

# Andrea Polle

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1771772/publications.pdf>

Version: 2024-02-01

269  
papers

20,965  
citations

7568

77  
h-index

12597

132  
g-index

279  
all docs

279  
docs citations

279  
times ranked

19271  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Plant responses to abiotic stresses: heavy metal-induced oxidative stress and protection by mycorrhization. <i>Journal of Experimental Botany</i> , 2002, 53, 1351-1365.   | 4.8  | 1,257     |
| 2  | Making the life of heavy metal-stressed plants a little easier. <i>Functional Plant Biology</i> , 2005, 32, 481.   | 2.1  | 933       |
| 3  | Plant responses to abiotic stresses: heavy metal-induced oxidative stress and protection by mycorrhization. <i>Journal of Experimental Botany</i> , 2002, 53, 1351-65.   | 4.8  | 730       |
| 4  | Cadmium-Induced Changes in Antioxidative Systems, Hydrogen Peroxide Content, and Differentiation in Scots Pine Roots. <i>Plant Physiology</i> , 2001, 127, 887-898.  | 4.8  | 656       |
| 5  | Dissecting the Superoxide Dismutase-Ascorbate-Glutathione-Pathway in Chloroplasts by Metabolic Modeling. Computer Simulations as a Step towards Flux Analysis. <i>Plant Physiology</i> , 2001, 126, 445-462.   | 4.8  | 368       |
| 6  | Increases in nitrogen uptake rather than nitrogen-use efficiency support higher rates of temperate forest productivity under elevated CO <sub>2</sub> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 14014-14019. | 7.1  | 353       |
| 7  | Downregulation of Cinnamoyl-Coenzyme A Reductase in Poplar: Multiple-Level Phenotyping Reveals Effects on Cell Wall Polymer Metabolism and Structure. <i>Plant Cell</i> , 2007, 19, 3669-3691.   | 6.6  | 352       |
| 8  | Mycorrhizal Hyphal Turnover as a Dominant Process for Carbon Input into Soil Organic Matter. <i>Plant and Soil</i> , 2006, 281, 15-24.   | 3.7  | 345       |
| 9  | Gradual Soil Water Depletion Results in Reversible Changes of Gene Expression, Protein Profiles, Ecophysiology, and Growth Performance in <i>Populus euphratica</i> , a Poplar Growing in Arid Regions. <i>Plant Physiology</i> , 2007, 143, 876-892.                    | 4.8  | 338       |
| 10 | Heavy metal accumulation and signal transduction in herbaceous and woody plants: Paving the way for enhancing phytoremediation efficiency. <i>Biotechnology Advances</i> , 2016, 34, 1131-1148.  | 11.7 | 283       |
| 11 | Environmental Factors Affect Acidobacterial Communities below the Subgroup Level in Grassland and Forest Soils. <i>Applied and Environmental Microbiology</i> , 2012, 78, 7398-7406.   | 3.1  | 272       |
| 12 | <i>Populus euphratica</i> Displays Apoplastic Sodium Accumulation, Osmotic Adjustment by Decreases in Calcium and Soluble Carbohydrates, and Develops Leaf Succulence under Salt Stress. <i>Plant Physiology</i> , 2005, 139, 1762-1772.                                 | 4.8  | 261       |
| 13 | Transport and detoxification of manganese and copper in plants. <i>Brazilian Journal of Plant Physiology</i> , 2005, 17, 103-112.  | 0.5  | 256       |
| 14 | Transgenic, non-isoprene emitting poplars don't like it hot. <i>Plant Journal</i> , 2007, 51, 485-499.   | 5.7  | 229       |
| 15 | Composition and Properties of Hydrogen Peroxide Decomposing Systems in Extracellular and Total Extracts from Needles of Norway Spruce ( <i>Picea abies</i> L., Karst.). <i>Plant Physiology</i> , 1990, 94, 312-319.   | 4.8  | 228       |
| 16 | Overexpression of bacterial $\gamma$ -glutamylcysteine synthetase mediates changes in cadmium influx, allocation and detoxification in poplar. <i>New Phytologist</i> , 2015, 205, 240-254.  | 7.3  | 214       |
| 17 | Volatile signalling by sesquiterpenes from ectomycorrhizal fungi reprogrammes root architecture. <i>Nature Communications</i> , 2015, 6, 6279.   | 12.8 | 211       |
| 18 | Gene expression and metabolite profiling of <i>Populus euphratica</i> growing in the Negev desert. <i>Genome Biology</i> , 2005, 6, R101.  | 9.6  | 208       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Regulation of glutathione synthesis in leaves of transgenic poplar ( <i>Populus tremula</i> X <i>P. alba</i> ) overexpressing glutathione synthetase. <i>Plant Journal</i> , 1995, 7, 141-145.                             | 5.7  | 203       |
| 20 | Net cadmium flux and accumulation reveal tissue-specific oxidative stress and detoxification in <i>Populus canescens</i> . <i>Physiologia Plantarum</i> , 2011, 143, 50-63.  | 5.2  | 194       |
| 21 | A Transcriptomic Network Underlies Microstructural and Physiological Responses to Cadmium in <i>Populus canescens</i> . <i>Plant Physiology</i> , 2013, 162, 424-439.  | 4.8  | 187       |
| 22 | Cadmium and H <sub>2</sub> O <sub>2</sub> -induced oxidative stress in <i>Populus canescens</i> roots. <i>Plant Physiology and Biochemistry</i> , 2002, 40, 577-584.   | 5.8  | 186       |
| 23 | Upgrading Root Physiology for Stress Tolerance by Ectomycorrhizas: Insights from Metabolite and Transcriptional Profiling into Reprogramming for Stress Anticipation. <i>Plant Physiology</i> , 2009, 151, 1902-1917.      | 4.8  | 186       |
| 24 | Multiple forest attributes underpin the supply of multiple ecosystem services. <i>Nature Communications</i> , 2018, 9, 4839.   | 12.8 | 182       |
| 25 | Nitrogen metabolism of two contrasting poplar species during acclimation to limiting nitrogen availability. <i>Journal of Experimental Botany</i> , 2013, 64, 4207-4224.   | 4.8  | 180       |
| 26 | Leaf litter decomposition in temperate deciduous forest stands with a decreasing fraction of beech ( <i>Fagus sylvatica</i> ). <i>Oecologia</i> , 2010, 164, 1083-1094.  | 2.0  | 172       |
| 27 | Soil phosphorus supply controls P nutrition strategies of beech forest ecosystems in Central Europe. <i>Biogeochemistry</i> , 2017, 136, 5-29.   | 3.5  | 171       |
| 28 | Phosphorus in forest ecosystems: New insights from an ecosystem nutrition perspective. <i>Journal of Plant Nutrition and Soil Science</i> , 2016, 179, 129-135.  | 1.9  | 169       |
| 29 | Tree girdling provides insight on the role of labile carbon in nitrogen partitioning between soil microorganisms and adult European beech. <i>Soil Biology and Biochemistry</i> , 2009, 41, 1622-1631.                     | 8.8  | 167       |
