

# Christoph Leuschner

## List of Publications by Citations

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|                    |                          |                |                 |
|--------------------|--------------------------|----------------|-----------------|
| 283<br>papers      | 10,377<br>citations      | 56<br>h-index  | 86<br>g-index   |
| 290<br>ext. papers | 12,208<br>ext. citations | 4.1<br>avg, IF | 6.71<br>L-index |

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 283 | Tradeoffs between income, biodiversity, and ecosystem functioning during tropical rainforest conversion and agroforestry intensification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 4973-8 | 11.5 | 328       |
| 282 | Tree Diversity, Forest Structure and Productivity along Altitudinal and Topographical Gradients in a Species-Rich Ecuadorian Montane Rain Forest. <i>Biotropica</i> , <b>2010</b> , 42, 140-148  | 2.3  | 196       |
| 281 | Large altitudinal increase in tree root/shoot ratio in tropical mountain forests of Ecuador. <i>Basic and Applied Ecology</i> , <b>2007</b> , 8, 219-230   | 3.2  | 183       |
| 280 | Root competition between beech and oak: a hypothesis. <i>Oecologia</i> , <b>2001</b> , 126, 276-284  | 2.9  | 182       |
| 279 | Stand fine root biomass and fine root morphology in old-growth beech forests as a function of precipitation and soil fertility. <i>Plant and Soil</i> , <b>2004</b> , 258, 43-56   | 4.2  | 160       |
| 278 | Belowground drought response of European beech: fine root biomass and carbon partitioning in 14 mature stands across a precipitation gradient. <i>Global Change Biology</i> , <b>2008</b> , 14, 2081-2095  | 11.4 | 153       |
| 277 | Fifty years of change in Central European grassland vegetation: Large losses in species richness and animal-pollinated plants. <i>Biological Conservation</i> , <b>2012</b> , 150, 76-85   | 6.2  | 143       |
| 276 | Ecological and socio-economic functions across tropical land use systems after rainforest conversion. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2016</b> , 371,   | 5.8  | 143       |
| 275 | Harnessing the biodiversity value of Central and Eastern European farmland. <i>Diversity and Distributions</i> , <b>2015</b> , 21, 722-730   | 5    | 130       |
| 274 | Elevation effects on the carbon budget of tropical mountain forests (S Ecuador): the role of the belowground compartment. <i>Global Change Biology</i> , <b>2011</b> , 17, 2211-2226   | 11.4 | 127       |
| 273 | A comparison of four different fine root production estimates with ecosystem carbon balance data in a FagusQuercus mixed forest. <i>Plant and Soil</i> , <b>2002</b> , 239, 237-251  | 4.2  | 127       |
| 272 | Acidity, nutrient stocks, and organic-matter content in soils of a temperate deciduous forest with different abundance of European beech ( <i>Fagus sylvatica</i> L.). <i>Journal of Plant Nutrition and Soil Science</i> , <b>2009</b> , 172, 500-511       | 2.3  | 125       |
| 271 | Ecology of Central European Forests <b>2017</b> ,  |      | 121       |
| 270 | Biomass and morphology of fine roots in temperate broad-leaved forests differing in tree species diversity: is there evidence of below-ground overyielding?. <i>Oecologia</i> , <b>2009</b> , 161, 99-111  | 2.9  | 116       |
| 269 | How adaptable is the hydraulic system of European beech in the face of climate change-related precipitation reduction?. <i>New Phytologist</i> , <b>2016</b> , 210, 443-58   | 9.8  | 115       |
| 268 | Fine root biomass and dynamics in beech forests across a precipitation gradient Is optimal resource partitioning theory applicable to water-limited mature trees?. <i>Journal of Ecology</i> , <b>2013</b> , 101, 1183-1200                                  | 6    | 114       |
