

# GÃ¶ran StÃ¥hl

## List of Publications by Year in descending order

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101  
papers

5,018  
citations

81900

39  
h-index

95266

68  
g-index

102  
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102  
docs citations

102  
times ranked

5304  
citing authors

#	ARTICLE	IF	CITATIONS
1	Data Assimilation of Growing Stock Volume Using a Sequence of Remote Sensing Data from Different Sensors. <i>Canadian Journal of Remote Sensing</i> , 2022, 48, 127-143.	2.4	5
2	Cross-classes domain inference with network sampling for natural resource inventory. <i>Forest Ecosystems</i> , 2022, 9, 100029.	3.1	3
3	Multiple drivers of large-scale lichen decline in boreal forest canopies. <i>Global Change Biology</i> , 2022, 28, 3293-3309.	9.5	11
4	Comparing frameworks for biomass prediction for the Global Ecosystem Dynamics Investigation. <i>Remote Sensing of Environment</i> , 2022, 278, 113074.	11.0	16
5	Rapid Changes in Ground Vegetation of Mature Boreal Forests—An Analysis of Swedish National Forest Inventory Data. <i>Forests</i> , 2021, 12, 475.	2.1	7
6	Generalizing systematic adaptive cluster sampling for forest ecosystem inventory. <i>Forest Ecology and Management</i> , 2021, 489, 119051.	3.2	4
7	Characterizing Uncertainty in Forest Remote Sensing Studies. <i>Remote Sensing</i> , 2020, 12, 505.	4.0	21
8	Estimating density from presence/absence data in clustered populations. <i>Methods in Ecology and Evolution</i> , 2020, 11, 390-402.	5.2	3
9	Presence-absence sampling for estimating plant density using survey data with variable plot size. <i>Methods in Ecology and Evolution</i> , 2020, 11, 580-590.	5.2	2
10	Mapping aboveground biomass and its prediction uncertainty using LiDAR and field data, accounting for tree-level allometric and LiDAR model errors. <i>Forest Ecosystems</i> , 2020, 7, .	3.1	31
11	Statistical properties of hybrid estimators proposed for GEDI—NASA's global ecosystem dynamics investigation. <i>Environmental Research Letters</i> , 2019, 14, 065007.	5.2	56
12	Forest biomass estimation over three distinct forest types using TanDEM-X InSAR data and simulated GEDI lidar data. <i>Remote Sensing of Environment</i> , 2019, 232, 111283.	11.0	79
13	Remote sensing-assisted data assimilation and simultaneous inference for forest inventory. <i>Remote Sensing of Environment</i> , 2019, 234, 111431.	11.0	16
14	How much can natural resource inventory benefit from finer resolution auxiliary data?. <i>Remote Sensing of Environment</i> , 2018, 209, 31-40.	11.0	12
15	Assessing components of the model-based mean square error estimator for remote sensing assisted forest applications. <i>Canadian Journal of Forest Research</i> , 2018, 48, 642-649.	1.7	40
16	Combining UAV and Sentinel-2 auxiliary data for forest growing stock volume estimation through hierarchical model-based inference. <i>Remote Sensing of Environment</i> , 2018, 204, 485-497.	11.0	120
17	Increased spruce tree growth in Central Europe since 1960s. <i>Science of the Total Environment</i> , 2018, 619-620, 1637-1647.	8.0	29
18	Generalized Hierarchical Model-Based Estimation for Aboveground Biomass Assessment Using GEDI and Landsat Data. <i>Remote Sensing</i> , 2018, 10, 1832.	4.0	53

