# Jouni Pulliainen

List of Publications by Year
in descending order

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|---|---|---|---|
| 236 papers | 7,529 citations | 57719<br>44 h-index | 60583<br>81 g-index |
| 240 all docs | 240 docs citations | 240 times ranked | 5860 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Validation of SMAP surface soil moisture products with core validation sites. Remote Sensing of Environment, 2017, 191, 215-231. | 4.6 | 503 |
| 2 | Estimating northern hemisphere snow water equivalent for climate research through assimilation of space-borne radiometer data and ground-based measurements. Remote Sensing of Environment, 2011, 115, 3517-3529. | 4.6 | 481 |
| 3 | HUT snow emission model and its applicability to snow water equivalent retrieval. IEEE Transactions on Geoscience and Remote Sensing, 1999, 37, 1378-1390. | 2.7 | 325 |
| 4 | Mapping of snow water equivalent and snow depth in boreal and sub-arctic zones by assimilating space-borne microwave radiometer data and ground-based observations. Remote Sensing of Environment, 2006, 101, 257-269. | 4.6 | 300 |
| 5 | Lake water quality classification with airborne hyperspectral spectrometer and simulated MERIS data. Remote Sensing of Environment, 2002, 79, 51-59. | 4.6 | 214 |
| 6 | Patterns and trends of Northern Hemisphere snow mass from 1980 to 2018. Nature, 2020, 581, 294-298. | 13.7 | 203 |
| 7 | Retrieval of Regional Snow Water Equivalent from Space-Borne Passive Microwave Observations. Remote Sensing of Environment, 2001, 75, 76-85. | 4.6 | 201 |
| 8 | Retrieval of water quality from airborne imaging spectrometry of various lake types in different seasons. Science of the Total Environment, 2001, 268, 59-77. | 3.9 | 176 |
| 9 | Application of an empirical neural network to surface water quality estimation in the Gulf of Finland using combined optical data and microwave data. Remote Sensing of Environment, 2002, 81, 327-336. | 4.6 | 168 |
| 10 | Artificial neural network-based techniques for the retrieval of SWE and snow depth from SSM/I data. Remote Sensing of Environment, 2004, 90, 76-85. | 4.6 | 161 |
| 11 | Cold Regions Hydrology High-Resolution Observatory for Snow and Cold Land Processes. Proceedings of the IEEE, 2010, 98, 752-765. | 16.4 | 148 |
| 12 | Retrieval of biomass in boreal forests from multitemporal ERS-1 and JERS-1 SAR images. IEEE Transactions on Geoscience and Remote Sensing, 1999, 37, 198-205. | 2.7 | 126 |
| 13 | Multitemporal behavior of L- and C-band SAR observations of boreal forests. IEEE Transactions on Geoscience and Remote Sensing, 1999, 37, 927-937. | 2.7 | 122 |
| 14 | A semi-operative approach to lake water quality retrieval from remote sensing data. Science of the Total Environment, 2001, 268, 79-93. | 3.9 | 122 |
| 15 | Detection of soil freezing from L-band passive microwave observations. Remote Sensing of Environment, 2014, 147, 206-218. | 4.6 | 120 |
| 16 | The use of ERS-1 SAR data in snow melt monitoring. IEEE Transactions on Geoscience and Remote Sensing, 1997, 35, 601-610. | 2.7 | 118 |
| 17 | Backscattering properties of boreal forests at the C- and X-bands. IEEE Transactions on Geoscience and Remote Sensing, 1994, 32, 1041-1050. | 2.7 | 117 |
| 18 | SMOS prototype algorithm for detecting autumn soil freezing. Remote Sensing of Environment, 2016, 180, 346-360. | 4.6 | 109 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|-----|-----------|
| 19 | Two-year global simulation of L-band brightness temperatures over land. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 2135-2139. | 2.7 | 108 |
| 20 | L-Band Radiometer Observations of Soil Processes in Boreal and Subarctic Environments. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 1483-1497. | 2.7 | 106 |
| 21 | Multiple-Layer Adaptation of HUT Snow Emission Model: Comparison With Experimental Data. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 2781-2794. | 2.7 | 97 |
| 22 | Water quality retrievals from combined landsat TM data and ERS-2 SAR data in the Gulf of Finland. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 622-629. | 2.7 | 95 |
| 23 | Seasonal dynamics of C-band backscatter of boreal forests with applications to biomass and soil moisture estimation. IEEE Transactions on Geoscience and Remote Sensing, 1996, 34, 758-770. | 2.7 | 92 |
| 24 | Radar-based forest biomass estimation. International Journal of Remote Sensing, 1994, 15, 2797-2808. | 1.3 | 86 |
| 25 | Introduction to GlobSnow Snow Extent products with considerations for accuracy assessment. Remote Sensing of Environment, 2015, 156, 96-108. | 4.6 | 85 |