| 30 | Host preferences and differential contributions of deciduous tree species shape mycorrhizal species richness in a mixed Central European forest. <i>Mycorrhiza</i> , 2011, 21, 297-308.                                    | 2.8  | 157       |
| 31 | Cadmium tolerance in six poplar species. <i>Environmental Science and Pollution Research</i> , 2013, 20, 163-174.  | 5.3  | 157       |
| 32 | Trade-offs between multifunctionality and profit in tropical smallholder landscapes. <i>Nature Communications</i> , 2020, 11, 1186.  | 12.8 | 156       |
| 33 | Volatile profiles of fungi – Chemotyping of species and ecological functions. <i>Fungal Genetics and Biology</i> , 2013, 54, 25-33.  | 2.1  | 150       |
| 34 | Comparison of different methods for lignin determination as a basis for calibration of near-infrared reflectance spectroscopy and implications of lignoproteins. <i>Journal of Chemical Ecology</i> , 2002, 28, 2483-2501. | 1.8  | 149       |
| 35 | FTIR spectroscopy, chemical and histochemical characterisation of wood and lignin of five tropical timber wood species of the family Dipterocarpaceae. <i>Wood Science and Technology</i> , 2010, 44, 225-242.             | 3.2  | 148       |
| 36 | General Relationships between Abiotic Soil Properties and Soil Biota across Spatial Scales and Different Land-Use Types. <i>PLoS ONE</i> , 2012, 7, e43292.  | 2.5  | 142       |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Pathway analysis of the transcriptome and metabolome of salt sensitive and tolerant poplar species reveals evolutionary adaptation of stress tolerance mechanisms. <i>BMC Plant Biology</i> , 2010, 10, 150.             | 3.6 | 141       |
| 38 | Cadmium interferes with auxin physiology and lignification in poplar. <i>Journal of Experimental Botany</i> , 2012, 63, 1413-1421.   | 4.8 | 136       |
| 39 | N-fertilization has different effects on the growth, carbon and nitrogen physiology, and wood properties of slow- and fast-growing <i>Populus</i> species. <i>Journal of Experimental Botany</i> , 2012, 63, 6173-6185.  | 4.8 | 131       |
| 40 | Global poplar root and leaf transcriptomes reveal links between growth and stress responses under nitrogen starvation and excess. <i>Tree Physiology</i> , 2015, 35, 1283-1302.  | 3.1 | 131       |
| 41 | Exogenous abscisic acid alleviates zinc uptake and accumulation in <i>Populus canescens</i> exposed to excess zinc. <i>Plant, Cell and Environment</i> , 2015, 38, 207-223.  | 5.7 | 129       |
| 42 | Girdling Affects Ectomycorrhizal Fungal (EMF) Diversity and Reveals Functional Differences in EMF Community Composition in a Beech Forest. <i>Applied and Environmental Microbiology</i> , 2010, 76, 1831-1841.          | 3.1 | 126       |
| 43 | The role of ectomycorrhizas in heavy metal stress tolerance of host plants. <i>Environmental and Experimental Botany</i> , 2014, 108, 47-62.   | 4.2 | 125       |
| 44 | What the transcriptome does not tell â€” proteomics and metabolomics are closer to the plantsâ€™ patho-phenotype. <i>Current Opinion in Plant Biology</i> , 2015, 26, 26-31.   | 7.1 | 124       |
| 45 | Linking the Salt Transcriptome with Physiological Responses of a Salt-Resistant <i>Populus</i> Species as a Strategy to Identify Genes Important for Stress Acclimation. <i>Plant Physiology</i> , 2010, 154, 1697-1709. | 4.8 | 120       |
| 46 | Ectomycorrhizas with <i>Paxillus involutus</i> enhance cadmium uptake and tolerance in <i>Populus canescens</i> . <i>Plant, Cell and Environment</i> , 2014, 37, 627-642.  | 5.7 | 118       |
| 47 | Ionic homeostasis and reactive oxygen species control in leaves and xylem sap of two poplars subjected to NaCl stress. <i>Tree Physiology</i> , 2008, 28, 947-957.   | 3.1 | 116       |
| 48 | Woody biomass production during the second rotation of a bio-energy <i>Populus</i> plantation increases in a future high CO <sub>2</sub> world. <i>Global Change Biology</i> , 2006, 12, 1094-1106.                      | 9.5 | 115       |
| 49 | Fourier transform infrared microscopy and imaging: Detection of fungi in wood. <i>Fungal Genetics and Biology</i> , 2005, 42, 829-835.   | 2.1 | 114       |
| 50 | Physiological and molecular mechanisms of heavy metal accumulation in nonmycorrhizal versus mycorrhizal plants. <i>Plant, Cell and Environment</i> , 2019, 42, 1087-1103.  | 5.7 | 113       |
| 51 | FTIR-ATR-based prediction and modelling of lignin and energy contents reveals independent intra-specific variation of these traits in bioenergy poplars. <i>Plant Methods</i> , 2011, 7, 9.                              | 4.3 | 112       |
| 52 | <i>Verticillium longisporum</i> Infection Affects the Leaf Apoplastic Proteome, Metabolome, and Cell Wall Properties in <i>Arabidopsis thaliana</i> . <i>PLoS ONE</i> , 2012, 7, e31435.                                 | 2.5 | 112       |
| 53 | Net fluxes of ammonium and nitrate in association with H <sup>+</sup> fluxes in fine roots of <i>Populus popularis</i> . <i>Planta</i> , 2013, 237, 919-931.   | 3.2 | 112       |
| 54 | Belowground communication: impacts of volatile organic compounds (VOCs) from soil fungi on other soil-inhabiting organisms. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 8651-8665.                        | 3.6 | 111       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | <i>Verticillium</i> Infection Triggers VASCULAR-RELATED NAC DOMAIN-Dependent de Novo Xylem Formation and Enhances Drought Tolerance in <i>Arabidopsis</i>. <i>Plant Cell</i> , 2012, 24, 3823-3837.                                   | 6.6 | 110       |
| 56 | Soluble phenylpropanoids are involved in the defense response of <sc>A</sc>rabidopsis against <i>V</i>erticillium longisporum</i>. <i>New Phytologist</i> , 2014, 202, 823-837.   | 7.3 | 110       |
| 57 | On the salty side of life: molecular, physiological and anatomical adaptation and acclimation of trees to extreme habitats. <i>Plant, Cell and Environment</i> , 2015, 38, 1794-1816.   | 5.7 | 109       |
| 58 | Differential temperature dependencies of antioxidative enzymes in two contrasting species: <i>Fagus sylvatica</i> and <i>Coleus blumei</i> . <i>Plant Physiology and Biochemistry</i> , 2002, 40, 141-150.                            | 5.8 | 108       |
| 59 | Defence reactions in the apoplastic proteome of oilseed rape ( <i>Brassica napus</i> var. <i>napus</i> ) attenuate <i>Verticillium longisporum</i> growth but not disease symptoms. <i>BMC Plant Biology</i> , 2008, 8, 129.          | 3.6 | 107       |