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19	Use of Stereology in Forest Inventories – A Brief History and Prospects for the Future. <i>Forests</i> , 2018, 9, 251.	2.1	2
20	Assessing Error Correlations in Remote Sensing-Based Estimates of Forest Attributes for Improved Composite Estimation. <i>Remote Sensing</i> , 2018, 10, 667.	4.0	13
21	Environmental effects of brushwood harvesting for bioenergy. <i>Forest Ecology and Management</i> , 2017, 383, 85-98.	3.2	8
22	Informative plot sizes in presence-absence sampling of forest floor vegetation. <i>Methods in Ecology and Evolution</i> , 2017, 8, 1284-1291.	5.2	8
23	Potential of using data assimilation to support forest planning. <i>Canadian Journal of Forest Research</i> , 2017, 47, 690-695.	1.7	5
24	Forest damage inventory using the local pivotal sampling method. <i>Canadian Journal of Forest Research</i> , 2017, 47, 357-365.	1.7	4
25	A new prediction-based variance estimator for two-stage model-assisted surveys of forest resources. <i>Remote Sensing of Environment</i> , 2017, 192, 1-11.	11.0	5
26	Hybrid three-phase estimators for large-area forest inventory using ground plots, airborne lidar, and space lidar. <i>Remote Sensing of Environment</i> , 2017, 197, 85-97.	11.0	24
27	Improved Prediction of Forest Variables Using Data Assimilation of Interferometric Synthetic Aperture Radar Data. <i>Canadian Journal of Remote Sensing</i> , 2017, 43, 374-383.	2.4	12
28	Kriging prediction of stand-level forest information using mobile laser scanning data adjusted for nondetection. <i>Canadian Journal of Forest Research</i> , 2017, 47, 1257-1265.	1.7	6
29	Assessing Uncertainty: Sample Size Trade-Offs in the Development and Application of Carbon Stock Models. <i>Forest Science</i> , 2017, 63, 402-412.	1.0	2
30	Hierarchical model-based inference for forest inventory utilizing three sources of information. <i>Annals of Forest Science</i> , 2016, 73, 895-910.	2.0	55
31	Effects of positional errors in model-assisted and model-based estimation of growing stock volume. <i>Remote Sensing of Environment</i> , 2016, 172, 101-108.	11.0	24
32	Large-scale estimation of aboveground biomass in miombo woodlands using airborne laser scanning and national forest inventory data. <i>Remote Sensing of Environment</i> , 2016, 186, 626-636.	11.0	26
33	Hybrid estimators for mean aboveground carbon per unit area. <i>Forest Ecology and Management</i> , 2016, 378, 44-56.	3.2	59
34	Discerning environmental factors affecting current tree growth in Central Europe. <i>Science of the Total Environment</i> , 2016, 573, 541-554.	8.0	47
35	Dead wood availability in managed Swedish forests – Policy outcomes and implications for biodiversity. <i>Forest Ecology and Management</i> , 2016, 376, 174-182.	3.2	73
36	A poststratified ratio estimator for model-assisted biomass estimation in sample-based airborne laser scanning surveys. <i>Canadian Journal of Forest Research</i> , 2016, 46, 1386-1395.	1.7	8

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37	Burial of downed deadwood is strongly affected by log attributes, forest ground vegetation, edaphic conditions, and climate zones. <i>Canadian Journal of Forest Research</i> , 2016, 46, 1451-1457.	1.7	9
38	Use of models in large-area forest surveys: comparing model-assisted, model-based and hybrid estimation. <i>Forest Ecosystems</i> , 2016, 3, .	3.1	105
39	Statistical rigor in LiDAR-assisted estimation of aboveground forest biomass. <i>Remote Sensing of Environment</i> , 2016, 173, 98-108.	11.0	58
40	Improving the precision of sample-based forest damage inventories through two-phase sampling and post-stratification using remotely sensed auxiliary information. <i>Environmental Monitoring and Assessment</i> , 2016, 188, 213.	2.7	8
41	Conditioning post-stratified inference following two-stage, equal-probability sampling. <i>Environmental and Ecological Statistics</i> , 2016, 23, 141-154.	3.5	6
42	Plant functional traits have globally consistent effects on competition. <i>Nature</i> , 2016, 529, 204-207.	27.8	655
43	Data Assimilation in Forest Inventory: First Empirical Results. <i>Forests</i> , 2015, 6, 4540-4557.	2.1	28
44	Model-assisted estimation of growing stock volume using different combinations of LiDAR and Landsat data as auxiliary information. <i>Remote Sensing of Environment</i> , 2015, 158, 431-440.	11.0	80
45	The contribution of trees outside forests to national tree biomass and carbon stocks—a comparative study across three continents. <i>Environmental Monitoring and Assessment</i> , 2015, 187, 4197.	2.7	42
46	Monitoring trees outside forests: a review. <i>Environmental Monitoring and Assessment</i> , 2015, 187, 600.	2.7	65
47	Effects of sample size and model form on the accuracy of model-based estimators of growing stock volume. <i>Canadian Journal of Forest Research</i> , 2015, 45, 1524-1534.	1.7	33
48	The choice of definition has a large effect on reported quantities of dead wood in boreal forest. <i>Scandinavian Journal of Forest Research</i> , 2014, , 1-29.	1.4	4
49	Sample-Based Estimation of Greenhouse Gas Emissions From Forests—A New Approach to Account for Both Sampling and Model Errors. <i>Forest Science</i> , 2014, 60, 3-13.	1.0	62
50	Merging National Forest and National Forest Health Inventories to Obtain an Integrated Forest Resource Inventory — Experiences from Bavaria, Slovenia and Sweden. <i>PLoS ONE</i> , 2014, 9, e100157.	2.5	13
51	Adapting National Forest Inventories to changing requirements — the case of the Swedish National Forest Inventory at the turn of the 20th century. <i>Silva Fennica</i> , 2014, 48, .	1.3	161
52	Comparison of precision of biomass estimates in regional field sample surveys and airborne LiDAR-assisted surveys in Hedmark County, Norway. <i>Remote Sensing of Environment</i> , 2013, 130, 108-120.	11.0	88
53	A simulation approach for accuracy assessment of two-phase post-stratified estimation in large-area LiDAR biomass surveys. <i>Remote Sensing of Environment</i> , 2013, 133, 210-224.	11.0	53
54	Data assimilation in stand-level forest inventories. <i>Canadian Journal of Forest Research</i> , 2013, 43, 1104-1113.	1.7	24