| 267 | Altitudinal Change in LAI and Stand Leaf Biomass in Tropical Montane Forests: a Transect Study in Ecuador and a Pan-Tropical Meta-Analysis. <i>Ecosystems</i> , <b>2007</b> , 10, 924-935  | 3.9  | 114       |

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| 266 | Nutrient release from decomposing leaf litter of temperate deciduous forest trees along a gradient of increasing tree species diversity. <i>Soil Biology and Biochemistry</i> , <b>2009</b> , 41, 2122-2130                                      | 7.5  | 112 |
| 265 | Genotypic variation and phenotypic plasticity in the drought response of fine roots of European beech. <i>Tree Physiology</i> , <b>2008</b> , 28, 297-309  | 4.2  | 111 |
| 264 | Soil organic carbon stocks in topsoil and subsoil controlled by parent material, carbon input in the rhizosphere, and microbial-derived compounds. <i>Soil Biology and Biochemistry</i> , <b>2018</b> , 122, 19-30                               | 7.5  | 109 |
| 263 | Quantifying above- and belowground biomass carbon loss with forest conversion in tropical lowlands of Sumatra (Indonesia). <i>Global Change Biology</i> , <b>2015</b> , 21, 3620-34  | 11.4 | 109 |
| 262 | Global warming-related tree growth decline and mortality on the north-eastern Tibetan plateau. <i>Climatic Change</i> , <b>2016</b> , 134, 163-176   | 4.5  | 106 |
| 261 | Are marginal beech ( <i>Fagus sylvatica</i> L.) provenances a source for drought tolerant ecotypes?. <i>European Journal of Forest Research</i> , <b>2009</b> , 128, 335-343   | 2.7  | 106 |
| 260 | Rainfall partitioning in relation to forest structure in differently managed montane forest stands in Central Sulawesi, Indonesia. <i>Forest Ecology and Management</i> , <b>2006</b> , 237, 170-178   | 3.9  | 106 |
| 259 | Above- and below-ground litter production in three tropical montane forests in southern Ecuador. <i>Journal of Tropical Ecology</i> , <b>2005</b> , 21, 483-492  | 1.3  | 106 |
| 258 | The Kobresia pygmaea ecosystem of the Tibetan highlands - Origin, functioning and degradation of the world's largest pastoral alpine ecosystem: Kobresia pastures of Tibet. <i>Science of the Total Environment</i> , <b>2019</b> , 648, 754-771 | 10.2 | 104 |
| 257 | On the niche breadth of <i>Fagus sylvatica</i> : soil nutrient status in 50 Central European beech stands on a broad range of bedrock types. <i>Annals of Forest Science</i> , <b>2006</b> , 63, 355-368   | 3.1  | 104 |
| 256 | Deforestation and Forest Fragmentation in South Ecuador since the 1970s - Losing a Hotspot of Biodiversity. <i>PLoS ONE</i> , <b>2015</b> , 10, e0133701   | 3.7  | 103 |
| 255 | Functional role of forest diversity: Pros and cons of synthetic stands and across-site comparisons in established forests. <i>Basic and Applied Ecology</i> , <b>2009</b> , 10, 1-9  | 3.2  | 101 |
| 254 | Climate Warming-Related Growth Decline Affects <i>Fagus sylvatica</i> , But Not Other Broad-Leaved Tree Species in Central European Mixed Forests. <i>Ecosystems</i> , <b>2015</b> , 18, 560-572   | 3.9  | 100 |
| 253 | Leaf water status and stem xylem flux in relation to soil drought in five temperate broad-leaved tree species with contrasting water use strategies. <i>Annals of Forest Science</i> , <b>2009</b> , 66, 101-101                                 | 3.1  | 100 |
| 252 | Leaf Size and Leaf Area Index in <i>Fagus sylvatica</i> Forests: Competing Effects of Precipitation, Temperature, and Nitrogen Availability. <i>Ecosystems</i> , <b>2008</b> , 11, 655-669   | 3.9  | 94  |
| 251 | Dramatic losses of specialist arable plants in Central Germany since the 1950s/60s - A cross-regional analysis. <i>Diversity and Distributions</i> , <b>2013</b> , 19, 1175-1187   | 5    | 91  |
| 250 | Forest aboveground biomass along an elevational transect in Sulawesi, Indonesia, and the role of Fagaceae in tropical montane rain forests. <i>Journal of Biogeography</i> , <b>2010</b> , 37, 960-974   | 4.1  | 91  |