| 26 | A case study of airborne and satellite remote sensing of a spring bloom event in the Gulf of Finland. Continental Shelf Research, 2007, 27, 228-244. | 0.9 | 84 |
| 27 | Evaluation of snow products over the Tibetan Plateau. Hydrological Processes, 2015, 29, 3247-3260. | 1.1 | 84 |
| 28 | Early snowmelt significantly enhances boreal springtime carbon uptake. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11081-11086. | 3.3 | 84 |
| 29 | Detection of Snowmelt Using Spaceborne Microwave Radiometer Data in Eurasia From 1979 to 2007. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 2996-3007. | 2.7 | 78 |
| 30 | Observed and modelled effects of ice lens formation on passive microwave brightness temperatures over snow covered tundra. Remote Sensing of Environment, 2010, 114, 116-126. | 4.6 | 74 |
| 31 | Landsat ETM+ Images in the Estimation of Seasonal Lake Water Quality in Boreal River Basins. Environmental Management, 2008, 42, 511-522. | 1.2 | 72 |
| 32 | Feasibility of multi-temporal interferometric SAR data for stand-level estimation of boreal forest stem volume. Remote Sensing of Environment, 2003, 85, 397-409. | 4.6 | 71 |
| 33 | An optical reflectance model-based method for fractional snow cover mapping applicable to continental scale. Remote Sensing of Environment, 2012, 123, 508-521. | 4.6 | 69 |
| 34 | Where do the treeless tundra areas of northern highlands fit in the global biome system: toward an ecologically natural subdivision of the tundra biome. Ecology and Evolution, 2016, 6, 143-158. | 0.8 | 69 |
| 35 | Evaluation of passive microwave brightness temperature simulations and snow water equivalent retrievals through a winter season. Remote Sensing of Environment, 2012, 117, 236-248. | 4.6 | 65 |
| 36 | Development of geophysical retrieval algorithms for the MIMR. IEEE Transactions on Geoscience and Remote Sensing, 1993, 31, 268-277. | 2.7 | 62 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 37 | Model for microwave emission of a snow-covered ground with focus on L band. Remote Sensing of Environment, 2014, 154, 180-191. | 4.6 | 62 |
| 38 | Validation of Soil Moisture Data Products From the NASA SMAP Mission. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 364-392. | 2.3 | 62 |
| 39 | Snow density and ground permittivity retrieved from L-band radiometry: Application to experimental data. Remote Sensing of Environment, 2016, 180, 377-391. | 4.6 | 60 |
| 40 | Improved linear interpolation method for the estimation of snow-covered area from optical data. Remote Sensing of Environment, 2002, 82, 64-78. | 4.6 | 59 |
| 41 | Snow Density and Ground Permittivity Retrieved from L-Band Radiometry: A Synthetic Analysis. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 3833-3845. | 2.3 | 59 |
| 42 | GlobSnow v3.0 Northern Hemisphere snow water equivalent dataset. Scientific Data, 2021, 8, 163. | 2.4 | 58 |
| 43 | Effect of reindeer grazing on snowmelt, albedo and energy balance based on satellite data analyses. Remote Sensing of Environment, 2013, 135, 107-117. | 4.6 | 52 |
| 44 | The seasonal behavior of interferometric coherence in boreal forest. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 820-829. | 2.7 | 50 |
| 45 | A helicopter-borne eight-channel ranging scatterometer for remote sensing. I. System description. IEEE Transactions on Geoscience and Remote Sensing, 1993, 31, 161-169. | 2.7 | 46 |
| 46 | Simulation of Spaceborne Microwave Radiometer Measurements of Snow Cover Using <i>In Situ</i> Data and Brightness Temperature Modeling. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 1031-1044. | 2.7 | 46 |
| 47 | Evolution of snow and ice temperature, thickness and energy balance in Lake Orajärvi, northern Finland. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 66, 21564. | 0.8 | 43 |
| 48 | Retrieval of surface temperature in boreal forest zone from SSM/I data. IEEE Transactions on Geoscience and Remote Sensing, 1997, 35, 1188-1200. | 2.7 | 42 |
| 49 | The behaviour of snow and snow-free surface reflectance in boreal forests: Implications to the performance of snow covered area monitoring. Remote Sensing of Environment, 2009, 113, 907-918. | 4.6 | 42 |
| 50 | Retrieval of Effective Correlation Length and Snow Water Equivalent from Radar and Passive Microwave Measurements. Remote Sensing, 2018, 10, 170. | 1.8 | 42 |
| 51 | Snow-Covered Area Estimation Using Satellite Radar Wide-Swath Images. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 978-989. | 2.7 | 41 |