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55	Relascope sampling for crown ratio estimation. Canadian Journal of Forest Research, 2013, 43, 459-468.	1.7	2
56	Model-assisted estimation of change in forest biomass over an 11 year period in a sample survey supported by airborne LiDAR: A case study with post-stratification to provide "activity data". Remote Sensing of Environment, 2013, 128, 299-314.	11.0	106
57	Assessment of bias due to random measurement errors in stem volume growth estimation by the Swedish National Forest Inventory. Scandinavian Journal of Forest Research, 2013, 28, 174-183.	1.4	5
58	Harmonizing Greenhouse Gas Reporting from European Forests: Case Examples and Implications for European Union Level Reporting. Forest Science, 2012, 58, 248-256.	1.0	15
59	Interpolating and Extrapolating Information from Periodic Forest Surveys for Annual Greenhouse Gas Reporting. Forest Science, 2012, 58, 236-247.	1.0	6
60	Assessing Deadwood Using Harmonized National Forest Inventory Data. Forest Science, 2012, 58, 269-283.	1.0	41
61	Bridging National and Reference Definitions for Harmonizing Forest Statistics. Forest Science, 2012, 58, 214-223.	1.0	38
62	Lidar sampling " Using an airborne profiler to estimate forest biomass in Hedmark County, Norway. Remote Sensing of Environment, 2012, 123, 563-578.	11.0	36
63	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
64	Assessing the accuracy of regional LiDAR-based biomass estimation using a simulation approach. Remote Sensing of Environment, 2012, 123, 579-592.	11.0	75
65	Restricted imputation for improving spatial consistency in landscape level data for forest scenario analysis. Forest Ecology and Management, 2012, 272, 61-68.	3.2	6
66	Individual tree biomass equations or biomass expansion factors for assessment of carbon stock changes in living biomass " A comparative study. Forest Ecology and Management, 2012, 270, 78-84.	3.2	106
67	Adapting forest health assessments to changing perspectives on threats" a case example from Sweden. Environmental Monitoring and Assessment, 2012, 184, 2453-2464.	2.7	26
68	Determining sample size in national forest inventories by cost-plus-loss analysis: an exploratory case study. European Journal of Forest Research, 2012, 131, 339-346.	2.5	4
69	Model-based inference for biomass estimation in a LiDAR sample survey in Hedmark County, Norway This 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
70	Model-assisted estimation of biomass in a LiDAR sample survey in Hedmark County, Norway This 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
71	Model-assisted regional forest biomass estimation using LiDAR and InSAR as auxiliary data: A case study from a boreal forest area. Remote Sensing of Environment, 2011, 115, 3599-3614.	11.0	131
72	National Inventory of Landscapes in Sweden (NILS)" scope, design, and experiences from establishing a multiscale biodiversity monitoring system. Environmental Monitoring and Assessment, 2011, 173, 579-595.	2.7	107

