

# Bernhard Schuldt

## List of Publications by Year in descending order

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59  
papers

4,027  
citations

172457

29  
h-index

128289

60  
g-index

67  
all docs

67  
docs citations

67  
times ranked

6280  
citing authors

#	ARTICLE	IF	CITATIONS
1	Variability in growth-determining hydraulic wood and leaf traits in <i>Melia dubia</i> across a steep water availability gradient in southern India. <i>Forest Ecology and Management</i> , 2022, 505, 119875.	3.2	2
2	Leaf trait modification in European beech trees in response to climatic and edaphic drought. <i>Plant Biology</i> , 2022, 24, 1272-1286.	3.8	18
3	Soil water availability and branch age explain variability in xylem safety of European beech in Central Europe. <i>Oecologia</i> , 2022, 198, 629-644.	2.0	13
4	Lack of hydraulic recovery as a cause of post-drought foliage reduction and canopy decline in European beech. <i>New Phytologist</i> , 2022, 234, 1195-1205.	7.3	40
5	Mutually inclusive mechanisms of drought-induced tree mortality. <i>Global Change Biology</i> , 2022, 28, 3365-3378.	9.5	37
6	High variation in hydraulic efficiency but not xylem safety between roots and branches in four temperate broad-leaved tree species. <i>Functional Ecology</i> , 2022, 36, 699-712.	3.6	17
7	Influence of Juvenile Growth on Xylem Safety and Efficiency in Three Temperate Tree Species. <i>Forests</i> , 2022, 13, 909.	2.1	3
8	60-year record of stem xylem anatomy and related hydraulic modification under increased summer drought in ring- and diffuse-porous temperate broad-leaved tree species. <i>Trees - Structure and Function</i> , 2021, 35, 919-937.	1.9	14
9	A whole-plant perspective of isohydry: stem-level support for leaf-level plant water regulation. <i>Tree Physiology</i> , 2021, 41, 901-905.	3.1	29
10	Pore constrictions in intervessel pit membranes provide a mechanistic explanation for xylem embolism resistance in angiosperms. <i>New Phytologist</i> , 2021, 230, 1829-1843.	7.3	63
11	Three-dimensional quantification of tree architecture from mobile laser scanning and geometry analysis. <i>Trees - Structure and Function</i> , 2021, 35, 1385-1398.	1.9	12
12	Rapid hydraulic collapse as cause of drought-induced mortality in conifers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	80
13	An interdisciplinary framework to describe and evaluate the functioning of forest ecosystems. <i>Basic and Applied Ecology</i> , 2021, 52, 1-14.	2.7	9
14	Hydraulic variability of three temperate broadleaf tree species along a water availability gradient in central Europe. <i>New Phytologist</i> , 2021, 231, 1387-1400.	7.3	16
15	Global transpiration data from sap flow measurements: the SAPFLUXNET database. <i>Earth System Science Data</i> , 2021, 13, 2607-2649.	9.9	65
16	Identification of drought-tolerant tree species through climate sensitivity analysis of radial growth in Central European mixed broadleaf forests. <i>Forest Ecology and Management</i> , 2021, 494, 119287.	3.2	18
17	Effects of Wood Hydraulic Properties on Water Use and Productivity of Tropical Rainforest Trees. <i>Frontiers in Forests and Global Change</i> , 2021, 3, .	2.3	11
18	Water Availability Controls the Biomass Increment of <i>Melia dubia</i> in South India. <i>Forests</i> , 2021, 12, 1675.	2.1	2

