

# Holger Gärtnertner

## List of Publications by Year in descending order

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Version: 2024-02-01

77  
papers

2,527  
citations

257450

24  
h-index

206112

48  
g-index

81  
all docs

81  
docs citations

81  
times ranked

2636  
citing authors

#	ARTICLE	IF	CITATIONS
1	Wood anatomy and tree-ring stable isotopes indicate a recent decline in water-use efficiency in the desert tree <i>Moringa peregrina</i> . <i>International Journal of Biometeorology</i> , 2022, 66, 127-137.	3.0	4
2	Altered growth with blue rings: comparison of radial growth and wood anatomy between trampled and non-trampled Scots pine roots. <i>Dendrochronologia</i> , 2022, 72, 125922.	2.2	5
3	Non-linear regional weather-growth relationships indicate limited adaptability of the eastern Baltic Scots pine. <i>Forest Ecology and Management</i> , 2021, 479, 118600.	3.2	14
4	Trampling as a major ecological factor affecting the radial growth and wood anatomy of Scots pine ( <i>Pinus sylvestris</i> L.) roots on a hiking trail. <i>Ecological Indicators</i> , 2021, 121, 107095.	6.3	6
5	Nonlinear Weather-Growth Relationships Suggest Disproportional Growth Changes of Norway Spruce in the Eastern Baltic Region. <i>Forests</i> , 2021, 12, 661.	2.1	10
6	Ring-forming plants in the Egyptian deserts. <i>Flora: Morphology, Distribution, Functional Ecology of Plants</i> , 2021, 279, 151812.	1.2	2
7	Testing the potential of the dwarf shrub <i>Dryas octopetala</i> L. for dating in dendrogeomorphology. <i>Dendrochronologia</i> , 2021, 67, 125823.	2.2	3
8	Permafrost Biases Climate Signals in $\delta^{18}O$ tree-ring Series from a Sub-Alpine Tree Stand in Val Bever/Switzerland. <i>Atmosphere</i> , 2021, 12, 836.	2.3	0
9	Canopy status modulates formation of wood rays in scots pine under hemiboreal conditions. <i>Dendrochronologia</i> , 2021, 67, 125822.	2.2	1
10	Changes in Root-Shoot Allometric Relations in Alpine Norway Spruce Trees After Strip Cutting. <i>Frontiers in Plant Science</i> , 2021, 12, 703674.	3.6	2
11	Formation and decay of peat bogs in the vegetable belt of Switzerland. <i>Swiss Journal of Geosciences</i> , 2021, 114, .	1.2	2
12	Cambial Activity of <i>Moringa peregrina</i> (Forssk.) Fiori in Arid Environments. <i>Frontiers in Plant Science</i> , 2021, 12, 760002.	3.6	5
13	Occurrence of "blue" and "frost" rings reveal frost sensitivity of eastern Baltic provenances of Scots pine. <i>Forest Ecology and Management</i> , 2020, 457, 117729.	3.2	6
14	Increase in ring width, vessel number and $\delta^{18}O$ in olive trees infected with <i>Xylella fastidiosa</i> . <i>Tree Physiology</i> , 2020, 40, 1583-1594.	3.1	10
15	Functional Relationships of Wood Anatomical Traits in Norway Spruce. <i>Frontiers in Plant Science</i> , 2020, 11, 683.	3.6	26
16	Schweingrubers cosmos of inspiration. <i>Dendrochronologia</i> , 2020, 60, 125680.	2.2	2
17	Compression wood has a minor effect on the climate signal in tree-ring stable isotope records of montane Norway spruce. <i>Tree Physiology</i> , 2020, 40, 1014-1028.	3.1	10
18	Erkenntnisse aus der Trockenheit 2018 für die zukünftige Waldentwicklung. <i>Schweizerische Zeitschrift Für Forstwesen</i> , 2020, 171, 242-248.	0.1	5