| 52 | Analysis on the feasibility of multi-source remote sensing observations for chl-a monitoring in Finnish lakes. Science of the Total Environment, 2001, 268, 95-106. | 3.9 | 39 |
| 53 | Feasibility of airborne imaging spectrometry for lake monitoring—a case study of spatial chlorophyll a distribution in two meso-eutrophic lakes. International Journal of Remote Sensing, 2003, 24, 3771-3790. | 1.3 | 39 |
| 54 | Physical properties of Arctic versus subarctic snow: Implications for high latitude passive microwave snow water equivalent retrievals. Journal of Geophysical Research D: Atmospheres, 2014, 119, 7254-7270. | 1.2 | 39 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 55 | Space‐Based Observations for Understanding Changes in the Arctic‐Boreal Zone. Reviews of Geophysics, 2020, 58, e2019RG000652. | 9.0 | 39 |
| 56 | A Comparison of Airborne Microwave Brightness Temperatures and Snowpack Properties Across the Boreal Forests of Finland and Western Canada. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 965-978. | 2.7 | 38 |
| 57 | Simulating seasonally and spatially varying snow cover brightness temperature using HUT snow emission model and retrieval of a microwave effective grain size. Remote Sensing of Environment, 2015, 156, 71-95. | 4.6 | 37 |
| 58 | Nordic Snow Radar Experiment. Geoscientific Instrumentation, Methods and Data Systems, 2016, 5, 403-415. | 0.6 | 37 |
| 59 | MODIS time-series-derived indicators for the beginning of the growing season in boreal coniferous forest â€" A comparison with CO2 flux measurements and phenological observations in Finland. Remote Sensing of Environment, 2014, 140, 625-638. | 4.6 | 36 |
| 60 | Sodankylä manual snow survey program. Geoscientific Instrumentation, Methods and Data Systems, 2016, 5, 163-179. | 0.6 | 36 |
| 61 | Observations for Reanalyses. Bulletin of the American Meteorological Society, 2018, 99, 1851-1866. | 1.7 | 35 |
| 62 | Comparison of traditional and optical grain-size field measurements with SNOWPACK simulations in a taiga snowpack. Journal of Glaciology, 2015, 61, 151-162. | 1.1 | 33 |
| 63 | Application of ERS-1 wind scatterometer data to soil frost and soil moisture monitoring in boreal forest zone. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 849-863. | 2.7 | 31 |
| 64 | The Effect of Boreal Forest Canopy in Satellite Snow Mappingâ€"A Multisensor Analysis. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 6593-6607. | 2.7 | 30 |
| 65 | Accuracy assessment of SAR data-based snow-covered area estimation method. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 277-287. | 2.7 | 28 |
| 66 | Monitoring of Snow-Cover Properties During the Spring Melting Period in Forested Areas. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 50-58. | 2.7 | 28 |
| 67 | The Sodankylä in situ soil moisture observation network: an example application of ESAÂCCI soil moisture product evaluation. Geoscientific Instrumentation, Methods and Data Systems, 2016, 5, 95-108. | 0.6 | 28 |
| 68 | Implications of boreal forest stand characteristics for X-band SAR flood mapping accuracy. Remote Sensing of Environment, 2016, 186, 47-63. | 4.6 | 28 |
| 69 | Differences Between the HUT Snow Emission Model and MEMLS and Their Effects on Brightness Temperature Simulation. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 2001-2019. | 2.7 | 28 |
| 70 | Validation of the SMAP freeze/thaw product using categorical triple collocation. Remote Sensing of Environment, 2018, 205, 329-337. | 4.6 | 27 |
| 71 | Radar-derived standwise forest inventory. IEEE Transactions on Geoscience and Remote Sensing, 1997, 35, 392-404. | 2.7 | 26 |
| 72 | A filtering approach for estimating lake water quality from remote sensing data. International Journal of Applied Earth Observation and Geoinformation, 2007, 9, 50-64. | 1.4 | 25 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|----|-----------| 
| 73 | Water Quality Classification of Lakes Using 250-m MODIS Data. IEEE Geoscience and Remote Sensing Letters, 2004, 1, 287-291. | 1.4 | 24 |
| 74 | Snow stratigraphic heterogeneity within groundâ€based passive microwave radiometer footprints: Implications for emission modeling. Journal of Geophysical Research F: Earth Surface, 2014, 119, 550-565. | 1.0 | 24 |
| 75 | Helicopter-borne measurements of radar backscatter from forests. International Journal of Remote Sensing, 1990, 11, 1179-1191. | 1.3 | 22 |
| 76 | Effects of Meteorological and Ancillary Data, Temporal Averaging, and Evaluation Methods on Model Performance and Uncertainty in a Land Surface Model. Journal of Hydrometeorology, 2015, 16, 2559-2576. | 0.7 | 22 |