| 60 | Determinants of <sc>A</sc>cidobacteria</i> activity inferred from the relative abundances of 16 <sc>S</sc> rRNA</i> transcripts in <sc>G</sc>erman grassland and forest soils. <i>Environmental Microbiology</i> , 2014, 16, 658-675. | 3.8 | 103       |
| 61 | Phosphorus and nitrogen physiology of two contrasting poplar genotypes when exposed to phosphorus and/or nitrogen starvation. <i>Tree Physiology</i> , 2016, 36, 22-38.   | 3.1 | 103       |
| 62 | Differential stress responses of antioxidative systems to drought in pendunculate oak ( <i>Quercus</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4<br><i>Experimental Botany</i> , 2001, 52, 133-143.                                    | 4.8 | 101       |
| 63 | Antioxidants and Manganese Deficiency in Needles of Norway Spruce (<i>Picea abies</i> L.) Trees. <i>Plant Physiology</i> , 1992, 99, 1084-1089.   | 4.8 | 100       |
| 64 | Field studies on Norway spruce trees at high altitudes: II. Defence systems against oxidative stress in needles. <i>New Phytologist</i> , 1992, 121, 635-642.   | 7.3 | 100       |
| 65 | Combined activity of <i>LACS1</i> and <i>LACS4</i> is required for proper pollen coat formation in <i>Arabidopsis</i> . <i>Plant Journal</i> , 2011, 68, 715-726.   | 5.7 | 98        |
| 66 | Class I KNOX transcription factors promote differentiation of cambial derivatives into xylem fibers in the <i>Arabidopsis</i> hypocotyl. <i>Development (Cambridge)</i> , 2014, 141, 4311-4319.                                       | 2.5 | 97        |
| 67 | FTIR-ATR spectroscopic analyses of changes in wood properties during particle- and fibreboard production of hard- and softwood trees. <i>BioResources</i> , 2009, 4, 49-71.   | 1.0 | 96        |
| 68 | Mehler Reaction: Friend or Foe in Photosynthesis?. <i>Botanica Acta</i> , 1996, 109, 84-89.   | 1.6 | 94        |
| 69 | Leaf photosynthesis, fluorescence response to salinity and the relevance to chloroplast salt compartmentation and anti-oxidative stress in two poplars. <i>Trees - Structure and Function</i> , 2007, 21, 581-591.                    | 1.9 | 94        |
| 70 | Attributing functions to ectomycorrhizal fungal identities in assemblages for nitrogen acquisition under stress. <i>ISME Journal</i> , 2014, 8, 321-330.  | 9.8 | 94        |
| 71 | Specialisation and diversity of multiple trophic groups are promoted by different forest features. <i>Ecology Letters</i> , 2019, 22, 170-180.  | 6.4 | 92        |
| 72 | <i>Populus euphratica</i> XTH overexpression enhances salinity tolerance by the development of leaf succulence in transgenic tobacco plants. <i>Journal of Experimental Botany</i> , 2013, 64, 4225-4238.                             | 4.8 | 91        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 73 | Leaf litter production and decomposition in a poplar short-rotation coppice exposed to free air CO <sub>2</sub> enrichment (POPFACE). <i>Global Change Biology</i> , 2005, 11, 971-982.                                      | 9.5 | 89        |
| 74 | Intensive tropical land use massively shifts soil fungal communities. <i>Scientific Reports</i> , 2019, 9, 3403.   | 3.3 | 86        |
| 75 | Engineering Drought Resistance in Forest Trees. <i>Frontiers in Plant Science</i> , 2018, 9, 1875.   | 3.6 | 86        |
| 76 | Salt stress induces the formation of a novel type of "pressure wood"™ in two <i>Populus</i> species. <i>New Phytologist</i> , 2012, 194, 129-141.  | 7.3 | 85        |
| 77 | Influence of Environmental Pollution on Leaf Properties of Urban Plane Trees, <i>Platanus orientalis</i> L.. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2010, 85, 251-255.                              | 2.7 | 84        |
| 78 | The Nitrate Transporter (NRT) Gene Family in Poplar. <i>PLoS ONE</i> , 2013, 8, e72126.  | 2.5 | 84        |
| 79 | Divergent habitat filtering of root and soil fungal communities in temperate beech forests. <i>Scientific Reports</i> , 2016, 6, 31439.  | 3.3 | 84        |
| 80 | The Influence of Apoplastic Ascorbate on the Activities of Cell Wall-Associated Peroxidase and NADH Oxidase in Needles of Norway Spruce ( <i>Picea abies</i> L.). <i>Plant and Cell Physiology</i> , 1994, 35, 1231-1238.    | 3.1 | 79        |
| 81 | Consequences of Air Pollution on Shoot-Root Interactions. <i>Journal of Plant Physiology</i> , 1996, 148, 296-301.   | 3.5 | 79        |
| 82 | Characterisation of antioxidative systems in the ectomycorrhiza-building basidiomycete <i>Paxillus involutus</i> (Bartsch) Fr. and its reaction to cadmium. <i>FEMS Microbiology Ecology</i> , 2002, 42, 359-366.            | 2.7 | 78        |
| 83 | Molecular characterization of PeNhaD1: the first member of the NhaD Na <sup>+</sup> /H <sup>+</sup> antiporter family of plant origin. <i>Plant Molecular Biology</i> , 2005, 58, 75-88.                                     | 3.9 | 77        |
| 84 | Effect of NaCl on photosynthesis, salt accumulation and ion compartmentation in two mangrove species, <i>Kandelia candel</i> and <i>Bruguiera gymnorhiza</i> . <i>Aquatic Botany</i> , 2008, 88, 303-310.                    | 1.6 | 76        |
| 85 | Mycorrhiza-Triggered Transcriptomic and Metabolomic Networks Impinge on Herbivore Fitness. <i>Plant Physiology</i> , 2018, 176, 2639-2656.   | 4.8 | 75        |
| 86 | Reducing Fertilizer and Avoiding Herbicides in Oil Palm Plantations" Ecological and Economic Valuations. <i>Frontiers in Forests and Global Change</i> , 2019, 2, .  | 2.3 | 75        |
| 87 | Beech carbon productivity as driver of ectomycorrhizal abundance and diversity. <i>Plant, Cell and Environment</i> , 2009, 32, 992-1003.   | 5.7 | 73        |
| 88 | Anatomical, physiological and transcriptional responses of two contrasting poplar genotypes to drought and rewatering. <i>Physiologia Plantarum</i> , 2014, 151, 480-494.  | 5.2 | 72        |
| 89 | Salt tolerance in <i>Populus</i> : Significance of stress signaling networks, mycorrhization, and soil amendments for cellular and whole-plant nutrition. <i>Environmental and Experimental Botany</i> , 2014, 107, 113-124. | 4.2 | 72        |