| 249 | Effects of experimental drought on the fine root system of mature Norway spruce. <i>Forest Ecology and Management</i> , <b>2008</b> , 256, 1151-1159   | 3.9  | 90  |

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| 248 | Productivity of temperate broad-leaved forest stands differing in tree species diversity. <i>Annals of Forest Science</i> , <b>2010</b> , 67, 503-503   | 3.1  | 88 |
| 247 | ARE HIGH ELEVATIONS IN TROPICAL MOUNTAINS ARID ENVIRONMENTS FOR PLANTS?. <i>Ecology</i> , <b>2000</b> , 81, 1425-1436   | 4.6  | 81 |
| 246 | Fine Root Biomass of Temperate Forests in Relation to Soil Acidity and Fertility, Climate, Age and Species. <i>Progress in Botany Fortschritte Der Botanik</i> , <b>2003</b> , 405-438              | 0.6  | 79 |
| 245 | Variation of soil and biomass carbon pools in beech forests across a precipitation gradient. <i>Global Change Biology</i> , <b>2010</b> , 16, 1035-1045   | 11.4 | 78 |
| 244 | Spatial and temporal patterns of fine root abundance in a mixed oak-beech forest. <i>Forest Ecology and Management</i> , <b>1994</b> , 70, 11-21  | 3.9  | 78 |
| 243 | Belowground competition in a broad-leaved temperate mixed forest: pattern analysis and experiments in a four-species stand. <i>European Journal of Forest Research</i> , <b>2009</b> , 128, 387-398 | 2.7  | 74 |
| 242 | Growth of European beech ( <i>Fagus sylvatica</i> L.) saplings is limited by elevated atmospheric vapour pressure deficits. <i>Forest Ecology and Management</i> , <b>2008</b> , 256, 648-655       | 3.9  | 73 |
| 241 | Diverging climate trends in Mongolian taiga forests influence growth and regeneration of <i>Larix sibirica</i> . <i>Oecologia</i> , <b>2010</b> , 163, 1091-102                                     | 2.9  | 71 |
| 240 | Crown plasticity in mixed forestsQuantifying asymmetry as a measure of competition using terrestrial laser scanning. <i>Forest Ecology and Management</i> , <b>2011</b> , 261, 2123-2132            | 3.9  | 70 |
| 239 | No evidence of spatial root system segregation and elevated fine root biomass in multi-species temperate broad-leaved forests. <i>Trees - Structure and Function</i> , <b>2009</b> , 23, 941-950    | 2.6  | 70 |
| 238 | Effects of experimental soil frost on the fine-root system of mature Norway spruce. <i>Journal of Plant Nutrition and Soil Science</i> , <b>2008</b> , 171, 690-698                                 | 2.3  | 70 |
| 237 | Habitat loss of floodplain meadows in north Germany since the 1950s. <i>Biodiversity and Conservation</i> , <b>2011</b> , 20, 2347-2364   | 3.4  | 66 |
| 236 | Effects of an experimental drought on the functioning of a cacao agroforestry system, Sulawesi, Indonesia. <i>Global Change Biology</i> , <b>2010</b> , 16, 1515-1530                               | 11.4 | 66 |
| 235 | Environmental control of daily stem growth patterns in five temperate broad-leaved tree species. <i>Tree Physiology</i> , <b>2012</b> , 32, 1021-32   | 4.2  | 66 |
| 234 | Effects of tree identity dominate over tree diversity on the soil microbial community structure. <i>Soil Biology and Biochemistry</i> , <b>2015</b> , 81, 219-227                                   | 7.5  | 63 |
| 233 | Limitation of carbon assimilation of intertidal <i>Zostera noltii</i> and <i>Z. marina</i> by desiccation at low tide. <i>Aquatic Botany</i> , <b>1998</b> , 62, 171-176                            | 1.8  | 62 |
| 232 | Dissociation and metal-binding characteristics of yellow lichen substances suggest a relationship with site preferences of lichens. <i>Annals of Botany</i> , <b>2009</b> , 103, 13-22              | 4.1  | 60 |
| 231 | Conversion of a tropical forest into agroforest alters the fine root-related carbon flux to the soil. <i>Soil Biology and Biochemistry</i> , <b>2009</b> , 41, 481-490                              | 7.5  | 60 |

