# Lauri Korhonen

## List of Publications by Year in descending order



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|---|---|---|---|
| 72 papers | 2,242 citations | 279798 23 h-index | 233421 45 g-index |
| 76 all docs | 76 docs citations | 76 times ranked | 2761 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Airborne discrete-return LIDAR data in the estimation of vertical canopy cover, angular canopy closure and leaf area index. Remote Sensing of Environment, 2011, 115, 1065-1080. | 11.0 | 305 |
| 2 | Comparison of Sentinel-2 and Landsat 8 in the estimation of boreal forest canopy cover and leaf area index. Remote Sensing of Environment, 2017, 195, 259-274. | 11.0 | 252 |
| 3 | Estimation of forest canopy cover: a comparison of field measurement techniques. Silva Fennica, 2006, 40, . | 1.3 | 243 |
| 4 | LiDAR waveform features for tree species classification and their sensitivity to tree- and acquisition related parameters. Remote Sensing of Environment, 2016, 173, 224-237. | 11.0 | 88 |
| 5 | Seasonal variation in MODIS LAI for a boreal forest area in Finland. Remote Sensing of Environment, 2012, 126, 104-115. | 11.0 | 82 |
| 6 | Forestation of boreal peatlands: Impacts of changing albedo and greenhouse gas fluxes on radiative forcing. Journal of Geophysical Research, 2010, 115, . | 3.3 | 64 |
| 7 | Comparison of methods for measuring gap size distribution and canopy nonrandomness at JÃrvselja RAMI (RAdiation transfer Model Intercomparison) test sites. Agricultural and Forest Meteorology, 2011, 151, 365-377. | 4.8 | 64 |
| 8 | Bayesian Approach to Tree Detection Based on Airborne Laser Scanning Data. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 2690-2699. | 6.3 | 56 |
| 9 | Use of airborne lidar for estimating canopy gap fraction and leaf area index of tropical montane forests. International Journal of Remote Sensing, 2015, 36, 2569-2583. | 2.9 | 53 |
| 10 | Nationwide airborne laser scanning based models for volume, biomass and dominant height in Finland. Silva Fennica, 2016, 50, . | 1.3 | 53 |
| 11 | Retrieving vegetation clumping index from Multi-angle Imaging SpectroRadiometer (MISR) data at 275m resolution. Remote Sensing of Environment, 2013, 138, 126-133. | 11.0 | 46 |
| 12 | Estimation of tree crown volume from airborne lidar data using computational geometry. International Journal of Remote Sensing, 2013, 34, 7236-7248. | 2.9 | 46 |
| 13 | Multispectral Airborne LiDAR Data in the Prediction of Boreal Tree Species Composition. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 3462-3471. | 6.3 | 43 |
| 14 | Local models for forest canopy cover with beta regression. Silva Fennica, 2007, 41, . | 1.3 | 41 |
| 15 | The use of airborne laser scanning to estimate sawlog volumes. Forestry, 2008, 81, 499-510. | 2.3 | 36 |
| 16 | Structural factors driving boreal forest albedo in Finland. Remote Sensing of Environment, 2016, 175, 43-51. | 11.0 | 36 |
| 17 | Laser-assisted selection of field plots for an area-based forest inventory. Silva Fennica, 2013, 47, . | 1.3 | 36 |
| 18 | Retrieval of boreal forest LAI using a forest reflectance model and empirical regressions. International Journal of Applied Earth Observation and Geoinformation, 2011, 13, 595-606. | 2.8 | 34 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Comparison of multispectral airborne laser scanning and stereo matching of aerial images as a single sensor solution to forest inventories by tree species. Remote Sensing of Environment, 2019, 231, 111208. | 11.0 | 32 |
| 20 | Assessing the performance of aerial image point cloud and spectral metrics in predicting boreal forest canopy cover. ISPRS Journal of Photogrammetry and Remote Sensing, 2017, 129, 77-85. | 11.1 | 31 |
| 21 | Digital photography for tracking the phenology of an evergreen conifer stand. Agricultural and Forest Meteorology, 2017, 246, 15-21. | 4.8 | 29 |
| 22 | The accuracy of large-area forest canopy cover estimation using Landsat in boreal region. International Journal of Applied Earth Observation and Geoinformation, 2016, 53, 118-127. | 2.8 | 28 |
| 23 | Forest inventories for small areas using drone imagery without in-situ field measurements. Remote Sensing of Environment, 2020, 237, 111404. | 11.0 | 27 |