| 90 | Comparative transcriptomic analysis reveals the roles of overlapping heat-/drought-responsive genes in poplars exposed to high temperature and drought. <i>Scientific Reports</i> , 2017, 7, 43215.                          | 3.3 | 72        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 91  | RNAi-mediated suppression of isoprene emission in poplar transiently impacts phenolic metabolism under high temperature and high light intensities: a transcriptomic and metabolomic analysis. <i>Plant Molecular Biology</i> , 2010, 74, 61-75. | 3.9 | 71        |
| 92  | <i>Paxillus involutus</i> Strains MAJ and NAU Mediate K <sup>+</sup> /Na <sup>+</sup> Homeostasis in Ectomycorrhizal <i>Populus canescens</i> under Sodium Chloride Stress. <i>Plant Physiology</i> , 2012, 159, 1771-1786.                      | 4.8 | 69        |
| 93  | Influence of free air CO <sub>2</sub> enrichment (EUROFACE) and nitrogen fertilisation on the anatomy of juvenile wood of three poplar species after coppicing. <i>Trees - Structure and Function</i> , 2005, 19, 109-118.                       | 1.9 | 68        |
| 94  | Salt stress affects xylem differentiation of grey poplar ( <i>Populus canescens</i> ). <i>Planta</i> , 2009, 229, 299-309.   | 3.2 | 68        |
| 95  | Carbon-based secondary metabolites and internal nitrogen pools in <i>Populus nigra</i> under Free Air CO <sub>2</sub> Enrichment (FACE) and nitrogen fertilisation. <i>Plant and Soil</i> , 2008, 304, 45-57.                                    | 3.7 | 66        |
| 96  | Wood composition and energy content in a poplar short rotation plantation on fertilized agricultural land in a future CO <sub>2</sub> atmosphere. <i>Global Change Biology</i> , 2009, 15, 38-47.  | 9.5 | 66        |
| 97  | Ectomycorrhizal fungal diversity increases phosphorus uptake efficiency of European beech. <i>New Phytologist</i> , 2018, 220, 1200-1210.  | 7.3 | 66        |
| 98  | The slow rise of the flash-light-induced alkalization by Photosystem II of the suspending medium of thylakoids is reversibly related to thylakoid stacking. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1986, 848, 257-264.           | 1.0 | 64        |
| 99  | Interspecific temporal and spatial differences in the acquisition of litter-derived nitrogen by ectomycorrhizal fungal assemblages. <i>New Phytologist</i> , 2013, 199, 520-528.   | 7.3 | 63        |
| 100 | Phosphorus availabilities in beech ( <i>Fagus sylvatica</i> L.) forests impose habitat filtering on ectomycorrhizal communities and impact tree nutrition. <i>Soil Biology and Biochemistry</i> , 2016, 98, 127-137.                             | 8.8 | 62        |
| 101 | The Vascular Pathogen <i>Verticillium longisporum</i> Requires a Jasmonic Acid-Independent COI1 Function in Roots to Elicit Disease Symptoms in Arabidopsis Shoots. <i>Plant Physiology</i> , 2012, 159, 1192-1203.                              | 4.8 | 61        |
| 102 | Osmotic Stress and Ion-Specific Effects on Xylem Abscisic Acid and the Relevance to Salinity Tolerance in Poplar. <i>Journal of Plant Growth Regulation</i> , 2002, 21, 224-233.   | 5.1 | 60        |
| 103 | Ectomycorrhiza and hydrogel protect hybrid poplar from water deficit and unravel plastic responses of xylem anatomy. <i>Environmental and Experimental Botany</i> , 2010, 69, 189-197.   | 4.2 | 59        |
| 104 | Differential Effects of Elevated Ozone on Two Hybrid Aspen Genotypes Predisposed to Chronic Ozone Fumigation. Role of Ethylene and Salicylic Acid. <i>Plant Physiology</i> , 2003, 132, 196-205.   | 4.8 | 58        |
| 105 | Heavy metal signalling in plants: linking cellular and organismic responses. <i>Topics in Current Genetics</i> , 0, , 187-215.   | 0.7 | 57        |
| 106 | Forest Soil Phosphorus Resources and Fertilization Affect Ectomycorrhizal Community Composition, Beech P Uptake Efficiency, and Photosynthesis. <i>Frontiers in Plant Science</i> , 2018, 9, 463.  | 3.6 | 56        |
| 107 | The ectomycorrhizal fungus ( <i>Paxillus involutus</i> ) modulates leaf physiology of poplar towards improved salt tolerance. <i>Environmental and Experimental Botany</i> , 2011, 72, 304-311.  | 4.2 | 55        |
| 108 | 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> , 2013, 61, 23-32.                                     | 8.8 | 55        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 109 | Freezing tolerance in two Norway spruce ( <i>Picea abies</i> [L.] Karst.) progenies is physiologically correlated with drought tolerance. <i>Journal of Plant Physiology</i> , 2005, 162, 549-558.                           | 3.5 | 54        |
| 110 | Temporal variations of phosphorus uptake by soil microbial biomass and young beech trees in two forest soils with contrasting phosphorus stocks. <i>Soil Biology and Biochemistry</i> , 2018, 117, 191-202.                  | 8.8 | 54        |
| 111 | Field studies on Norway spruce trees at high altitudes. I. Mineral, pigment and soluble protein contents of needles as affected by climate and pollution. <i>New Phytologist</i> , 1992, 121, 89-99.                         | 7.3 | 53        |
| 112 | Theory of proton flow along appressed thylakoid membranes under both non-stationary and stationary conditions. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1986, 848, 265-273.                                    | 1.0 | 52        |
| 113 | Ectomycorrhizal fungus ( <i>Paxillus involutus</i> ) and hydrogels affect performance of <i>Populus euphratica</i> exposed to drought stress. <i>Annals of Forest Science</i> , 2009, 66, 106-106.                           | 2.0 | 52        |
| 114 | FTIR spectroscopy in combination with principal component analysis or cluster analysis as a tool to distinguish beech ( <i>Fagus sylvatica</i> L.) trees grown at different sites. <i>Holzforschung</i> , 2008, 62, 530-538. | 1.9 | 51        |
| 115 | Dynamics of phosphorus nutrition, allocation and growth of young beech ( <i>Fagus sylvatica</i> L.) trees in P-rich and P-poor forest soil. <i>Tree Physiology</i> , 2018, 38, 37-51.  | 3.1 | 51        |
| 116 | Increased nitrogen-use efficiency of a short-rotation poplar plantation in elevated CO <sub>2</sub> concentration. <i>Tree Physiology</i> , 2007, 27, 1153-1163.   | 3.1 | 50        |
| 117 | Manganese toxicity in two varieties of Douglas fir ( <i>Pseudotsuga menziesii</i> var. <i>viridis</i> and <i>glauca</i> ) seedlings as affected by phosphorus supply. <i>Functional Plant Biology</i> , 2007, 34, 31.        | 2.1 | 50        |
| 118 | Isoprene emission “free poplars” a chance to reduce the impact from poplar plantations on the atmosphere. <i>New Phytologist</i> , 2012, 194, 70-82.   | 7.3 | 50        |