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73	Monitoring landscape metrics by point sampling: accuracy in estimating Shannon's diversity and edge density. <i>Environmental Monitoring and Assessment</i> , 2010, 164, 403-421.	2.7	28
74	Estimating Quebec provincial forest resources using ICESat/GLAS. <i>Canadian Journal of Forest Research</i> , 2009, 39, 862-881.	1.7	66
75	Estimating Dead Wood During National Forest Inventories: A Review of Inventory Methodologies and Suggestions for Harmonization. <i>Environmental Management</i> , 2009, 44, 624-631.	2.7	64
76	Spatially consistent nearest neighbor imputation of forest stand data. <i>Remote Sensing of Environment</i> , 2009, 113, 546-553.	11.0	16
77	Combining national forest inventory field plots and remote sensing data for forest databases. <i>Remote Sensing of Environment</i> , 2008, 112, 1982-1999.	11.0	313
78	Preparing emission reporting from forests: use of National Forest Inventories in European countries. <i>Silva Fennica</i> , 2008, 42, .	1.3	37
79	Regional Forest Inventory using an Airborne Profiling LiDAR (Special Issue: Silvilaser). <i>Journal of Forest Planning</i> , 2008, 13, 287-294.	0.1	18
80	Biomass conversion factors (density and carbon concentration) by decay classes for dead wood of <i>Pinus sylvestris</i> , <i>Picea abies</i> and <i>Betula</i> spp. in boreal forests of Sweden. <i>Forest Ecology and Management</i> , 2007, 243, 19-27.	3.2	76
81	Forest certification and Swedish wood supply. <i>Forest Policy and Economics</i> , 2007, 9, 452-463.	3.4	29
82	Unrestricted guided transect sampling for surveying sparse species. <i>Canadian Journal of Forest Research</i> , 2007, 37, 2575-2586.	1.7	5
83	A framework for evaluating data acquisition strategies for analyses of sustainable forestry at national level. <i>Scandinavian Journal of Forest Research</i> , 2006, 21, 94-105.	1.4	8
84	Functions for below-ground biomass of <i>Pinus sylvestris</i> , <i>Picea abies</i> , <i>Betula pendula</i> and <i>Betula pubescens</i> in Sweden. <i>Scandinavian Journal of Forest Research</i> , 2006, 21, 84-93.	1.4	112
85	Estimation of the biomass stock of trees in Sweden: comparison of biomass equations and age-dependent biomass expansion factors. <i>Annals of Forest Science</i> , 2005, 62, 845-851.	2.0	79
86	Critical point relascope sampling for unbiased volume estimation of downed coarse woody debris. <i>Forestry</i> , 2005, 78, 417-431.	2.3	20
87	Modelling root rot incidence in Sweden using tree, site and stand variables. <i>Scandinavian Journal of Forest Research</i> , 2005, 20, 165-176.	1.4	53
88	Surveyor consistency in presence/absence sampling for monitoring vegetation in a boreal forest. <i>Forest Ecology and Management</i> , 2005, 212, 109-117.	3.2	33
89	A STAGE-BASED MATRIX MODEL FOR DECAY-CLASS DYNAMICS OF WOODY DEBRIS. , 2002, 12, 773-781.		80
90	Two-phase approaches to point and transect relascope sampling of downed logs. <i>Canadian Journal of Forest Research</i> , 2001, 31, 971-977.	1.7	9

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91	Simultaneous Estimations of Forest Parameters using Aerial Photograph Interpreted Data and the k Nearest Neighbour Method. <i>Scandinavian Journal of Forest Research</i> , 2001, 16, 67-78.	1.4	53
92	A Three-step Approach for Modelling Tree Mortality in Swedish Forests. <i>Scandinavian Journal of Forest Research</i> , 2001, 16, 455-466.	1.4	82
93	On the Field Performance of Transect Relascope Sampling for Assessing Downed Coarse Woody Debris. <i>Scandinavian Journal of Forest Research</i> , 1999, 14, 552-557.	1.4	12
94	Point relascope sampling of downed coarse woody debris. <i>Canadian Journal of Forest Research</i> , 1999, 29, 1718-1726.	1.7	49
95	Tree rings as indicators of growth periodicity of acacias in the Rift Valley of Ethiopia. <i>Forest Ecology and Management</i> , 1999, 116, 107-117.	3.2	46
96	Field aspects of line intersect sampling for assessing coarse woody debris. <i>Forest Ecology and Management</i> , 1999, 119, 163-170.	3.2	51
97	Wood-inhabiting cryptogams on dead Norway spruce ( <i>Picea abies</i> ) trees in managed Swedish boreal forests. <i>Canadian Journal of Forest Research</i> , 1999, 29, 178-186.	1.7	148
98	On the Field Performance of Transect Relascope Sampling for Assessing Downed Coarse Woody Debris. <i>Scandinavian Journal of Forest Research</i> , 1999, 14, 552-557.	1.4	1
99	Functions for multi-phase assessment of biomass in acacia woodlands of the Rift Valley of Ethiopia. <i>Forest Ecology and Management</i> , 1998, 105, 79-90.	3.2	22
100	Transect relascope sampling for assessing coarse woody debris: The case of a $\frac{\pi}{2}$ relascope angle. <i>Scandinavian Journal of Forest Research</i> , 1997, 12, 375-381.	1.4	14
101	Optimal stand level forest inventory intensities under deterministic and stochastic stumpage value assumptions. <i>Scandinavian Journal of Forest Research</i> , 1994, 9, 405-412.	1.4	13