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| 230 | Genotypic variation in drought response of silver birch ( <i>Betula pendula</i> Roth): leaf and root morphology and carbon partitioning. <i>Trees - Structure and Function</i> , <b>2006</b> , 20, 42-52                                 | 2.6 | 60 |
| 229 | European beech responds to climate change with growth decline at lower, and growth increase at higher elevations in the center of its distribution range (SW Germany). <i>Trees - Structure and Function</i> , <b>2017</b> , 31, 673-686 | 2.6 | 58 |
| 228 | Consistent patterns of elevational change in tree taxonomic and phylogenetic diversity across Malesian mountain forests. <i>Journal of Biogeography</i> , <b>2013</b> , 40, 1997-2010  | 4.1 | 56 |
| 227 | The significance of deadwood for total bryophyte, lichen, and vascular plant diversity in an old-growth spruce forest. <i>Plant Ecology</i> , <b>2014</b> , 215, 1123-1137   | 1.7 | 55 |
| 226 | Increased Summer Temperatures Reduce the Growth and Regeneration of <i>Larix sibirica</i> in Southern Boreal Forests of Eastern Kazakhstan. <i>Ecosystems</i> , <b>2013</b> , 16, 1536-1549  | 3.9 | 54 |
| 225 | Environment and tree size controlling stem sap flux in a perhumid tropical forest of Central Sulawesi, Indonesia. <i>Annals of Forest Science</i> , <b>2011</b> , 68, 1027-1038  | 3.1 | 54 |
| 224 | Root exudation patterns in a beech forest: Dependence on soil depth, root morphology, and environment. <i>Soil Biology and Biochemistry</i> , <b>2017</b> , 107, 188-197   | 7.5 | 53 |
| 223 | The relationship between tree species richness, canopy space exploration and productivity in a temperate broad-leaf mixed forest. <i>Forest Ecology and Management</i> , <b>2013</b> , 310, 366-374                                      | 3.9 | 53 |
| 222 | Dramatic diversity losses in epiphytic lichens in temperate broad-leaved forests during the last 150years. <i>Biological Conservation</i> , <b>2013</b> , 157, 136-145   | 6.2 | 53 |
| 221 | Variation in leaf area index and stand leaf mass of European beech across gradients of soil acidity and precipitation. <i>Plant Ecology</i> , <b>2006</b> , 186, 247-258   | 1.7 | 53 |
| 220 | 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> , <b>2014</b> , 330, 126-136                                | 3.9 | 52 |
| 219 | Review of ground-based methods to measure the distribution of biomass in forest canopies. <i>Annals of Forest Science</i> , <b>2011</b> , 68, 225-244  | 3.1 | 52 |
| 218 | 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> , <b>2017</b> , 244-245, 151-161                           | 5.8 | 51 |
| 217 | Effects of soil chemistry on tropical forest biomass and productivity at different elevations in the equatorial Andes. <i>Oecologia</i> , <b>2012</b> , 170, 263-74  | 2.9 | 51 |
| 216 | Root Growth and Recovery in Temperate Broad-Leaved Forest Stands Differing in Tree Species Diversity. <i>Ecosystems</i> , <b>2009</b> , 12, 1103-1116  | 3.9 | 51 |
| 215 | Trade-offs between xylem hydraulic properties, wood anatomy and yield in <i>Populus</i> . <i>Tree Physiology</i> , <b>2014</b> , 34, 744-56  | 4.2 | 49 |
| 214 | Response of tree-ring width to climate warming and selective logging in larch forests of the Mongolian Altai. <i>Journal of Plant Ecology</i> , <b>2014</b> , 7, 24-38   | 1.7 | 48 |
| 213 | Roots from beech ( <i>Fagus sylvatica</i> L.) and ash ( <i>Fraxinus excelsior</i> L.) differentially affect soil microorganisms and carbon dynamics. <i>Soil Biology and Biochemistry</i> , <b>2013</b> , 61, 23-32                      | 7.5 | 48 |

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| 212 | Size and Structure of Fine Root Systems in Old-growth and Secondary Tropical Montane Forests (Costa Rica). <i>Biotropica</i> , <b>2003</b> , 35, 143-153  | 2.3  | 48 |
| 211 | Air humidity as an ecological factor for woodland herbs: leaf water status, nutrient uptake, leaf anatomy, and productivity of eight species grown at low or high vpd levels. <i>Flora: Morphology, Distribution, Functional Ecology of Plants</i> , <b>2002</b> , 197, 262-274 | 1.9  | 48 |