| 119 | Quantitative trait loci affecting stomatal density and growth in a <i>Quercus robur</i> progeny: implications for the adaptation to changing environments. <i>Global Change Biology</i> , 2008, 14, 1934-1946.               | 9.5 | 48        |
| 120 | Changes in carbon, nutrients and stoichiometric relations under different soil depths, plant tissues and ages in black locust plantations. <i>Acta Physiologiae Plantarum</i> , 2013, 35, 2951-2964.                         | 2.1 | 48        |
| 121 | Incorporation of plant carbon and microbial nitrogen into the rhizosphere food web of beech and ash. <i>Soil Biology and Biochemistry</i> , 2013, 62, 76-81.   | 8.8 | 48        |
| 122 | Changes in Trophic Groups of Protists With Conversion of Rainforest Into Rubber and Oil Palm Plantations. <i>Frontiers in Microbiology</i> , 2019, 10, 240.  | 3.5 | 48        |
| 123 | Ectomycorrhizal fungal diversity, tree diversity and root nutrient relations in a mixed Central European forest. <i>Tree Physiology</i> , 2011, 31, 531-538.   | 3.1 | 47        |
| 124 | Nitrogen fertilization has differential effects on N allocation and lignin in two <i>Populus</i> species with contrasting ecology. <i>Trees - Structure and Function</i> , 2012, 26, 1933-1942.                              | 1.9 | 46        |
| 125 | Growing poplars for research with and without mycorrhizas. <i>Frontiers in Plant Science</i> , 2013, 4, 332.   | 3.6 | 46        |
| 126 | Assembly processes of trophic guilds in the root mycobiome of temperate forests. <i>Molecular Ecology</i> , 2019, 28, 348-364.   | 3.9 | 46        |



| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 127 | Interactive Effects of Elevated CO <sub>2</sub> , Ozone and Drought Stress on the Activities of Antioxidative Enzymes in Needles of Norway Spruce Trees ( <i>Picea abies</i> , [L] Karsten) Grown with Luxurious N-Supply. <i>Journal of Plant Physiology</i> , 1996, 148, 351-355. | 3.5 | 45        |
| 128 | Superoxide Dismutase Activity in Needles of Norwegian Spruce Trees ( <i>Picea abies</i> L.). <i>Plant Physiology</i> , 1989, 90, 1310-1315.   | 4.8 | 44        |
| 129 | GH3::GUS reflects cell-specific developmental patterns and stress-induced changes in wood anatomy in the poplar stem. <i>Tree Physiology</i> , 2008, 28, 1305-1315.   | 3.1 | 44        |
| 130 | Temperature-induced lipocalin (TIL) is translocated under salt stress and protects chloroplasts from ion toxicity. <i>Journal of Plant Physiology</i> , 2014, 171, 250-259.   | 3.5 | 44        |
| 131 | Phosphate uptake kinetics and tissue-specific transporter expression profiles in poplar ( <i>Populus alba</i> — <i>canescens</i> ) at different phosphorus availabilities. <i>BMC Plant Biology</i> , 2016, 16, 206.  | 3.6 | 44        |
| 132 | Seasonal Fluctuations of Ascorbate-Related Enzymes: Acute and Delayed Effects of Late Frost in Spring on Antioxidative Systems in Needles of Norway Spruce ( <i>Picea abies</i> L.). <i>Plant and Cell Physiology</i> , 1996, 37, 717-725.  | 3.1 | 43        |
| 133 | Diurnal fluctuations of antioxidative systems in leaves of field-grown beech trees ( <i>Fagus sylvatica</i> ): Responses to light and temperature. <i>Physiologia Plantarum</i> , 2001, 111, 158-164.   | 5.2 | 43        |
| 134 | Local Responses and Systemic Induced Resistance Mediated by Ectomycorrhizal Fungi. <i>Frontiers in Plant Science</i> , 2020, 11, 590063.  | 3.6 | 43        |
| 135 | Climate Change Impairs Nitrogen Cycling in European Beech Forests. <i>PLoS ONE</i> , 2016, 11, e0158823.  | 2.5 | 42        |
| 136 | Phenology, photosynthesis, and phosphorus in European beech ( <i>Fagus sylvatica</i> L.) in two forest soils with contrasting P contents. <i>Journal of Plant Nutrition and Soil Science</i> , 2016, 179, 151-158.  | 1.9 | 42        |
| 137 | Carbon partitioning to mobile and structural fractions in poplar wood under elevated CO <sub>2</sub> (EUROFACE) and N fertilization. <i>Global Change Biology</i> , 2006, 12, 272-283.  | 9.5 | 41        |
| 138 | Harnessing salt for woody biomass production. <i>Tree Physiology</i> , 2012, 32, 1-3.   | 3.1 | 41        |
| 139 | Nitrogen-driven stem elongation in poplar is linked with wood modification and gene clusters for stress, photosynthesis and cell wall formation. <i>BMC Plant Biology</i> , 2014, 14, 391.  | 3.6 | 41        |
| 140 | Dissecting nutrient-related co-expression networks in phosphate starved poplars. <i>PLoS ONE</i> , 2017, 12, e0171958.  | 2.5 | 41        |
| 141 | Root-induced tree species effects on the source/sink strength for greenhouse gases (CH <sub>4</sub> , N <sub>2</sub> O and Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 39  | 8.8 | 40        |
| 142 | Intra-specific variations in expression of stress-related genes in beech progenies are stronger than drought-induced responses. <i>Tree Physiology</i> , 2014, 34, 1348-1361.   | 3.1 | 40        |
| 143 | Ectomycorrhizal Colonization and Diversity in Relation to Tree Biomass and Nutrition in a Plantation of Transgenic Poplars with Modified Lignin Biosynthesis. <i>PLoS ONE</i> , 2013, 8, e59207.  | 2.5 | 40        |
| 144 | Uptake and translocation of manganese in seedlings of two varieties of Douglas fir ( <i>Pseudotsuga</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 39  | 7.3 | 39        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | Auxin is a long-range signal that acts independently of ethylene signaling on leaf abscission in <i>Populus</i> . <i>Frontiers in Plant Science</i> , 2015, 6, 634.   | 3.6 | 39        |
| 146 | Volatile organic compound patterns predict fungal trophic mode and lifestyle. <i>Communications Biology</i> , 2021, 4, 673.   | 4.4 | 39        |
| 147 | Protura are unique: first evidence of specialized feeding on ectomycorrhizal fungi in soil invertebrates. <i>BMC Ecology</i> , 2019, 19, 10.  | 3.0 | 38        |
| 148 | Amelioration of nitrate uptake under salt stress by ectomycorrhiza with and without a Hartig net. <i>New Phytologist</i> , 2019, 222, 1951-1964.  | 7.3 | 38        |
| 149 | Effect of magnesium-deficiency on antioxidative systems in needles of Norway spruce [ <i>Picea abies</i> (L.) Karst.] grown with different ratios of nitrate and ammonium as nitrogen sources. <i>New Phytologist</i> , 1994, 128, 621-628. | 7.3 | 37        |