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19	TRY plant trait database – enhanced coverage and open access. <i>Global Change Biology</i> , 2020, 26, 119-188.	9.5	1,038
20	Predicting Tree Sap Flux and Stomatal Conductance from Drone-Recorded Surface Temperatures in a Mixed Agroforestry System – A Machine Learning Approach. <i>Remote Sensing</i> , 2020, 12, 4070.	4.0	15
21	Tree height predicts the shape of radial sap flow profiles of Costa-Rican tropical dry forest tree species. <i>Agricultural and Forest Meteorology</i> , 2020, 287, 107913.	4.8	8
22	A first assessment of the impact of the extreme 2018 summer drought on Central European forests. <i>Basic and Applied Ecology</i> , 2020, 45, 86-103.	2.7	482
23	Effects of Summer Drought on the Fine Root System of Five Broadleaf Tree Species along a Precipitation Gradient. <i>Forests</i> , 2020, 11, 289.	2.1	16
24	Influence of Cambial Age and Axial Height on the Spatial Patterns of Xylem Traits in <i>Catalpa bungei</i> , a Ring-Porous Tree Species Native to China. <i>Forests</i> , 2019, 10, 662.	2.1	25
25	Soil moisture regime and palm height influence embolism resistance in oil palm. <i>Tree Physiology</i> , 2019, 39, 1696-1712.	3.1	8
26	Xylem hydraulic safety and efficiency in relation to leaf and wood traits in three temperate <i>Acer</i> species differing in habitat preferences. <i>Trees - Structure and Function</i> , 2019, 33, 1475-1490.	1.9	26
27	A synthesis of bias and uncertainty in sap flow methods. <i>Agricultural and Forest Meteorology</i> , 2019, 271, 362-374.	4.8	101
28	Hydraulic architecture and vulnerability to drought-induced embolism in southern boreal tree species of Inner Asia. <i>Tree Physiology</i> , 2019, 39, 463-473.	3.1	17
29	Hydraulic traits and tree-ring width in <i>Larix sibirica</i> Ledeb. as affected by summer drought and forest fragmentation in the Mongolian forest steppe. <i>Annals of Forest Science</i> , 2018, 75, 1.	2.0	22
30	Testing the plant pneumatic method to estimate xylem embolism resistance in stems of temperate trees. <i>Tree Physiology</i> , 2018, 38, 1016-1025.	3.1	47
31	Is xylem of angiosperm leaves less resistant to embolism than branches? Insights from microCT, hydraulics, and anatomy. <i>Journal of Experimental Botany</i> , 2018, 69, 5611-5623.	4.8	46
32	Higher drought sensitivity of radial growth of European beech in managed than in unmanaged forests. <i>Science of the Total Environment</i> , 2018, 642, 1201-1208.	8.0	45
33	Maximum-likelihood estimation of xylem vessel length distributions. <i>Journal of Theoretical Biology</i> , 2018, 455, 329-341.	1.7	6
34	A synthesis of tree functional traits related to drought-induced mortality in forests across climatic zones. <i>Journal of Applied Ecology</i> , 2017, 54, 1669-1686.	4.0	148
35	Calibration and comparison of thermal dissipation, heat ratio and heat field deformation sap flow probes for diffuse-porous trees. <i>Agricultural and Forest Meteorology</i> , 2017, 244-245, 151-161.	4.8	77
36	Acclimation of leaf water status and stem hydraulics to drought and tree neighbourhood: alternative strategies among the saplings of five temperate deciduous tree species. <i>Tree Physiology</i> , 2017, 37, 456-468.	3.1	24

