

# Tarmo Virtanen

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1753865/publications.pdf>

Version: 2024-02-01

50  
papers

2,123  
citations

218677

26  
h-index

233421

45  
g-index

50  
all docs

50  
docs citations

50  
times ranked

3207  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomass offsets little or none of permafrost carbon release from soils, streams, and wildfire: an expert assessment. <i>Environmental Research Letters</i> , 2016, 11, 034014.	5.2	199
2	Large N <sub>2</sub> O emissions from cryoturbated peat soil in tundra. <i>Nature Geoscience</i> , 2009, 2, 189-192.	12.9	171
3	The importance of northern peatland expansion to the late-Holocene rise of atmospheric methane. <i>Quaternary Science Reviews</i> , 2010, 29, 611-617.	3.0	109
4	Smartphone GPS tracking—Inexpensive and efficient data collection on recreational movement. <i>Landscape and Urban Planning</i> , 2017, 157, 608-617.	7.5	99
5	Performance of moth larvae on birch in relation to altitude, climate, host quality and parasitoids. <i>Oecologia</i> , 1999, 120, 92-101.	2.0	90
6	High-resolution mapping of ecosystem carbon storage and potential effects of permafrost thaw in periglacial terrain, European Russian Arctic. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	88
7	Carbon balance in East European tundra. <i>Global Biogeochemical Cycles</i> , 2004, 18, n/a-n/a.	4.9	87
8	Modelling topoclimatic patterns of egg mortality of <i>Epirrita autumnata</i> (Lepidoptera: Geometridae) with a Geographical Information System: predictions for current climate and warmer climate scenarios. <i>Journal of Applied Ecology</i> , 1998, 35, 311-322.	4.0	79
9	Soil organic carbon pools in a periglacial landscape: a case study from the central Canadian Arctic. <i>Permafrost and Periglacial Processes</i> , 2010, 21, 16-29.	3.4	79
10	Postglacial spatiotemporal peatland initiation and lateral expansion dynamics in North America and northern Europe. <i>Holocene</i> , 2013, 23, 1596-1606.	1.7	76
11	Data and resolution requirements in mapping vegetation in spatially heterogeneous landscapes. <i>Remote Sensing of Environment</i> , 2019, 230, 111207.	11.0	74
12	The fragmented nature of tundra landscape. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2014, 27, 4-12.	2.8	59
13	Contrasting spatial and temporal trends of protected area effectiveness in mitigating deforestation in Madagascar. <i>Biological Conservation</i> , 2016, 203, 290-297.	4.1	57
14	Old Mountain Birches at High Altitudes are Prone to Outbreaks of <i>Epirrita autumnata</i> (Lepidoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.4	51
15	More than A to B: Understanding and managing visitor spatial behaviour in urban forests using public participation GIS. <i>Journal of Environmental Management</i> , 2018, 207, 124-133.	7.8	48
16	Multiple indicators of human impacts on the environment in the Pechora Basin, north-eastern European Russia. <i>Ecological Indicators</i> , 2009, 9, 765-779.	6.3	46
17	The Boreal—Arctic Wetland and Lake Dataset (BAWLD). <i>Earth System Science Data</i> , 2021, 13, 5127-5149.	9.9	46
18	Changing stock of biomass carbon in a boreal forest over 93 years. <i>Forest Ecology and Management</i> , 2010, 259, 1239-1244.	3.2	43