| 150 | Poplar nutrition under drought as affected by ectomycorrhizal colonization. <i>Environmental and Experimental Botany</i> , 2014, 108, 89-98.  | 4.2 | 37        |
| 151 | Phylogenetic and functional traits of ectomycorrhizal assemblages in top soil from different biogeographic regions and forest types. <i>Mycorrhiza</i> , 2017, 27, 233-245.   | 2.8 | 37        |
| 152 | Protection from oxidative stress in transgenic plants. <i>Biochemical Society Transactions</i> , 1994, 22, 936-940.   | 3.4 | 36        |
| 153 | Ectomycorrhiza affect architecture and nitrogen partitioning of beech ( <i>Fagus sylvatica</i> L.) seedlings under shade and drought. <i>Environmental and Experimental Botany</i> , 2013, 87, 207-217.                                     | 4.2 | 36        |
| 154 | Biomass traits and candidate genes for bioenergy revealed through association genetics in coppiced European <i>Populus nigra</i> (L.). <i>Biotechnology for Biofuels</i> , 2016, 9, 195.  | 6.2 | 36        |
| 155 | Degradation of Root Community Traits as Indicator for Transformation of Tropical Lowland Rain Forests into Oil Palm and Rubber Plantations. <i>PLoS ONE</i> , 2015, 10, e0138077.   | 2.5 | 36        |
| 156 | Early drought-induced changes to the needle proteome of Norway spruce. <i>Tree Physiology</i> , 2007, 27, 1423-1431.  | 3.1 | 35        |
| 157 | Genes and gene clusters related to genotype and drought-induced variation in saccharification potential, lignin content and wood anatomical traits in <i>Populus nigra</i> . <i>Tree Physiology</i> , 2018, 38, 320-339.                    | 3.1 | 35        |
| 158 | Poplar Wood Rays Are Involved in Seasonal Remodeling of Tree Physiology. <i>Plant Physiology</i> , 2012, 160, 1515-1529.  | 4.8 | 34        |
| 159 | Water consumption and biomass production of protoplast fusion lines of poplar hybrids under drought stress. <i>Frontiers in Plant Science</i> , 2015, 6, 330.   | 3.6 | 34        |
| 160 | Segregation of nitrogen use between ammonium and nitrate of ectomycorrhizas and beech trees. <i>Plant, Cell and Environment</i> , 2016, 39, 2691-2700.  | 5.7 | 34        |
| 161 | Relations between sulphur supply and glutathione and ascorbate concentrations in <i>Brassica napus</i> . <i>Zeitschrift Fur Pflanzenernahrung Und Bodenkunde = Journal of Plant Nutrition and Plant Science</i> , 1995, 158, 67-69.         | 0.4 | 32        |
| 162 | Carbon and nitrogen fluxes between beech and their ectomycorrhizal assemblage. <i>Mycorrhiza</i> , 2014, 24, 645-650.   | 2.8 | 32        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 163 | High rates of virus-induced gene silencing by tobacco rattle virus in <i>Populus</i> . <i>Tree Physiology</i> , 2015, 35, 1016-1029.   | 3.1 | 32        |
| 164 | Abscisic acid signalling mediates biomass trade-off and allocation in poplar. <i>New Phytologist</i> , 2019, 223, 1192-1203.   | 7.3 | 32        |
| 165 | Ectomycorrhizal fungi induce systemic resistance against insects on a nonmycorrhizal plant in a CERK1-dependent manner. <i>New Phytologist</i> , 2020, 228, 728-740.   | 7.3 | 32        |
| 166 | Seasonal Changes of the Antioxidative Systems in Foliar Buds and Leaves of Field-Grown Beech Trees ( <i>Fagus sylvatica</i> , L.) in a Stressful Climate. <i>Botanica Acta</i> , 1995, 108, 314-320.   | 1.6 | 30        |
| 167 | Fatty acid metabolism in the ectomycorrhizal fungus <i>Laccaria bicolor</i> . <i>New Phytologist</i> , 2009, 182, 950-964.   | 7.3 | 30        |
| 168 | Spatial Patterns of Ectomycorrhizal Assemblages in a Monospecific Forest in Relation to Host Tree Genotype. <i>Frontiers in Plant Science</i> , 2013, 4, 103.  | 3.6 | 30        |
| 169 | Physiological and transcriptional regulation in poplar roots and leaves during acclimation to high temperature and drought. <i>Physiologia Plantarum</i> , 2016, 157, 38-53.   | 5.2 | 29        |
| 170 | The Effect of Elevated [CO <sub>2</sub> ] on Uptake and Allocation of <sup>13</sup> C and <sup>15</sup> N in Beech ( <i>Fagus sylvatica</i> L.) during Leafing. <i>Plant Biology</i> , 2000, 2, 113-120.   | 3.8 | 28        |
| 171 | The influence of the ectomycorrhizal fungus <i>Rhizopogon subareolatus</i> on growth and nutrient element localisation in two varieties of Douglas fir ( <i>Pseudotsuga menziesii</i> var. <i>menziesii</i> and var. <i>Tj ETQq1 1 0.784314 rgBT / Overlo</i>                            | 4.1 | 27        |
| 172 | Competing Endogenous RNA Networks Underlying Anatomical and Physiological Characteristics of Poplar Wood in Acclimation to Low Nitrogen Availability. <i>Plant and Cell Physiology</i> , 2019, 60, 2478-2495.  | 3.1 | 26        |
| 173 | Mycorrhizal Phosphorus Efficiencies and Microbial Competition Drive Root P Uptake. <i>Frontiers in Forests and Global Change</i> , 2020, 3, .  | 2.3 | 25        |
| 174 | Subcellular Nutrient Element Localization and Enrichment in Ecto- and Arbuscular Mycorrhizas of Field-Grown Beech and Ash Trees Indicate Functional Differences. <i>PLoS ONE</i> , 2014, 9, e114672.   | 2.5 | 25        |
| 175 | Amelioration of planting stress by soil amendment with a hydrogel-mycorrhiza mixture for early establishment of beech ( <i>Fagus sylvatica</i> L.) seedlings. <i>Annals of Forest Science</i> , 2011, 68, 803-810.   | 2.0 | 24        |
| 176 | Minor contribution of leaf litter to N nutrition of beech ( <i>Fagus sylvatica</i> ) seedlings in a mountainous beech forest of Southern Germany. <i>Plant and Soil</i> , 2013, 369, 657-668.  | 3.7 | 24        |
| 177 | Growth under elevated CO <sub>2</sub> ameliorates defenses against photo-oxidative stress in poplar ( <i>Populus</i> ) Tj ETQq1 1 0.784314 rgBT / Overlo   | 4.2 | 23        |
| 178 | Mycorrhizal communities in relation to biomass production and nutrient use efficiency in two varieties of Douglas fir ( <i>Pseudotsuga menziesii</i> var. <i>menziesii</i> and var. <i>glauca</i> ) in different forest soils. <i>Soil Biology and Biochemistry</i> , 2009, 41, 742-753. | 8.8 | 23        |
| 179 | Are beech ( <i>Fagus sylvatica</i> ) roots territorial?. <i>Forest Ecology and Management</i> , 2010, 260, 1212-1217.  | 3.2 | 23        |
| 180 | Ectomycorrhizal Communities on the Roots of Two Beech ( <i>Fagus sylvatica</i> ) Populations from Contrasting Climates Differ in Nitrogen Acquisition in a Common Environment. <i>Applied and Environmental Microbiology</i> , 2015, 81, 5957-5967.                                      | 3.1 | 23        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 181 | Mistletoe infestation mediates alteration of the phytohormone profile and anti-oxidative metabolism in bark and wood of its host <i>Pinus sylvestris</i> . <i>Tree Physiology</i> , 2017, 37, 676-691.  | 3.1  | 23        |