| 77 | The accuracy of snow melt-off day derived from optical and microwave radiometer data â€" A study for Europe. Remote Sensing of Environment, 2018, 211, 1-12. | 4.6 | 22 |
| 78 | Impact of dynamic snow density on GlobSnow snow water equivalent retrieval accuracy. Cryosphere, 2021, 15, 2969-2981. | 1.5 | 22 |
| 79 | Correcting for the influence of frozen lakes in satellite microwave radiometer observations through application of a microwave emission model. Remote Sensing of Environment, 2011, 115, 3695-3706. | 4.6 | 20 |
| 80 | Compensation of forest canopy effects in the estimation of snow covered area from SAR data. , 0, , . |  | 19 |
| 81 | Application of empirical neural networks to chlorophyll-a estimation in coastal waters using remote optosensors. IEEE Sensors Journal, 2003, 3, 376-382. | 2.4 | 19 |
| 82 | The combined use of optical remote sensing data and unattended flowâ€through fluorometer measurements in the Baltic Sea. International Journal of Remote Sensing, 2005, 26, 261-282. | 1.3 | 19 |
| 83 | Enhanced SAR-Based Snow-Covered Area Estimation Method for Boreal Forest Zone. IEEE Transactions on Geoscience and Remote Sensing, 2009, 47, 922-935. | 2.7 | 19 |
| 84 | Monitoring of boreal forests with multitemporal special sensor microwave imager data. Radio Science, 1998, 33, 731-744. | 0.8 | 18 |
| 85 | The Influence of Thermal Properties and Canopy- Intercepted Snow on Passive Microwave Transmissivity of a Scots Pine. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 5424-5433. | 2.7 | 18 |
| 86 | Evaluating Biosphere Model Estimates of the Start of the Vegetation Active Season in Boreal Forests by Satellite Observations. Remote Sensing, 2016, 8, 580. | 1.8 | 17 |
| 87 | New Snow Water Equivalent Processing System With Improved Resolution Over Europe and its Applications in Hydrology. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 428-436. | 2.3 | 17 |
| 88 | Investigating of snow wetness parameter using a two-phase backscattering model. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 1827-1833. | 2.7 | 16 |
| 89 | OBSERVATIONS OF L-AND C-BAND BACKSCATTER AND A SEMI-EMPIRICAL BACKSCATTERING MODEL APPROACH FROM A FOREST-SNOW-GROUND SYSTEM. Progress in Electromagnetics Research, 2006, 56, 263-281. | 1.6 | 16 |
| 90 | The behaviour of mast-borne spectra in a snow-covered boreal forest. Remote Sensing of Environment, 2012, 124, 551-563. | 4.6 | 16 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 91 | Semi-empirical modeling of the scene reflectance of snow-covered boreal forest: Validation with airborne spectrometer and LIDAR observations. Remote Sensing of Environment, 2014, 155, 303-311. | 4.6 | 16 |
| 92 | Spatially Distributed Evaluation of ESA CCI Soil Moisture Products in a Northern Boreal Forest Environment. Geosciences (Switzerland), 2018, 8, 51. | 1.0 | 16 |
| 93 | Coupling SNOWPACK-modeled grain size parameters with the HUT snow emission model. Remote Sensing of Environment, 2017, 194, 33-47. | 4.6 | 15 |
| 94 | Boreal Forest Coherence-Based Measures of Interferometric Pair Suitability for Operational Stem Volume Retrieval. IEEE Geoscience and Remote Sensing Letters, 2004, 1, 228-231. | 1.4 | 14 |
| 95 | Detecting the onset of snowâ€melt using SSM/I data and the selfâ€organizing map. International Journal of Remote Sensing, 2008, 29, 755-766. | 1.3 | 14 |
| 96 | Observation and Modeling of the Microwave Brightness Temperature of Snow-Covered Frozen Lakes and Wetlands. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 3275-3288. | 2.7 | 14 |
| 97 | User requirements for the snow and land ice services â€" CryoLand. Cryosphere, 2015, 9, 1191-1202. | 1.5 | 14 |
| 98 | A Modeling-Based Approach for Soil Frost Detection in the Northern Boreal Forest Region With C-Band SAR. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 1069-1083. | 2.7 | 14 |
| 99 | Effective Permittivity of Wet Snow Using Strong Fluctuation Theory - Abstract. Journal of Electromagnetic Waves and Applications, 2001, 15, 53-55. | 1.0 | 11 |
| 100 | Regional water quality mapping through the assimilation of spaceborne remote sensing data to ship-based transect observations. Journal of Geophysical Research, 2004, 109, . | 3.3 | 11 |
| 101 | Performance inter-comparison of soil moisture retrieval models for the MetOp-A ASCAT instrument. , 2014, , . | | 11 |
| 102 | Sentinel-1 based soil freeze/thaw estimation in boreal forest environments. Remote Sensing of Environment, 2021, 254, 112267. | 4.6 | 10 |