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19	In Memoriam Fritz Hans Schweingruber 1936–2020. <i>Tree-Ring Research</i> , 2020, 76, 106.	0.6	1
20	Effects of Mycorrhizal Fungi on Slope Stabilisation Functions of Plants. <i>Springer Series in Geomechanics and Geoengineering</i> , 2019, , 57-77.	0.1	5
21	Comparative dendroecological characterisation of <i>Ailanthus altissima</i> (Mill.) Swingle in its native and introduced range. <i>Dendrochronologia</i> , 2019, 57, 125608.	2.2	2
22	Anatomy and dendrochronological potential of <i>Moringa peregrina</i> from the hyper-arid desert in Egypt. <i>Dendrochronologia</i> , 2019, 56, 125606.	2.2	13
23	Scientific Merits and Analytical Challenges of Tree-Ring Densitometry. <i>Reviews of Geophysics</i> , 2019, 57, 1224-1264.	23.0	98
24	Plasticity and climatic sensitivity of wood anatomy contribute to performance of eastern Baltic provenances of Scots pine. <i>Forest Ecology and Management</i> , 2019, 452, 117568.	3.2	14
25	Reconstruction and actual trends of landslide activities in Bruus-Haltiwald, Horw, canton of Lucerne, Switzerland. <i>Geographica Helvetica</i> , 2019, 74, 93-103.	0.8	6
26	An annually-resolved stem growth tool based on 3D laser scans and 2D tree-ring data. <i>Trees - Structure and Function</i> , 2018, 32, 125-136.	1.9	5
27	Introducing anatomical techniques to subfossil wood. <i>Dendrochronologia</i> , 2018, 52, 146-151.	2.2	8
28	Long slide holders for microscope stages. <i>IAWA Journal</i> , 2018, 39, 489-496.	2.7	2
29	Berenty Reserve – A Gallery Forest in Decline in Dry Southern Madagascar – Towards Forest Restoration. <i>Land</i> , 2018, 7, 8.	2.9	4
30	New Tree-Ring Evidence from the Pyrenees Reveals Western Mediterranean Climate Variability since Medieval Times. <i>Journal of Climate</i> , 2017, 30, 5295-5318.	3.2	62
31	Quantitative analysis of ring growth in spruce roots and its application towards a more precise dating. <i>Dendrochronologia</i> , 2016, 38, 61-71.	2.2	24
32	Does mycorrhizal inoculation improve plant survival, aggregate stability, and fine root development on a coarse-grained soil in an alpine eco-engineering field experiment?. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 2158-2171.	3.0	12
33	TREE-RING FEATURES: INDICATORS OF EXTREME EVENT IMPACTS. <i>IAWA Journal</i> , 2016, 37, 206-231.	2.7	64
34	A Technical Perspective in Modern Tree-ring Research - How to Overcome Dendroecological and Wood Anatomical Challenges. <i>Journal of Visualized Experiments</i> , 2015, , .	0.3	33
35	Forty centimeter long transverse and radial sections cut from fresh increment cores. <i>IAWA Journal</i> , 2015, 36, 460-463.	2.7	6
36	A new sledge microtome to combine wood anatomy and tree-ring ecology. <i>IAWA Journal</i> , 2015, 36, 452-459.	2.7	47

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37	Pre-alpine mire sediments as a mirror of erosion, soil formation and landscape evolution during the last 45ka. <i>Catena</i> , 2015, 128, 63-79.	5.0	21
38	Effects of experimental stem burial on radial growth and wood anatomy of pedunculate oak. <i>Dendrochronologia</i> , 2015, 33, 54-60.	2.2	10
39	A simplified and rapid technique to determine an aggregate stability coefficient in coarse grained soils. <i>Catena</i> , 2015, 127, 170-176.	5.0	20
40	Preparing micro sections of entire (dry) conifer increment cores for wood anatomical time-series analyses. <i>Dendrochronologia</i> , 2015, 34, 19-23.	2.2	18
41	Variation in wood anatomical structure of Douglas-fir defoliated by the western spruce budworm: a case study in the coastal-transitional zone of British Columbia, Canada. <i>Trees - Structure and Function</i> , 2014, 28, 1837-1846.	1.9	19
42	The olive-branch dating of the Santorini eruption. <i>Antiquity</i> , 2014, 88, 267-273.	1.0	25
43	The use of mycorrhiza for eco-engineering measures in steep alpine environments: effects on soil aggregate formation and fine root development. <i>Earth Surface Processes and Landforms</i> , 2014, 39, 1753-1763.	2.5	21
44	Age and diversity of Mediterranean dwarf shrublands: a dendrochronological approach along an altitudinal gradient on Crete. <i>Journal of Vegetation Science</i> , 2014, 25, 122-134.	2.2	15
45	New perspectives for wood anatomical analysis in dendrosciences: The GSL1-microtome. <i>Dendrochronologia</i> , 2014, 32, 47-51.	2.2	142
46	Tracing the origin of Arctic driftwood. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2013, 118, 68-76.	3.0	37
47	Temperature modulates intra-plant growth of <i>Salix polaris</i> from a high Arctic site (Svalbard). <i>Polar Biology</i> , 2013, 36, 1305-1318.	1.2	74
48	Effect of permafrost on the formation of soil organic carbon pools and their physical-chemical properties in the Eastern Swiss Alps. <i>Catena</i> , 2013, 110, 70-85.	5.0	34
49	Application of eccentric growth of trees as a tool for landslide analyses: The example of <i>Picea abies</i> Karst. in the Carpathian and Sudeten Mountains (Central Europe). <i>Catena</i> , 2013, 111, 41-55.	5.0	70
50	The advantage of using a starch based non-Newtonian fluid to prepare micro sections. <i>Dendrochronologia</i> , 2013, 31, 175-178.	2.2	41
51	Wood anatomical analysis of Swiss willow ( <i>Salix helvetica</i> ) shrubs growing on creeping mountain permafrost. <i>Dendrochronologia</i> , 2013, 31, 97-104.	2.2	17
52	Xylem Adjustment in <i>Erica Arborea</i> to Temperature and Moisture Availability in Contrasting Climates. <i>IAWA Journal</i> , 2013, 34, 109-126.	2.7	20
53	GLACIAL LANDFORMS, TREE RINGS   <i>Dendrogeomorphology</i> , 2013, , 91-103.		7
54	Olive Tree-Ring Problematic Dating: A Comparative Analysis on Santorini (Greece). <i>PLoS ONE</i> , 2013, 8, e54730.	2.5	60

