground biomass in airborne laser scanning-assisted inventories in tropical rain forests of Tanzania. Carbon Balance and Management, 2015, 10, 10.	3.2	59
82	Assessing forest inventory information obtained from different inventory approaches and remote sensing data sources. Annals of Forest Science, 2015, 72, 33-45.	2.0	46
83	Mapping Above- and Below-Ground Carbon Pools in Boreal Forests: The Case for Airborne Lidar. PLoS ONE, 2015, 10, e0138450.	2.5	21
84	Estimating Single-Tree Crown Biomass of Norway Spruce by Airborne Laser Scanning: A Comparison of Methods with and without the Use of Terrestrial Laser Scanning to Obtain the Ground Reference Data. Forests, 2014, 5, 384-403.	2.1	37
85	Improving Classification of Airborne Laser Scanning Echoes in the Forest-Tundra Ecotone Using Geostatistical and Statistical Measures. Remote Sensing, 2014, 6, 4582-4599.	4.0	7
86	Automatic Detection of Small Single Trees in the Forest-Tundra Ecotone Using Airborne Laser Scanning. Remote Sensing, 2014, 6, 10152-10170.	4.0	10
87	Modelling bird richness and bird species presence in a boreal forest reserve using airborne laser-scanning and aerial images. Bird Study, 2014, 61, 204-219.	1.0	17
88	Geo-referencing forest field plots by co-registration of terrestrial and airborne laser scanning data. International Journal of Remote Sensing, 2014, 35, 3135-3149.	2.9	44
89	Tree crown delineation and tree species classification in boreal forests using hyperspectral and ALS data. Remote Sensing of Environment, 2014, 140, 306-317.	11.0	222
90	Cost-Sensitive Active Learning With Lookahead: Optimizing Field Surveys for Remote Sensing Data Classification. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 6652-6664.	6.3	39

#	Article	IF	Citations
91	Forest biomass change estimated from height change in interferometric SAR height models. Carbon Balance and Management, 2014, 9, 5.	3.2	48
92	Unsupervised Selection of Training Samples for Tree Species Classification Using Hyperspectral Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3560-3569.	4.9	6
93	An Estimator of Variance for Two-Stage Ratio Regression Estimators. Forest Science, 2014, 60, 663-676.	1.0	11
94	Area-Based Inventory in Norway â€“ From Innovation to an Operational Reality. Managing Forest Ecosystems, 2014, , 215-240.	0.9	61
95	Taking stock of circumboreal forest carbon with ground measurements, airborne and spaceborne LiDAR. Remote Sensing of Environment, 2013, 137, 274-287.	11.0	85
96	Inference for lidar-assisted estimation of forest growing stock volume. Remote Sensing of Environment, 2013, 128, 268-275.	11.0	147
97	Model-assisted estimation of change in forest biomass over an 11year period in a sample survey supported by airborne LiDAR: A case study with post-stratification to provide â€œactivity dataâ€• Remote Sensing of Environment, 2013, 128, 299-314.	11.0	106
98	Detection of biomass change in a Norwegian mountain forest area using small footprint airborne laser scanner data. Statistical Methods and Applications, 2013, 22, 113-129.	1.2	61
99	Characterizing forest species composition using multiple remote sensing data sources and inventory approaches. Scandinavian Journal of Forest Research, 2013, 28, 677-688.	1.4	65
100	Classifying tree and nontree echoes from airborne laser scanning in the forestâ€“tundra ecotone. Canadian Journal of Remote Sensing, 2013, 38, 655-666.	2.4	13
101	Optimizing the ground sample collection with cost-sensitive active learning for tree species classification using hyperspectral images. , 2013, , .		2
102	Unsupervised selection of training plots and trees for tree species classification. , 2013, , .		0
103	Model-based inference fork-nearest neighbours predictions using a canonical vine copula. Scandinavian Journal of Forest Research, 2013, 28, 266-281.	1.4	8
104	Estimating single-tree branch biomass of Norway spruce with terrestrial laser scanning using voxel-based and crown dimension features. Scandinavian Journal of Forest Research, 2013, 28, 456-469.	1.4	48
105	Single tree detection in heterogeneous boreal forests using airborne laser scanning and area-based stem number estimates. International Journal of Remote Sensing, 2012, 33, 5171-5193.	2.9	95
106	Simultaneously acquired airborne laser scanning and multispectral imagery for individual tree species identification. Canadian Journal of Remote Sensing, 2012, 38, 125-138.	2.4	58
107	Estimating biomass in Hedmark County, Norway using national forest inventory field plots and airborne laser scanning. Remote Sensing of Environment, 2012, 123, 443-456.	11.0	102
108	Lidar sampling for large-area forest characterization: A review. Remote Sensing of Environment, 2012, 121, 196-209.	11.0	553