| 103 | Spatial and temporal variation of bulk snow properties in northern boreal and tundra environments based on extensive field measurements. Geoscientific Instrumentation, Methods and Data Systems, 2016, 5, 347-363. | 0.6 | 9 |
| 104 | Overview: Recent advances in the understanding of the northern Eurasian environments and of the urban air quality in China â€" a Pan-Eurasian Experiment (PEEX) programme perspective. Atmospheric Chemistry and Physics, 2022, 22, 4413-4469. | 1.9 | 9 |
| 105 | Land applications of ERS-1 Wind Scatterometer in boreal forest zone. , 0, , . | | 8 |
| 106 | Seasonal comparison of HUTSCAT ranging scatterometer and ERS-1 SAR microwave signatures of boreal forest zone. IEEE Transactions on Geoscience and Remote Sensing, 1999, 37, 2068-2079. | 2.7 | 8 |
| 107 | Applicability of Combined Microwave and Optical Data for Surface Water Quality Retrievals â€" Abstract. Journal of Electromagnetic Waves and Applications, 2002, 16, 249-251. | 1.0 | 8 |
| 108 | Combined active and passive microwave remote sensing of snow in Finland. , 0, , . | | 8 |

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|---|---------|----|-----------| 
| 109 | Comparison of SAR-Based Snow-Covered Area Estimation Methods for the Boreal Forest Zone. IEEE Geoscience and Remote Sensing Letters, 2009, 6, 403-407. | 1.4 | 8 |
| 110 | The effect of boreal forest canopy to reflectance of snow covered terrain based on airborne imaging spectrometer observations. International Journal of Applied Earth Observation and Geoinformation, 2014, 27, 31-41. | 1.4 | 8 |
| 111 | Active Microwave Scattering Signature of Snowpackâ€"Continuous Multiyear SnowScat Observation Experiments. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 3849-3869. | 2.3 | 8 |
| 112 | Investigating hemispherical trends in snow accumulation using GlobSnow snow water equivalent data. , 2011, , . | | 7 |
| 113 | CoReH&lt;inf&gt;2&lt;/inf&gt;O, a dual frequency radar mission for snow and ice observations. , 2012, , . | | 7 |
| 114 | Determination of uncertainty characteristics for the satellite data-based estimation of fractional snow cover. Remote Sensing of Environment, 2018, 212, 103-113. | 4.6 | 7 |
| 115 | Solving Challenges of Assimilating Microwave Remote Sensing Signatures With a Physical Model to Estimate Snow Water Equivalent. Water Resources Research, 2021, 57, e2021WR030119. | 1.7 | 7 |
| 116 | Correlation Functions and Correlation Lengths for Dry Snow. Journal of Electromagnetic Waves and Applications, 1998, 12, 1337-1347. | 1.0 | 6 |
| 117 | Active and passive microwave remote sensing of boreal forests. Acta Astronautica, 2002, 51, 707-713. | 1.7 | 6 |
| 118 | From EO data to snow covered area (SCA) end products using automated processing system. , 0, , . | | 6 |
| 119 | Analysis of Turbid Water Quality Using Airborne Spectrometer Data with a Numerical Weather Prediction Model-aided Atmospheric Correction. Photogrammetric Engineering and Remote Sensing, 2008, 74, 363-374. | 0.3 | 6 |
| 120 | Spectral reflectance behavior of different boreal snow types. Journal of Glaciology, 2019, 65, 926-939. | 1.1 | 6 |
| 121 | SodSAR: A Tower-Based 1â€"10 GHz SAR System for Snow, Soil and Vegetation Studies. Sensors, 2020, 20, 6702. | 2.1 | 6 |
| 122 | Inter-annual variation in lake ice composition in the European Arctic: observations based on high-resolution thermistor strings. Earth System Science Data, 2021, 13, 3967-3978. | 3.7 | 6 |
| 123 | Laboratory, field, mast-borne and airborne spectral reflectance measurements of boreal landscape during spring. Earth System Science Data, 2020, 12, 719-740. | 3.7 | 6 |
| 124 | Subpixel Land Use Classification and Retrieval of Forest Stem Volume in the Boreal Forest Zone by Employing SSM/I Data. Remote Sensing of Environment, 1998, 63, 140-154. | 4.6 | 5 |
| 125 | Transmissivity of boreal forest canopies for microwave radiometry of snow. , 0, , . | | 5 |
| 126 | Monitoring of soil moisture and vegetation water content variations in boreal forest from C-band SAR data. , 0, , . | | 5 |

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|---|---------|----|-----------|
| 127 | Snow covered area estimation using satellite radar wide swath images. , 0, , . | | 5 |
| 128 | Reflectance spectroradiometer measurement system in 30 meter mast for validating satellite images. , 2007, , . | | 5 |
| 129 | Analysis of active and passive microwave observations from the NoSREx campaign. , 2011, , . | | 5 |