| 210 | Mechanical abrasion, and not competition for light, is the dominant canopy interaction in a temperate mixed forest. <i>Forest Ecology and Management</i> , <b>2015</b> , 348, 108-116   | 3.9  | 46 |
| 209 | Conversion of tropical lowland forest reduces nutrient return through litterfall, and alters nutrient use efficiency and seasonality of net primary production. <i>Oecologia</i> , <b>2016</b> , 180, 601-18  | 2.9  | 46 |
| 208 | Estimating fine root longevity in a temperate Norway spruce forest using three independent methods. <i>Functional Plant Biology</i> , <b>2009</b> , 36, 11-19   | 2.7  | 46 |
| 207 | Climate Responses of Aboveground Productivity and Allocation in <i>Fagus sylvatica</i> : A Transect Study in Mature Forests. <i>Ecosystems</i> , <b>2013</b> , 16, 1498-1516  | 3.9  | 45 |
| 206 | CO <sub>2</sub> gas exchange of two intertidal seagrass species, <i>Zostera marina</i> L. and <i>Zostera noltii</i> Hornem., during emersion. <i>Aquatic Botany</i> , <b>1993</b> , 45, 53-62   | 1.8  | 45 |
| 205 | European beech grows better and is less drought sensitive in mixed than in pure stands: tree neighbourhood effects on radial increment. <i>Trees - Structure and Function</i> , <b>2014</b> , 28, 777-792   | 2.6  | 44 |
| 204 | Lichen substances prevent lichens from nutrient deficiency. <i>Journal of Chemical Ecology</i> , <b>2009</b> , 35, 71-3   | 2.7  | 44 |
| 203 | Variability of indices of macronutrient availability in soils at different spatial scales along an elevation transect in tropical moist forests (NE Ecuador). <i>Plant and Soil</i> , <b>2010</b> , 336, 443-458  | 4.2  | 43 |
| 202 | Fine root dynamics along a 2,000-m elevation transect in South Ecuadorian mountain rainforests. <i>Plant and Soil</i> , <b>2008</b> , 313, 155-166  | 4.2  | 42 |
| 201 | On the significance of belowground overyielding in temperate mixed forests: separating species identity and species diversity effects. <i>Oikos</i> , <b>2013</b> , 122, 463-473  | 4    | 40 |
| 200 | 3D-laser scanning: A non-destructive method for studying above- ground biomass and growth of juvenile trees. <i>Agricultural and Forest Meteorology</i> , <b>2011</b> , 151, 1305-1311  | 5.8  | 40 |
| 199 | The role of plant resources in forest succession: changes in radiation, water and nutrient fluxes, and plant productivity over a 300-yr-long chronosequence in NW-Germany. <i>Perspectives in Plant Ecology, Evolution and Systematics</i> , <b>1999</b> , 2, 103-147           | 3    | 40 |
| 198 | Factors controlling the variability of organic matter in the top- and subsoil of a sandy Dystric Cambisol under beech forest. <i>Geoderma</i> , <b>2018</b> , 311, 37-44  | 6.7  | 39 |
| 197 | Opposing effects of nitrogen versus phosphorus additions on mycorrhizal fungal abundance along an elevational gradient in tropical montane forests. <i>Soil Biology and Biochemistry</i> , <b>2016</b> , 94, 37-47  | 7.5  | 39 |
| 196 | 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> , <b>2014</b> , 20, 1481-97   | 11.4 | 39 |
| 195 | Diversity loss in the macrophyte vegetation of northwest German streams and rivers between the 1950s and 2010. <i>Hydrobiologia</i> , <b>2013</b> , 713, 1-17   | 2.4  | 39 |



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| 194 | Estimating Fine Root Turnover in Tropical Forests along an Elevational Transect using Minirhizotrons. <i>Biotropica</i> , <b>2008</b> , 40, 536-542   | 2.3 | 39 |
| 193 | Cacao Cultivation under Diverse Shade Tree Cover Allows High Carbon Storage and Sequestration without Yield Losses. <i>PLoS ONE</i> , <b>2016</b> , 11, e0149949  | 3.7 | 39 |
| 192 | Climate response of tree-ring width in <i>Larix sibirica</i> growing in the drought-stressed forest-steppe ecotone of northern Mongolia. <i>Annals of Forest Science</i> , <b>2011</b> , 68, 275-282  | 3.1 | 38 |