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55	Cross-sectional interpolation of annual rings within a 3D root model. <i>Dendrochronologia</i> , 2011, 29, 201-210.	2.2	8
56	A tool to model 3D coarse-root development with annual resolution. <i>Plant and Soil</i> , 2011, 346, 79-96.	3.7	18
57	Fire-related features of wood anatomy in a sweet chestnut ( <i>Castanea sativa</i> ) coppice in southern Switzerland. <i>Trees - Structure and Function</i> , 2010, 24, 643-655.	1.9	14
58	Incorporating 2D tree-ring data in 3D laser scans of coarse-root systems. <i>Plant and Soil</i> , 2010, 334, 175-187.	3.7	20
59	Studying global change through investigation of the plastic responses of xylem anatomy in tree rings. <i>New Phytologist</i> , 2010, 185, 42-53.	7.3	475
60	Drought-triggered false ring formation in a Mediterranean shrub. <i>Botany</i> , 2010, 88, 545-555.	1.0	34
61	The core-microtome: A new tool for surface preparation on cores and time series analysis of varying cell parameters. <i>Dendrochronologia</i> , 2010, 28, 85-92.	2.2	244
62	The Formation of Traumatic Rows of Resin Ducts in <i>Larix Decidua</i> and <i>Picea Abies</i> (Pinaceae) as a Result of Wounding Experiments in the Dormant Season. <i>IAWA Journal</i> , 2009, 30, 199-215.	2.7	32
63	Application of ash ( <i>Fraxinus excelsior</i> L.) roots to determine erosion rates in mountain torrents. <i>Catena</i> , 2008, 72, 248-258.	5.0	57
64	Wood anatomical changes in roots of European ash ( <i>Fraxinus excelsior</i> L.) after exposure. <i>Dendrochronologia</i> , 2008, 25, 145-152.	2.2	32
65	Variations in Tension Wood of Two Broad-leaved Tree Species in Response to Different Mechanical Treatments: Implications for Dendrochronology and Mass Movement Studies. <i>International Journal of Plant Sciences</i> , 2008, 169, 928-936.	1.3	27
66	Erosionsrekonstruktion aufgrund anatomischer Veränderungen in Eschenwurzeln   Reconstruction of erosion dynamics with exposed roots of European ash. <i>Schweizerische Zeitschrift Fur Forstwesen</i> , 2008, 159, 51-57.	0.1	2
67	Rekonstruktion von Massenbewegungen mithilfe der Holzanatomie   Reconstruction of geomorphic events by means of wood anatomy. <i>Schweizerische Zeitschrift Fur Forstwesen</i> , 2008, 159, 58-65.	0.1	2
68	Tension Wood Formed in <i>Fagus Sylvatica</i> and <i>Alnus Glutinosa</i> After Simulated Mass Movement Events. <i>IAWA Journal</i> , 2007, 28, 39-48.	2.7	30
69	Tree roots – Methodological review and new development in dating and quantifying erosive processes. <i>Geomorphology</i> , 2007, 86, 243-251.	2.6	114
70	GLACIAL LANDFORMS, TREE RINGS   <i>Dendrogeomorphology.</i> , 2007, , 979-988.		3
71	400 Years of Debris-Flow Activity and Triggering Weather Conditions: Ritigraben, Valais, Switzerland. <i>Arctic, Antarctic, and Alpine Research</i> , 2005, 37, 387-395.	1.1	114
72	Geomorphologie und Jahrringe – Feldmethoden in der Dendrogeomorphologie   Geomorphology and tree rings – field methods in dendrogeomorphology. <i>Schweizerische Zeitschrift Fur Forstwesen</i> , 2004, 155, 198-207.	0.1	5

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73	Stabile Isotope in der Dendroklimatologie   Stable isotopes and dendroclimatology. Schweizerische Zeitschrift Fur Forstwesen, 2004, 155, 222-232.	0.1	3
74	Object-oriented modeling of data sources as a tool for the integration of heterogeneous geoscientific information. Computers and Geosciences, 2001, 27, 975-985.	4.2	13
75	Principles of semantic modeling of landform structures. Computers and Geosciences, 2001, 27, 1005-1010.	4.2	64
76	Interpretation of treeâ€™ring chronologies. Erdkunde, 2001, 55, 277-288.	0.8	22
77	Optically Active $\pm$ -Arylcarboxylic Acids by Kinetic Resolution: Pyrethroid Acids. Angewandte Chemie International Edition in English, 1984, 23, 162-164.	4.4	18