| 130 | MODIS-derived snow-free ground reflectance statistics of selected Eurasian non-forested land cover types for the application of estimating fractional snow cover. Remote Sensing of Environment, 2013, 138, 51-64. | 4.6 | 5 |
| 131 | Evaluation of North Eurasian snow-off dates in the ECHAM5.4 atmospheric general circulation model. Geoscientific Model Development, 2014, 7, 3037-3057. | 1.3 | 5 |
| 132 | The impact of meteorological conditions on snow and ice thickness in an Arctic lake. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 68, 31590. | 0.8 | 5 |
| 133 | Reflectance variation in boreal landscape during the snow melting period using airborne imaging spectroscopy. International Journal of Applied Earth Observation and Geoinformation, 2019, 76, 66-76. | 1.4 | 5 |
| 134 | Retrieval of forest parameters from multitemporal spaceborne SAR data. , 0, , . | | 4 |
| 135 | Water quality studies of combined optical, thermal infrared, and microwave remote sensing. Microwave and Optical Technology Letters, 2002, 34, 281-285. | 0.9 | 4 |
| 136 | Estimation of the beginning of snow melt period using SSM/I data. , 0, , . | | 4 |
| 137 | CoRe-H&lt;inf&gt;2&lt;/inf&gt;O - A dual frequency SAR mission for hydrology and climate research. , 2007, , . | | 4 |
| 138 | Segment-based stem volume retrieval in boreal forests using multitemporal ERS-1/2 InSAR data. Canadian Journal of Remote Sensing, 2008, 34, 46-55. | 1.1 | 4 |
| 139 | Correction to â€œMultiple-Layer Adaptation of HUT Snow Emission Model: Comparison With Experimental Dataâ€•[Jul 10 2781-2794. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3055-3055. | 2.7 | 4 |
| 140 | Hemispheric snow water equivalent: The need for a synergistic approach. Eos, 2012, 93, 305-305. | 0.1 | 4 |
| 141 | Retrieval of snow parameters from L-band observations - application for SMOS and SMAP. , 2016, , . | | 4 |
| 142 | Effect of temporally varying parameters on L- and C-band SAR observations of boreal forests. , 0, , . | | 3 |
| 143 | Effective Permittivity of Dry Snow in the 18 To 90 GHz Range - Abstract. Journal of Electromagnetic Waves and Applications, 1999, 13, 1393-1394. | 1.0 | 3 |
| 144 | Microwave Emission Model for Wet Snow By Using Radiative Transfer and Strong Fluctuation Theory - Abstract *. Journal of Electromagnetic Waves and Applications, 2001, 15, 57-59. | 1.0 | 3 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 145 | Modeling Snow Volume Backscatter Combining the Radiative Transfer Theory and the Discrete Dipole Approximation. , 2006, , . | | 3 |
| 146 | Estimating the snow melt onset using AMSR-E data in Eurasia. , 2007, , . | | 3 |
| 147 | CoReH&lt;inf&gt;2&lt;/inf&gt;O - Cold Regions Hydrology High-esolution Observatory. , 2009, , . | | 3 |
| 148 | Evaluation of the single reference image snow-covered area estimation method for the boreal forest zone. , 2009, , . | | 3 |
| 149 | Merging flat/forest and mountainous snow products for extended European area. , 2009, , . | | 3 |
| 150 | Observing seasonal snow changes in the boreal forest area using active and passive microwave measurements. , 2010, , . | | 3 |
| 151 | L-band measurements of boreal soil. , 2010, , . | | 3 |
| 152 | Algorithm for retrieval of snow mass from Ku- and X-band radar backscatter measurements. , 2012, , . | | 3 |
| 153 | Attenuation of Radar Signal by a Boreal Forest Canopy in Winter. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5. | 1.4 | 3 |
| 154 | Microwave Radiometer And Radar Measurements In The SAAMEX Campaign. , 0, , . | | 2 |
| 155 | Radar backscatter from boreal forest in winter. , 0, , . | | 2 |
| 156 | Estimation of snow water equivalent from SSM/I data by using a physical model-based inversion algorithm. , 1998, , . | | 2 |
| 157 | Extinction behaviour of dry snow at microwave range up to 90 GHz by using strong fluctuation theory. , 1998, , . | | 2 |
| 158 | Effective permittivity of wet snow by using two-phase strong fluctuation theory with non-symmetrical inclusions. , 0, , . | | 2 |
| 159 | Estimation of snow covered area by applying apparent regional transmissivity. , 0, , . | | 2 |
| 160 | Assimilation of space-borne microwave radiometer and discrete ground-based data in snow depth mapping: a case study for northern Eurasia. , 0, , . | | 2 |
| 161 | Title is missing!. Journal of Infrared, Millimeter and Terahertz Waves, 2002, 23, 1407-1412. | 0.6 | 2 |
| 162 | Combined land-cover classification and stem volume estimation using multitemporal ERS tandem INSAR data. , 0, , . | | 2 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 163 | Detection of oil pollution on sea ice with airborne and spaceborne spectrometer. , 0, , . | | 2 |