| 191 | The different strategies of <i>Pinus sylvestris</i> and <i>Larix sibirica</i> to deal with summer drought in a northern Mongolian forest-steppe ecotone suggest a future superiority of pine in a warming climate. <i>Canadian Journal of Forest Research</i> , <b>2009</b> , 39, 2520-2528 | 1.9 | 38 |
| 190 | Size and Structure of Fine Root Systems in Old-growth and Secondary Tropical Montane Forests (Costa Rica)1. <i>Biotropica</i> , <b>2003</b> , 35, 143   | 2.3 | 38 |
| 189 | Air humidity, soil moisture and soil chemistry as determinants of the herb layer composition in European beech forests. <i>Journal of Vegetation Science</i> , <b>2009</b> , 20, 288-298  | 3.1 | 37 |
| 188 | Does reduced precipitation trigger physiological and morphological drought adaptations in European beech ( <i>Fagus sylvatica</i> L.)? Comparing provenances across a precipitation gradient. <i>Tree Physiology</i> , <b>2015</b> , 35, 949-63   | 4.2 | 36 |
| 187 | Structure and composition of the seed bank in monospecific and tree species-rich temperate broad-leaved forests. <i>Forest Ecology and Management</i> , <b>2009</b> , 257, 695-702  | 3.9 | 36 |
| 186 | Recent Climate Warming-Related Growth Decline Impairs European Beech in the Center of Its Distribution Range. <i>Ecosystems</i> , <b>2017</b> , 20, 1494-1511   | 3.9 | 35 |
| 185 | Intraspecific variation in root and leaf traits and leaf-root trait linkages in eight aspen demes ( <i>Populus tremula</i> and <i>P. tremuloides</i> ). <i>Frontiers in Plant Science</i> , <b>2013</b> , 4, 415  | 6.2 | 35 |
| 184 | The relationships between abundance, range size and niche breadth in Central European tree species. <i>Journal of Biogeography</i> , <b>2009</b> , 36, 854-864  | 4.1 | 35 |
| 183 | Assessing future suitability of tree species under climate change by multiple methods: a case study in southern Germany. <i>Annals of Forest Research</i> , <b>2014</b> , 60,   | 2.4 | 35 |
| 182 | Intra-specific variations in expression of stress-related genes in beech progenies are stronger than drought-induced responses. <i>Tree Physiology</i> , <b>2014</b> , 34, 1348-61  | 4.2 | 34 |
| 181 | Regional variation in canopy transpiration of Central European beech forests. <i>Oecologia</i> , <b>2005</b> , 143, 260-70  | 3.0 | 34 |
| 180 | Effects of coppicing in temperate deciduous forests on ecosystem nutrient pools and soil fertility. <i>Basic and Applied Ecology</i> , <b>2001</b> , 2, 155-164   | 3.2 | 34 |
| 179 | Forty years of vegetation change in former coppice-with-standards woodlands as a result of management change and N deposition. <i>Applied Vegetation Science</i> , <b>2017</b> , 20, 304-313  | 3.3 | 33 |
| 178 | Root-induced tree species effects on the source/sink strength for greenhouse gases (CH <sub>4</sub> , N <sub>2</sub> O and CO <sub>2</sub> ) of a temperate deciduous forest soil. <i>Soil Biology and Biochemistry</i> , <b>2013</b> , 57, 587-597   | 7.5 | 33 |
| 177 | Factors controlling the abundance of lianas along an altitudinal transect of tropical forests in Ecuador. <i>Forest Ecology and Management</i> , <b>2010</b> , 259, 1399-1405   | 3.9 | 33 |

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| 176 | The ecology of Central European tree species: Trait spectra, functional trade-offs, and ecological classification of adult trees. <i>Perspectives in Plant Ecology, Evolution and Systematics</i> , <b>2018</b> , 33, 89-103           | 3    | 33 |
| 175 | Climatic Drivers of Mast Fruiting in European Beech and Resulting C and N Allocation Shifts. <i>Ecosystems</i> , <b>2015</b> , 18, 1083-1100   | 3.9  | 30 |
| 174 | Performance of Siberian elm ( <i>Ulmus pumila</i> ) on steppe slopes of the northern Mongolian mountain taiga: Drought stress and herbivory in mature trees. <i>Environmental and Experimental Botany</i> , <b>2009</b> , 66, 18-24    | 5.9  | 30 |