| 24 | Leaf Area Index (LAI) Estimation of Boreal Forest Using Wide Optics Airborne Winter Photos. Remote Sensing, 2009, 1, 1380-1394. | 4.0 | 24 |
| 25 | Effect of field plot location on estimating tropical forest above-ground biomass in Nepal using airborne laser scanning data. ISPRS Journal of Photogrammetry and Remote Sensing, 2014, 94, 55-62. | 11.1 | 21 |
| 26 | Tropical forest canopy cover estimation using satellite imagery and airborne lidar reference data. Silva Fennica, 2015, 49, . | 1.3 | 21 |
| 27 | Detection of the need for seedling stand tending using high-resolution remote sensing data. Silva Fennica, 2013, 47, . | 1.3 | 21 |
| 28 | Modelling lidar-derived boreal forest canopy cover with SPOT 4 HRVIR data. International Journal of Remote Sensing, 2013, 34, 8172-8181. | 2.9 | 20 |
| 29 | Automatic Segment-Level Tree Species Recognition Using High Resolution Aerial Winter Imagery. European Journal of Remote Sensing, 2016, 49, 239-259. | 3.5 | 20 |
| 30 | 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 |
| 31 | Backscattering of individual LiDAR pulses from forest canopies explained by photogrammetrically derived vegetation structure. ISPRS Journal of Photogrammetry and Remote Sensing, 2013, 83, 81-93. | 11.1 | 19 |
| 32 | LiDAR-Based Estimates of Canopy Base Height for a Dense Uneven-Aged Structured Forest. Remote Sensing, 2020, 12, 1565. | 4.0 | 19 |
| 33 | Quantifying the missing link between forest albedo and productivity in the boreal zone. Biogeosciences, 2016, 13, 6015-6030. | 3.3 | 18 |
| 34 | Airborne Estimation of Boreal Forest LAI in Winter Conditions: A Test Using Summer and Winter Ground Truth. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 68-74. | 6.3 | 16 |
| 35 | Forest canopy structure and reflectance in humid tropical Borneo: A physically-based interpretation using spectral invariants. Remote Sensing of Environment, 2017, 201, 314-330. | 11.0 | 16 |
| 36 | Predicting stand age in managed forests using National Forest Inventory field data and airborne laser scanning. Forest Ecosystems, 2020, 7, . | 3.1 | 16 |

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| 37 | Tracking the Seasonal Dynamics of Boreal Forest Photosynthesis Using EO-1 Hyperion Reflectance: Sensitivity to Structural and Illumination Effects. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 5105-5116. | 6.3 | 15 |
| 38 | Bayesian inversion of a forest reflectance model using Sentinel-2 and Landsat 8 satellite images. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 233, 1-12. | 2.3 | 15 |
| 39 | Predicting forest growth based on airborne light detection and ranging data, climate data, and a simplified process-based model. Canadian Journal of Forest Research, 2013, 43, 364-375. | 1.7 | 14 |
| 40 | Training Area Concept in a Two-Phase Biomass Inventory Using Airborne Laser Scanning and RapidEye Satellite Data. Remote Sensing, 2014, 6, 285-309. | 4.0 | 13 |
| 41 | Calibration of nationwide airborne laser scanning based stem volume models. Remote Sensing of Environment, 2018, 210, 179-192. | 11.0 | 13 |
| 42 | Multispectral LiDAR-Based Estimation of Surface Fuel Load in a Dense Coniferous Forest. Remote Sensing, 2020, 12, 3333. | 4.0 | 13 |
| 43 | The transferability of airborne laser scanning based tree-level models between different inventory areas. Canadian Journal of Forest Research, 2019, 49, 228-236. | 1.7 | 12 |
| 44 | Retrieval and validation of forest background reflectivity from daily Moderate Resolution Imaging Spectroradiometer (MODIS) bidirectional reflectance distribution function (BRDF) data across European forests. Biogeosciences, 2021, 18, 621-635. | 3.3 | 12 |
| 45 | Prediction of forest canopy fuel parameters in managed boreal forests using multispectral and unispectral airborne laser scanning data and aerial images. European Journal of Remote Sensing, 2020, 53, 245-257. | 3.5 | 11 |
| 46 | Estimation of Canopy Cover, Gap Fraction and Leaf Area Index with Airborne Laser Scanning. Managing Forest Ecosystems, 2014, , 397-417. | 0.9 | 11 |
| 47 | Effects of numbers of observations and predictors for various model types on the performance of forest inventory with airborne laser scanning. Canadian Journal of Forest Research, 2022, 52, 385-395. | 1.7 | 11 |