#	ARTICLE	IF	CITATIONS
19	The current state of CO <sub>2</sub> flux chamber studies in the Arctic tundra. <i>Progress in Physical Geography</i> , 2018, 42, 162-184.	3.2	41
20	Palaeoecological evidence of changes in vegetation and climate during the Holocene in the pre-Polar Urals, northeast European Russia. <i>Journal of Quaternary Science</i> , 2003, 18, 503-520.	2.1	40
21	Satellite image analysis of human caused changes in the tundra vegetation around the city of Vorkuta, north-European Russia. <i>Environmental Pollution</i> , 2002, 120, 647-658.	7.5	37
22	Competitive exclusion within the predator community influences the distribution of a threatened prey species. <i>Ecology</i> , 2012, 93, 1802-1808.	3.2	36
23	Climate change and the risks of Neodiprion sertifer outbreaks on Scots pine.. <i>Silva Fennica</i> , 1996, 30, .	1.3	36
24	Climate change and macrolepidopteran biodiversity in Finland. <i>Chemosphere</i> , 1999, 1, 439-448.	1.2	34
25	Spatial variation and seasonal dynamics of leaf-area index in the arctic tundra-implications for linking ground observations and satellite images. <i>Environmental Research Letters</i> , 2017, 12, 095002.	5.2	33
26	Interpreting eddy covariance data from heterogeneous Siberian tundra: land-cover-specific methane fluxes and spatial representativeness. <i>Biogeosciences</i> , 2019, 16, 255-274.	3.3	30
27	Detecting northern peatland vegetation patterns at ultra-high spatial resolution. <i>Remote Sensing in Ecology and Conservation</i> , 2020, 6, 457-471.	4.3	27
28	Spatial variation and linkages of soil and vegetation in the Siberian Arctic tundra – coupling field observations with remote sensing data. <i>Biogeosciences</i> , 2018, 15, 2781-2801.	3.3	26
29	Satellite image based vegetation classification of a large area using limited ground reference data: a case study in the Usa Basin, north-east European Russia. <i>Polar Research</i> , 2004, 23, 51-66.	1.6	23
30	Comparing ultra-high spatial resolution remote sensing methods in mapping peatland vegetation. <i>Journal of Vegetation Science</i> , 2019, 30, 1016-1026.	2.2	23
31	Peatland leaf-area index and biomass estimation with ultra-high resolution remote sensing. <i>GIScience and Remote Sensing</i> , 2020, 57, 943-964.	5.9	21
32	Perceived and Measured Levels of Environmental Pollution: Interdisciplinary Research in the Subarctic Lowlands of Northeast European Russia. <i>Ambio</i> , 2006, 35, 220-228.	5.5	20
33	Bird Assemblages in a Malagasy Forest-Agricultural Frontier: Effects of Habitat Structure and Forest Cover. <i>Tropical Conservation Science</i> , 2015, 8, 681-710.	1.2	20
34	Predicting catchment-scale methane fluxes with multi-source remote sensing. <i>Landscape Ecology</i> , 2021, 36, 1177-1195.	4.2	19
35	Modeling the Location of the Forest Line in Northeast European Russia with Remotely Sensed Vegetation and GIS-Based Climate and Terrain Data. <i>Arctic, Antarctic, and Alpine Research</i> , 2004, 36, 314-322.	1.1	18
36	Land cover change on the Isthmus of Karelia 1939–2005: Agricultural abandonment and natural succession. <i>Environmental Science and Policy</i> , 2016, 55, 127-134.	4.9	15

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37	Predicting aboveground biomass in Arctic landscapes using very high spatial resolution satellite imagery and field sampling. <i>International Journal of Remote Sensing</i> , 2019, 40, 1175-1199.	2.9	15
38	Carbon dioxide and methane exchange of a patterned subarctic fen during two contrasting growing seasons. <i>Biogeosciences</i> , 2021, 18, 873-896.	3.3	15
39	Sensitivity Analysis of Discharge in the Arctic Usa Basin, East-European Russia. <i>Climatic Change</i> , 2003, 57, 139-161.	3.6	13
40	Where are the hotspots and coldspots of landscape values, visitor use and biodiversity in an urban forest?. <i>PLoS ONE</i> , 2018, 13, e0203611.	2.5	13
41	Satellite image based vegetation classification of a large area using limited ground reference data: a case study in the Usa Basin, north-east European Russia. <i>Polar Research</i> , 2004, 23, 51-66.	1.6	11
42	Water flow controls the spatial variability of methane emissions in a northern valley fen ecosystem. <i>Biogeosciences</i> , 2020, 17, 6247-6270.	3.3	10
43	Usability of one-class classification in mapping and detecting changes in bare peat surfaces in the tundra. <i>International Journal of Remote Sensing</i> , 2019, 40, 4083-4103.	2.9	8
44	Very High Spatial Resolution Soil Moisture Observation of Heterogeneous Subarctic Catchment Using Nonlocal Averaging and Multitemporal SAR Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2022, 60, 1-17.	6.3	8
45	Spatiotemporal dynamics of plant occurrence in an urban forest fragment. <i>Plant Ecology</i> , 2013, 214, 669-683.	1.6	7
46	Dissolved organic matter dynamics during the spring snowmelt at a boreal river valley mire complex in Northwest Russia. <i>Hydrological Processes</i> , 2016, 30, 1727-1741.	2.6	7
47	Variation in CO <sub>2</sub> and CH <sub>4</sub> fluxes among land cover types in heterogeneous Arctic tundra in northeastern Siberia. <i>Biogeosciences</i> , 2022, 19, 3151-3167.	3.3	6
48	Differences in the forest landscape structure along the Finnish-Russian border in southern Karelia. <i>Scandinavian Journal of Forest Research</i> , 2009, 24, 140-148.	1.4	5
49	Warming climate forcing impact from a sub-arctic peatland as a result of late Holocene permafrost aggradation and initiation of bare peat surfaces. <i>Quaternary Science Reviews</i> , 2021, 264, 107022.	3.0	3
50	Aboveground biomass patterns across treeless northern landscapes. <i>International Journal of Remote Sensing</i> , 2021, 42, 4536-4561.	2.9	2