| 173 | Recent drought stress leads to growth reductions in <i>Larix sibirica</i> in the western Khentey, Mongolia. <i>Global Change Biology</i> , <b>2009</b> , 16, no-no   | 11.4 | 30 |
| 172 | Competition effects on fine root survival of <i>Fagus sylvatica</i> and <i>Fraxinus excelsior</i> . <i>Forest Ecology and Management</i> , <b>2013</b> , 302, 14-22  | 3.9  | 29 |
| 171 | Soil C and nutrient stores under Scots pine afforestations compared to ancient beech forests in the German Pleistocene: The role of tree species and forest history. <i>Forest Ecology and Management</i> , <b>2013</b> , 310, 405-415 | 3.9  | 29 |
| 170 | Conversion of tropical moist forest into cacao agroforest: consequences for carbon pools and annual C sequestration. <i>Agroforestry Systems</i> , <b>2013</b> , 87, 1173-1187   | 2    | 29 |
| 169 | Evapotranspiration and water balance of high-elevation grassland on the Tibetan Plateau. <i>Journal of Hydrology</i> , <b>2016</b> , 533, 557-566  | 6    | 28 |
| 168 | In situ measurement of fine root water absorption in three temperate tree species—temporal variability and control by soil and atmospheric factors. <i>Basic and Applied Ecology</i> , <b>2005</b> , 6, 395-405                        | 3.2  | 28 |
| 167 | Significance of Over-Mature and Decaying Trees for Carbon Stocks in a Central European Natural Spruce Forest. <i>Ecosystems</i> , <b>2013</b> , 16, 336-346  | 3.9  | 27 |
| 166 | N, P and K limitation of fine root growth along an elevation transect in tropical mountain forests. <i>Acta Oecologica</i> , <b>2010</b> , 36, 537-542   | 1.7  | 27 |
| 165 | Patterns of long-term vegetation change vary between different types of semi-natural grasslands in Western and Central Europe. <i>Journal of Vegetation Science</i> , <b>2019</b> , 30, 187-202  | 3.1  | 26 |
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| 148 | High litterfall in old-growth and secondary upper montane forest of Costa Rica. <i>Plant Ecology</i> , <b>2008</b> , 199, 163-173  | 1.7  | 24 |
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| 128 | De novo transcriptome assembly and analysis of differential gene expression in response to drought in European beech. <i>PLoS ONE</i> , <b>2017</b> , 12, e0184167  | 3.7 | 20 |
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| 108 | Contrasting species responses to continued nitrogen and phosphorus addition in tropical montane forest tree seedlings. <i>Biotropica</i> , <b>2018</b> , 50, 234-245   | 2.3 | 17 |
| 107 | Functional Crown Architecture of Five Temperate Broadleaf Tree Species: Vertical Gradients in Leaf Morphology, Leaf Angle, and Leaf Area Density. <i>Forests</i> , <b>2019</b> , 10, 265                                       | 2.8 | 16 |
| 106 | Arable plant diversity on conventional cropland: The role of crop species, management and environment. <i>Agriculture, Ecosystems and Environment</i> , <b>2015</b> , 213, 151-163   | 5.7 | 16 |
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| 88  | Global transpiration data from sap flow measurements: the SAPFLUXNET database. <i>Earth System Science Data</i> , <b>2021</b> , 13, 2607-2649  | 10.5 | 13 |
| 87  | Hydraulic architecture and vulnerability to drought-induced embolism in southern boreal tree species of Inner Asia. <i>Tree Physiology</i> , <b>2019</b> , 39, 463-473   | 4.2  | 13 |

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| 51 | Soil moisture regime and palm height influence embolism resistance in oil palm. <i>Tree Physiology</i> , <b>2019</b> , 39, 1696-1712   | 4.2 | 5 |



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| 30 | Impacts of Multiple Environmental Change Drivers on Growth of European Beech ( <i>Fagus sylvatica</i> ): Forest History Matters. <i>Ecosystems</i> , <b>2020</b> , 23, 529-540   | 3.9  | 3 |
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