| 48 | A relascope for measuring canopy cover. Canadian Journal of Forest Research, 2008, 38, 2545-2550. | 1.7 | 10 |
| 49 | Predicting the occurrence of large-diameter trees using airborne laser scanning. Canadian Journal of Forest Research, 2016, 46, 461-469. | 1.7 | 9 |
| 50 | Using LiDAR-modified topographic wetness index, terrain attributes with leaf area index to improve a single-tree growth model in south-eastern Finland. Forestry, 2019, 92, 253-263. | 2.3 | 9 |
| 51 | Direct Estimation of Forest Leaf Area Index based on Spectrally Corrected Airborne LiDAR Pulse Penetration Ratio. Remote Sensing, 2020, 12, 217. | 4.0 | 9 |
| 52 | Prediction error aggregation behaviour for remote sensing augmented forest inventory approaches. Forestry, 2021, 94, 576-587. | 2.3 | 8 |
| 53 | Inventory of aspen trees in spruce dominated stands in conservation area. Forest Ecosystems, 2015, 2, . | 3.1 | 7 |
| 54 | Estimating the beyond-shoot foliage clumping at two contrasting points in the growing season using a variety of field-based methods. Trees - Structure and Function, 2017, 31, 1367-1373. | 1.9 | 7 |

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| 55 | How much can airborne laser scanning based forest inventory by tree species benefit from auxiliary optical data?. International Journal of Applied Earth Observation and Geoinformation, 2018, 72, 91-98. | 2.8 | 7 |
| 56 | Generating fine resolution leaf area index maps for boreal forests of Finland. , 2011, , . | | 6 |
| 57 | Application of 3D triangulations of airborne laser scanning data to estimate boreal forest leaf area index. International Journal of Applied Earth Observation and Geoinformation, 2017, 59, 53-62. | 2.8 | 6 |
| 58 | Detection of European Aspen (Populus tremula L.) Based on an Unmanned Aerial Vehicle Approach in Boreal Forests. Remote Sensing, 2021, 13, 1723. | 4.0 | 6 |
| 59 | Transferability and calibration of airborne laser scanning based mixed-effects models to estimate the attributes of sawlog-sized Scots pines. Silva Fennica, 2019, 53, . | 1.3 | 6 |
| 60 | Airborne Measurements of Surface Albedo and Leaf Area Index of Snowâ€Covered Boreal Forest. Journal of Geophysical Research D: Atmospheres, 2022, 127, . | 3.3 | 6 |
| 61 | A Comparison of Linear-Mode and Single-Photon Airborne LiDAR in Species-Specific Forest Inventories. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-14. | 6.3 | 5 |
| 62 | Estimation of periodic annual increment of tree ring widths by airborne laser scanning. Canadian Journal of Forest Research, 2022, 52, 644-651. | 1.7 | 5 |
| 63 | Comparison of field and airborne laser scanning based crown cover estimates across land cover types in Kenya. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-7/W3, 409-415. | 0.2 | 4 |
| 64 | Estimation of Individual Tree Stem Biomass in an Uneven-Aged Structured Coniferous Forest Using Multispectral LiDAR Data. Remote Sensing, 2021, 13, 4827. | 4.0 | 4 |
| 65 | Estimation of boreal forest canopy cover with ground measurements, statistical models and remote sensing. Dissertationes Forestales, 2011, 2011, . | 0.1 | 3 |
| 66 | Estimation of boreal forest LAI in winter conditions: Test of a new method using wide optics airborne images. , 2010, , . | | 2 |
| 67 | Boreal forest albedo and LAI in SNORTEX 2008–2010. , 2012, , . | | 2 |
| 68 | Fusion of crown and trunk detections from airborne UAS based laser scanning for small area forest inventories. International Journal of Applied Earth Observation and Geoinformation, 2021, 100, 102327. | 2.8 | 2 |
| 69 | BACKSCATTERING OF INDIVIDUAL LIDAR PULSES FROM FOREST CANOPIES EXPLAINED BY PHOTOGRAMMETRICALLY DERIVED VEGETATION STRUCTURE. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-1/W1, 171-176. | 0.2 | 2 |
| 70 | Bayesian approach to tree detection with airborne laser scanning. , 2012, , . | | 1 |
| 71 | Estimating the clumping index at two contrasting points in the growing season using a variety of field-based methods. , 2016, , . | | 0 |
| 72 | Transferability of ALS-based forest attribute models when predicting with drone-based image point cloud data. International Journal of Applied Earth Observation and Geoinformation, 2021, 103, 102484. | 2.8 | 0 |