| 182 | Growth and protection against oxidative stress in young clones and mature spruce trees ( <i>Picea abies</i> ) Tj ETQq0 0 Q,rgBT /Overlock 10 T  | 2.9  | 22        |
| 183 | Carbon and nitrogen balance in beech roots under competitive pressure of soil-borne microorganisms induced by girdling, drought and glucose application. <i>Functional Plant Biology</i> , 2010, 37, 879.   | 2.1  | 22        |
| 184 | Ectomycorrhizal identification in environmental samples of tree roots by Fourier-transform infrared (FTIR) spectroscopy. <i>Frontiers in Plant Science</i> , 2014, 5, 229.  | 3.6  | 22        |
| 185 | Shifts in root and soil chemistry drive the assembly of belowground fungal communities in tropical land-use systems. <i>Soil Biology and Biochemistry</i> , 2021, 154, 108140.  | 8.8  | 22        |
| 186 | SchÄdigung von WaldÄrkosystemen. , 2007, , .  |      | 22        |
| 187 | Superoxide dismutase activity in needles of Scots pine and Norway spruce under field and chamber conditions: lack of ozone effects. <i>New Phytologist</i> , 1991, 117, 335-343.  | 7.3  | 21        |
| 188 | Purification of Two Superoxide Dismutase Isozymes and Their Subcellular Localization in Needles and Roots of Norway Spruce ( <i>Picea abies</i> L.) Trees. <i>Plant Physiology</i> , 1992, 100, 334-340.  | 4.8  | 21        |
| 189 | Sulphate and antioxidants in needles of Scots pine ( <i>Pinus sylvestris</i> L.) from three SO <sub>2</sub> -polluted field sites in eastern Germany. <i>New Phytologist</i> , 1994, 127, 571-577.  | 7.3  | 21        |
| 190 | Preferential use of root litter compared to leaf litter by beech seedlings and soil microorganisms. <i>Plant and Soil</i> , 2013, 368, 519-534.   | 3.7  | 21        |
| 191 | Acid and calcareous soils affect nitrogen nutrition and organic nitrogen uptake by beech seedlings ( <i>Fagus sylvatica</i> L.) under drought, and their ectomycorrhizal community structure. <i>Plant and Soil</i> , 2016, 409, 143-157.                                   | 3.7  | 21        |
| 192 | Soil and root nutrient chemistry structure root-associated fungal assemblages in temperate forests. <i>Environmental Microbiology</i> , 2020, 22, 3081-3095.  | 3.8  | 21        |
| 193 | Root isoprene formation alters lateral root development. <i>Plant, Cell and Environment</i> , 2020, 43, 2207-2223.  | 5.7  | 21        |
| 194 | Ion fluxes in <i>Paxillus involutus</i> -inoculated roots of <i>Populus</i> -canescens under saline stress. <i>Environmental and Experimental Botany</i> , 2014, 108, 99-108.   | 4.2  | 20        |
| 195 | Isoprene emission by poplar is not important for the feeding behaviour of poplar leaf beetles. <i>BMC Plant Biology</i> , 2015, 15, 165.  | 3.6  | 20        |
| 196 | The slow rate of proton consumption at the reducing side of Photosystem I is limited by the rate of redox reactions of extrinsic electron acceptors, but not by a diffusion barrier for protons. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1986, 848, 274-278. | 1.0  | 19        |
| 197 | Does Atmospheric Hydrogen Peroxide Contribute to Damage to Forest Trees?. <i>Environmental Science &amp; Technology</i> , 1994, 28, 812-815.  | 10.0 | 19        |
| 198 | Effects of Elevated Atmospheric CO <sub>2</sub> on Microbial Community Structure at the Plant-Soil Interface of Young Beech Trees ( <i>Fagus sylvatica</i> L.) Grown at Two Sites with Contrasting Climatic Conditions. <i>Microbial Ecology</i> , 2015, 69, 867-878.       | 2.8  | 19        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 199 | Carbohydrate depletion in roots impedes phosphorus nutrition in young forest trees. <i>New Phytologist</i> , 2021, 229, 2611-2624.   | 7.3 | 19        |
| 200 | Towards Genetic Engineering for Drought Tolerance in Trees. , 2006, , 275-297.   |     | 18        |
| 201 | Impacts of earthworms on nitrogen acquisition from leaf litter by arbuscular mycorrhizal ash and ectomycorrhizal beech trees. <i>Environmental and Experimental Botany</i> , 2015, 120, 1-7.   | 4.2 | 18        |
| 202 | Intraspecific variations in drought response and fitness traits of beech ( <i>Fagus sylvatica</i> L.) seedlings from three provenances differing in annual precipitation. <i>Trees - Structure and Function</i> , 2017, 31, 1215-1225.   | 1.9 | 18        |
| 203 | Changes in sulphur metabolism of grey poplar ( <i>Populus x canescens</i> ) leaves during salt stress: a metabolic link to photorespiration. <i>Tree Physiology</i> , 2010, 30, 1161-1173.   | 3.1 | 17        |
| 204 | What Makes the Wood? Exploring the Molecular Mechanisms of Xylem Acclimation in Hardwoods to an Ever-Changing Environment. <i>Forests</i> , 2019, 10, 358.   | 2.1 | 17        |
| 205 | Wood Formation under Severe Drought Invokes Adjustment of the Hormonal and Transcriptional Landscape in Poplar. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9899.   | 4.1 | 17        |
| 206 | Populus Responses to Abiotic Stress. , 2010, , 225-246.  |     | 17        |
| 207 | Developmental changes of antioxidative systems in tobacco leaves as affected by limited sucrose export in transgenic plants expressing yeast-invertase in the apoplastic space. <i>Planta</i> , 1996, 198, 253.  | 3.2 | 16        |
| 208 | Responses of antioxidative systems to acute ozone stress in transgenic poplar ( <i>Populus tremula</i> Å— P.) Tj ETQq0 0 0 rgBT /Overlock 10 Function, 2002, 16, 262-273.  | 1.9 | 16        |
| 209 | Paxillus involutus-Facilitated Cd <sup>2+</sup> Influx through Plasma Membrane Ca <sup>2+</sup> -Permeable Channels Is Stimulated by H <sub>2</sub> O <sub>2</sub> and H <sup>+</sup> -ATPase in Ectomycorrhizal <i>Populus</i> Å— <i>canescens</i> under Cadmium Stress. <i>Frontiers in Plant Science</i> , 2016, 7, 1975. | 3.6 | 16        |
| 210 | Drought effects on the tissue- and cell-specific cytokinin activity in poplar. <i>AoB PLANTS</i> , 2018, 10, plx067.   | 2.3 | 16        |
| 211 | Comparative characterization of ethanol organosolv lignin polymer from bamboo green, timber and yellow. <i>Wood Science and Technology</i> , 2018, 52, 1331-1341.  | 3.2 | 16        |