#	Article	IF	Citations
109	Model-based inference for biomass estimation in a LiDAR sample survey in Hedmark County, NorwayThis article is one of a selection of papers from Extending Forest Inventory and Monitoring over Space and Time.. Canadian Journal of Forest Research, 2011, 41, 96-107.	1.7	147
110	Model-assisted estimation of biomass in a LiDAR sample survey in Hedmark County, NorwayThis article is one of a selection of papers from Extending Forest Inventory and Monitoring over Space and Time.. Canadian Journal of Forest Research, 2011, 41, 83-95.	1.7	139
111	Detection of small single trees in the forestâ€“tundra ecotone using height values from airborne laser scanning. Canadian Journal of Remote Sensing, 2011, 37, 264-274.	2.4	35
112	Using remotely sensed data to construct and assess forest attribute maps and related spatial products. Scandinavian Journal of Forest Research, 2010, 25, 340-367.	1.4	108
113	Advances and emerging issues in national forest inventories. Scandinavian Journal of Forest Research, 2010, 25, 368-381.	1.4	136
114	Estimating Quebec provincial forest resources using ICESat/GLAS. Canadian Journal of Forest Research, 2009, 39, 862-881.	1.7	66
115	Non-parametric prediction of diameter distributions using airborne laser scanner data. Scandinavian Journal of Forest Research, 2009, 24, 541-553.	1.4	51
116	Effects of different sensors, flying altitudes, and pulse repetition frequencies on forest canopy metrics and biophysical stand properties derived from small-footprint airborne laser data. Remote Sensing of Environment, 2009, 113, 148-159.	11.0	201
117	Models for predicting above-ground biomass of Betula pubescens spp. czerepanÃ³vii in mountain areas of southern Norway. Scandinavian Journal of Forest Research, 2009, 24, 318-332.	1.4	10
118	Assessing effects of positioning errors and sample plot size on biophysical stand properties derived from airborne laser scanner data. Canadian Journal of Forest Research, 2009, 39, 1036-1052.	1.7	109
119	Weibull models for single-tree increment of Norway spruce, Scots pine, birch and other broadleaves in Norway. Scandinavian Journal of Forest Research, 2009, 24, 54-66.	1.4	25
120	Assessing effects of laser point density, ground sampling intensity, and field sample plot size on biophysical stand properties derived from airborne laser scanner data. Canadian Journal of Forest Research, 2008, 38, 1095-1109.	1.7	165
121	Performance of GPS Precise Point Positioning Under Conifer Forest Canopies. Photogrammetric Engineering and Remote Sensing, 2008, 74, 661-668.	0.6	23
122	Estimating percentile-based diameter distributions in uneven-sized Norway spruce stands using airborne laser scanner data. Scandinavian Journal of Forest Research, 2007, 22, 33-47.	1.4	52
123	Airborne laser scanning as a method in operational forest inventory: Status of accuracy assessments accomplished in Scandinavia. Scandinavian Journal of Forest Research, 2007, 22, 433-442.	1.4	225
124	Using airborne laser scanning to monitor tree migration in the borealâ€“alpine transition zone. Remote Sensing of Environment, 2007, 110, 357-369.	11.0	60
125	Mapping defoliation during a severe insect attack on Scots pine using airborne laser scanning. Remote Sensing of Environment, 2006, 102, 364-376.	11.0	204
126	Weibull and percentile models for lidar-based estimation of basal area distribution. Scandinavian Journal of Forest Research, 2005, 20, 490-502.	1.4	70

#	Article	IF	Citations
127	Practical large-scale forest stand inventory using a small-footprint airborne scanning laser. Scandinavian Journal of Forest Research, 2004, 19, 164-179.	1.4	420
128	Laser scanning of forest resources: the nordic experience. Scandinavian Journal of Forest Research, 2004, 19, 482-499.	1.4	386
129	Predicting forest stand characteristics with airborne scanning laser using a practical two-stage procedure and field data. Remote Sensing of Environment, 2002, 80, 88-99.	11.0	1,090
130	Determination of mean tree height of forest stands using airborne laser scanner data. ISPRS Journal of Photogrammetry and Remote Sensing, 1997, 52, 49-56.	11.1	462