| 164 | Retrieval of snow characteristics from spaceborne scatterometer data. , 0, , . | | 2 |
| 165 | Estimation of snow water equivalent and snow depth in boreal forests by assimilating AMSR-E observations with in situ observations. , 0, , . | | 2 |
| 166 | Assimilating spaceborne radar and ground-based weather station data for operational snow-covered area estimation. , 2007, , . | | 2 |
| 167 | Detection of snow melt using different algorithms in global scale. , 2008, , . | | 2 |
| 168 | New approach for the global mapping of fractional snow coverage in boreal forest and tundra belt applicable to various sensors. , 2010, , . | | 2 |
| 169 | Implementing hemispherical snow water equivalent product assimilating weather station observations and spaceborne microwave data. , 2011, , . | | 2 |
| 170 | COREH2O: High-resolution X/Ku-band radar imaging of cold land processes. , 2013, , . | | 2 |
| 171 | Assessing global satellite-based snow water equivalent datasets in ESA SnowPEx project. , 2016, , . | | 2 |
| 172 | Season -Length Observations of Active and Passive Microwave Signatures of Snow Cover in a Boreal Forest Environment. , 2018, , . | | 2 |
| 173 | Smos Retrievals of Soil Freezing and Thawing and its Applications. , 2018, , . | | 2 |
| 174 | CryoLand - GMES Service Snow and Land Ice - Interoperability, Service Integration and User Access. IFIP Advances in Information and Communication Technology, 2011, , 341-348. | 0.5 | 2 |
| 175 | Effects of temperature and moisture of snow and soil on SSM/I response to snow. , 0, , . | | 2 |
| 176 | Simulation Software For A Satellite-borne Radiometer System. , 0, , . | | 1 |
| 177 | Development Of Geophysical Algorithms For A Spaceborne Microwave Radiometer System. , 0, , . | | 1 |
| 178 | Laboratory and Tower-Based Microwave Measurements of Spruce Defoliation. , 0, , . | | 1 |
| 179 | Estimation of forest biomass and soil moisture in boreal forests employing ERS-1 SAR data. , 0, , . | | 1 |
| 180 | SSM/I-based surface temperature retrieval methods for boreal forest zone. , 0, , . | | 1 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|----|-----------|
| 181 | The HUT brightness temperature model for snow-covered terrain. , 0, , . | | 1 |
| 182 | Comparison of ranging scatterometer and ERS-1 SAR microwave signatures over boreal forest zone during winter season. , 0, , . | | 1 |
| 183 | Monitoring of turbid coastal and inland waters by airborne imaging spectrometer AISA. , 1998, , . | | 1 |
| 184 | An application of strong fluctuation theory on wet snow modeling. , 0, , . | | 1 |
| 185 | A semi empirical backscattering model of forest canopy covered by snow using SAR data. , 0, , . | | 1 |
| 186 | SSM/I response to dry snow and land-cover categories. , 0, , . | | 1 |
| 187 | Assimilation of SAR data to operational hydrological runoff and snow melt forecasting model. , 0, , . | | 1 |
| 188 | Detection of sea surface temperature (SST) using AVHRR data in the Gulf of Finland. , 0, , . | | 1 |
| 189 | The use of airborne optical spectrometer data in snow cover monitoring. , 0, , . | | 1 |
| 190 | Classification and retrieval of dry snow parameters by means of SMM/I data and artificial neural networks. , 0, , . | | 1 |
| 191 | Estimation of snow pack characteristics and snow covered area in Boreal forests from ERS-2 SAR and envisat ASAR data. , 0, , . | | 1 |
| 192 | A Comparison of Airborne Passive Microwave Brightness Temperatures and Snowpack Properties across the Boreal Forests of Finland and Western Canada. , 2006, , . | | 1 |
| 193 | Development of Techniques to Retrieve Snow Covered Area (SCA) in Boreal Forests from Space-borne Microwave Observations. , 2006, , . | | 1 |
| 194 | Mapping of Snow Water Equivalent and Snow Coverage from Combined EO and in situ Data for Climatic Studies and Hydrological Forecasting Models. , 2006, , . | | 1 |
| 195 | Operational snow monitoring using satellite observations. , 2007, , . | | 1 |
| 196 | Operational snow map production for whole eurasia using microwave radiometer and ground-based observations. , 2007, , . | | 1 |
| 197 | Validation of microwave emission models by simulating AMSR-E brightness temperature data from ground-based observations. , 2007, , . | | 1 |
| 198 | Using Multilook Averaging for Coherently Modeled Scattering From a Pine Tree at L-Band. IEEE Geoscience and Remote Sensing Letters, 2009, 6, 162-166. | 1.4 | 1 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 199 | Monitoring of snow cover properties during the spring melting period in forested areas. , 2009, , . | | 1 |