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37	Influence of Root Diameter and Soil Depth on the Xylem Anatomy of Fine- to Medium-Sized Roots of Mature Beech Trees in the Top- and Subsoil. <i>Frontiers in Plant Science</i> , 2017, 8, 1194.	3.6	22
38	Leaf gas exchange performance and the lethal water potential of five European species during drought. <i>Tree Physiology</i> , 2016, 36, tpv117.	3.1	55
39	Intraspecific Variation in Wood Anatomical, Hydraulic, and Foliar Traits in Ten European Beech Provenances Differing in Growth Yield. <i>Frontiers in Plant Science</i> , 2016, 7, 791.	3.6	80
40	Species diversity and identity effects on the water consumption of tree sapling assemblages under ample and limited water supply. <i>Oikos</i> , 2016, 125, 86-97.	2.7	23
41	How adaptable is the hydraulic system of European beech in the face of climate change-related precipitation reduction?. <i>New Phytologist</i> , 2016, 210, 443-458.	7.3	178
42	INTERVESSEL PIT MEMBRANE THICKNESS AS A KEY DETERMINANT OF EMBOLISM RESISTANCE IN ANGIOSPERM XYLEM. <i>IAWA Journal</i> , 2016, 37, 152-171.	2.7	169
43	Species identity and neighbor size surpass the impact of tree species diversity on productivity in experimental broad-leaved tree sapling assemblages under dry and moist conditions. <i>Frontiers in Plant Science</i> , 2015, 6, 857.	3.6	16
44	Stem increment and hydraulic architecture of a boreal conifer ( <i>Larix sibirica</i> ) under contrasting macroclimates. <i>Trees - Structure and Function</i> , 2015, 29, 623-636.	1.9	23
45	Hydraulic properties and fine root mass of <i>Larix sibirica</i> along forest edge-interior gradients. <i>Acta Oecologica</i> , 2015, 63, 28-35.	1.1	17
46	Patterns in hydraulic architecture from roots to branches in six tropical tree species from cacao agroforestry and their relation to wood density and stem growth. <i>Frontiers in Plant Science</i> , 2015, 6, 191.	3.6	55
47	Replicated throughfall exclusion experiment in an Indonesian perhumid rainforest: wood production, litter fall and fine root growth under simulated drought. <i>Global Change Biology</i> , 2014, 20, 1481-1497.	9.5	49
48	Transpiration and water use strategies of a young and a full-grown short rotation coppice differing in canopy cover and leaf area. <i>Agricultural and Forest Meteorology</i> , 2014, 195-196, 165-178.	4.8	35
49	The importance of hydraulic conductivity and wood density to growth performance in eight tree species from a tropical semi-dry climate. <i>Forest Ecology and Management</i> , 2014, 330, 126-136.	3.2	80
50	Trade-offs between xylem hydraulic properties, wood anatomy and yield in <i>Populus</i> . <i>Tree Physiology</i> , 2014, 34, 744-756.	3.1	66
51	Conversion of tropical moist forest into cacao agroforest: consequences for carbon pools and annual C sequestration. <i>Agroforestry Systems</i> , 2013, 87, 1173-1187.	2.0	38
52	Changes in wood density, wood anatomy and hydraulic properties of the xylem along the root-to-shoot flow path in tropical rainforest trees. <i>Tree Physiology</i> , 2013, 33, 161-174.	3.1	79
53	Basic Approaches to Gene Expression Analysis of Stem Cells by Microarrays. <i>Methods in Molecular Biology</i> , 2011, 767, 269-282.	0.9	1
54	Change in hydraulic properties and leaf traits in a tall rainforest tree species subjected to long-term throughfall exclusion in the perhumid tropics. <i>Biogeosciences</i> , 2011, 8, 2179-2194.	3.3	38

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55	Environment and tree size controlling stem sap flux in a perhumid tropical forest of Central Sulawesi, Indonesia. <i>Annals of Forest Science</i> , 2011, 68, 1027-1038.	2.0	72
56	A guide to stem cell identification: Progress and challenges in system-wide predictive testing with complex biomarkers. <i>BioEssays</i> , 2011, 33, 880-890.	2.5	17
57	Vessel diameter and xylem hydraulic conductivity increase with tree height in tropical rainforest trees in Sulawesi, Indonesia. <i>Flora: Morphology, Distribution, Functional Ecology of Plants</i> , 2010, 205, 506-512.	1.2	67
58	The hydraulic performance of tropical rainforest trees in their perhumid environment - is there evidence for drought vulnerability?. <i>Environmental Science and Engineering</i> , 2010, , 391-410.	0.2	2
59	Below- and above-ground biomass and net primary production in a paleotropical natural forest (Sulawesi, Indonesia) as compared to neotropical forests. <i>Forest Ecology and Management</i> , 2009, 258, 1904-1912.	3.2	86