| 200 | A new global Snow Extent product based on ATSR-2 and AATSR. , 2010, , . | | 1 |
| 201 | SNOWCARBO: Monitoring and assessment of carbon balance related phenomena in Finland and northern Eurasia. , 2011, , . | | 1 |
| 202 | Monitoring snow parameters in boreal forest using multi-frequency SAR data. , 2014, , . | | 1 |
| 203 | Spring-time fractional snow cover mapping in Northern Hemisphere with NPP Suomi/VIIRS within ESA DUE GlobSnow-2 project. , 2014, , . | | 1 |
| 204 | Comparison of SSMIS, AMSR-E and MWRI brightness temperature data. , 2014, , . | | 1 |
| 205 | Assessment of Seasonal snow Cover Mass in Northern Hemisphere During the Satellite-ERA. , 2018, , . | | 1 |
| 206 | Sustainable earth observations for the Arctic, the Antarctic and the high-altitude mountain cold regions. International Journal of Digital Earth, 2019, 12, 858-859. | 1.6 | 1 |
| 207 | Feasibility of satellite Ku-band scatterometer data for retrieval of seasonal snow characteristics in Finland. , 0, , . | | 0 |
| 208 | Accuracy of forest inventory based on radar-derived stand profile. , 0, , . | | 0 |
| 209 | Theoretical and experimental studies of dry snow effective permittivity in the 18 to 90 GHz range. , 0, , . | | 0 |
| 210 | Correlation functions and correlation lengths for dry snow. , 1998, , . | | 0 |
| 211 | Application of Strong Fluctuation Theory To Microwave Emission From Dry Snow - Abstract. Journal of Electromagnetic Waves and Applications, 2000, 14, 829-830. | 1.0 | 0 |
| 212 | Estimation of areal snow water equivalent from space-borne microwave observations. , 0, , . | | 0 |
| 213 | Lake water quality classification with airborne multichannel spectrometer. , 0, , . | | 0 |
| 214 | Use of MODIS data for monitoring turbidity in Finnish lakes. , 0, , . | | 0 |
| 215 | Estimation of boreal forest biomass from multi-temporal INSAR data by inverting an empirical backscattering-coherence model. , 0, , . | | 0 |
| 216 | <title>Application of neural networks to AVHRR chlorophyll-a and turbidity estimation</title>. , 2002, , . | | 0 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 217 | Investigating relationship between correlation lengths and physical properties of wet snow. , 0, , . | | 0 |
| 218 | Electromagnetic scattering from ocean surface using single integral equation and adaptive integral method. , 0, , . | | 0 |
| 219 | Investigation of the effect of variable viewing angle with airborne multiangular measurements. , 0, , . | | 0 |
| 220 | Spectrometer-derived variability for snow covered forest reflectances in the melting period. , 0, , . | | 0 |
| 221 | Spatial Microwave Brightness Temperature Variations of Boreal Forests under Dry Snow Cover Conditions. , 0, , . | | 0 |
| 222 | Experimental validation activities of HUT snow emission model. , 2009, , . | | 0 |
| 223 | Modeling attenuation of melting hydrometeors with a method based on volume integral equations. , 2010, , . | | 0 |
| 224 | Combined hemispherical scale SWE and snow clearance monitoring. , 2010, , . | | 0 |
| 225 | Improving hydrological forecasting using multi-source remote sensing data together with in situ measurements. , 2010, , . | | 0 |
| 226 | Effects of snowpack parameters and layering processes at X- and Ku-band backscatter. , 2011, , . | | 0 |
| 227 | CoReH&lt;inf&gt;2&lt;/inf&gt;0, a dual frequency radar satellite for COld REgions Hydrology. , 2011, , . | | 0 |
| 228 | Electromagnetic simulation and validation of backscattering from boreal forest in the C-Ku frequency range. , 2013, , . | | 0 |
| 229 | Potential of L-band passive microwave radiometry for snow parameter retrieval. , 2015, , . | | 0 |
| 230 | Hydrological applications of super resolution SWE processing system over Europe. , 2016, , . | | 0 |
| 231 | Long term changes in Northern hemisphere snow cover from SWE timeseries constrained with SE data. , 2017, , . | | 0 |
| 232 | The Pan-European Yearly Snow Melt-Off Day Derived from Optical and Microwave Radiometer Data. , 2018, , . | | 0 |
| 233 | Soil Permittivity and Soil Frost Retrievals Using a Synergistic Method for Active and Passive Microwave Instruments. , 2018, , . | | 0 |
| 234 | Development of SWE Retrieval Methods in the ESA Snow CCI Project And Long Term Trends in Seasonal Snow Mass. , 2019, , . | | 0 |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 235 | Estimation of Hemispheric Snow Mass Evolution Based on Microwave Radiometry. , 2021, , . | | 0 |
| 236 | Development of Dynamic Snow Density Methodology for GlobSnow SWE Retrieval. , 2021, , . | | 0 |