| 212 | National Forest Inventories capture the multifunctionality of managed forests in Germany. <i>Forest Ecosystems</i> , 2021, 8, .  | 3.1 | 16        |
| 213 | Role of Carbon Dioxide in Modifying the Plant Response to Ozone. , 1999, , 193-213.  |     | 16        |
| 214 | Root-derived carbon and nitrogen from beech and ash trees differentially fuel soil animal food webs of deciduous forests. <i>PLoS ONE</i> , 2017, 12, e0189502.  | 2.5 | 16        |
| 215 | Protection from Oxidative Stress in Trees as Affected by Elevated CO <sub>2</sub> and Environmental Stress. , 1996, , 299-315.   |     | 15        |
| 216 | Tree species composition and soil properties in pure and mixed beech-conifer stands drive soil fungal communities. <i>Forest Ecology and Management</i> , 2021, 502, 119709.   | 3.2 | 15        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 217 | Evidence for the Participation of a 5-Oxo-prolinase in Degradation of Glutathione in <i>Nicotiana tabacum</i> . <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 1980, 35, 708-711.                                       | 1.4 | 14        |
| 218 | Lignification and structural biomass production in tobacco with suppressed caffeic/5-hydroxy ferulic acid-O-methyl transferase activity under ambient and elevated CO <sub>2</sub> concentrations. <i>Physiologia Plantarum</i> , 2004, 121, 75-83. | 5.2 | 14        |
| 219 | Cross-scale integration of mycorrhizal function. <i>New Phytologist</i> , 2018, 220, 941-946.   | 7.3 | 14        |
| 220 | Phosphorus Compartmentalization on the Cellular Level of Douglas Fir Root as Affected by Mn Toxicity: A Synchrotron-Based FTIR Approach. <i>Spectroscopy</i> , 2012, 27, 265-272.   | 0.8 | 13        |
| 221 | Transient and intramembrane trapping of pumped protons in thylakoids. <i>FEBS Letters</i> , 1986, 198, 263-267.   | 2.8 | 12        |
| 222 | Quantitative X-ray microanalysis of hydrogen peroxide within plant cells. <i>Microscopy Research and Technique</i> , 2009, 72, 49-60.   | 2.2 | 12        |
| 223 | Mycorrhiza-Tree-Herbivore Interactions: Alterations in Poplar Metabolome and Volatilome. <i>Metabolites</i> , 2022, 12, 93.   | 2.9 | 12        |
| 224 | Relating genetic variation of ecologically important tree traits to associated organisms in full-sib aspen families. <i>European Journal of Forest Research</i> , 2011, 130, 707-716.   | 2.5 | 11        |
| 225 | Tissue- and Cell-Specific Cytokinin Activity in <i>Populus Æ— canescens</i> Monitored by ARR5::GUS Reporter Lines in Summer and Winter. <i>Frontiers in Plant Science</i> , 2016, 7, 652.   | 3.6 | 11        |
| 226 | Beech trees fuel soil animal food webs via root-derived nitrogen. <i>Basic and Applied Ecology</i> , 2017, 22, 28-35.   | 2.7 | 11        |
| 227 | Saprotrophic and Ectomycorrhizal Fungi Contribute Differentially to Organic P Mobilization in Beech-Dominated Forest Ecosystems. <i>Frontiers in Forests and Global Change</i> , 2020, 3, .   | 2.3 | 11        |
| 228 | The influence of transpiration on foliar accumulation of salt and nutrients under salinity in poplar ( <i>Populus Æ— canescens</i> ). <i>PLoS ONE</i> , 2021, 16, e0253228.   | 2.5 | 11        |
| 229 | Transcriptional Landscape of Ectomycorrhizal Fungi and Their Host Provides Insight into N Uptake from Forest Soil. <i>MSystems</i> , 2022, 7, e0095721.   | 3.8 | 11        |
| 230 | Multi-omics analysis of xylem sap uncovers dynamic modulation of poplar defenses by ammonium and nitrate. <i>Plant Journal</i> , 2022, 111, 282-303.  | 5.7 | 11        |
| 231 | Quantitative X-ray Elemental Imaging in Plant Materials at the Subcellular Level with a Transmission Electron Microscope: Applications and Limitations. <i>Materials</i> , 2014, 7, 3160-3175.  | 2.9 | 10        |
| 232 | Changes in the fine root proteome of <i>Fagus sylvatica</i> L. trees associated with P-deficiency and amelioration of P-deficiency. <i>Journal of Proteomics</i> , 2017, 169, 33-40.  | 2.4 | 10        |
| 233 | Carbohydrate Accumulation Affects the Redox State of Ascorbate in Detached Tobacco Leaves. <i>Botanica Acta</i> , 1995, 108, 432-438.   | 1.6 | 9         |
| 234 | Genetic diversity in aspen and its relation to arthropod abundance. <i>Frontiers in Plant Science</i> , 2015, 5, 806.   | 3.6 | 9         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 235 | Leaf litter species identity influences biochemical composition of ectomycorrhizal fungi. <i>Mycorrhiza</i> , 2019, 29, 85-96.   | 2.8 | 9         |
| 236 | Legacy Effects Overshadow Tree Diversity Effects on Soil Fungal Communities in Oil Palm-Enrichment Plantations. <i>Microorganisms</i> , 2020, 8, 1577.   | 3.6 | 9         |
| 237 | 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         |
| 238 | Hydrogen Sulfide Emission by Cultured Tobacco Cells. <i>Zeitschrift für Pflanzenphysiologie</i> , 1983, 111, 189-202.  | 1.4 | 8         |
| 239 | Interference of Heavy Metal Toxicity with Auxin Physiology. , 2012, , 249-259.   |     | 8         |
| 240 | Mortality of Different Populus Genotypes in Recently Established Mixed Short Rotation Coppice with Robinia pseudoacacia L. <i>Forests</i> , 2019, 10, 410.   | 2.1 | 8         |
| 241 | Differences in Root Nitrogen Uptake Between Tropical Lowland Rainforests and Oil Palm Plantations. <i>Frontiers in Plant Science</i> , 2020, 11, 92.   | 3.6 | 8         |
| 242 | Peroxidase Activity in Poplar Inoculated with Compatible and Incompetent Isolates of Paxillus involutus. <i>HAYATI Journal of Biosciences</i> , 2007, 14, 49-53.   | 0.4 | 7         |
| 243 | Phylogeny, tissue-specific expression, and activities of root-secreted purple acid phosphatases for P uptake from ATP in P starved poplar. <i>Plant Science</i> , 2021, 307, 110906.   | 3.6 | 7         |
| 244 | Effects of Photooxidants on Plants. , 1989, , 251-258.   |     | 7         |
| 245 | Photooxidative Stress in Trees. , 2019, , 199-218.   |     | 7         |
| 246 | Diurnal fluctuations of secondary photooxidants in air and of detoxification systems in the foliage of Mediterranean forest trees. <i>Atmospheric Environment</i> , 1997, 31, 61-65.   | 4.1 | 6         |
| 247 | Preliminary Studies of Ascorbate Metabolism in Green and Albino Regions of Variegated Leaves of <i>Coleus blumei</i> , Benth. <i>Free Radical Research</i> , 1999, 31, 181-185.  | 3.3 | 6         |
| 248 | Physiological Responses to Abiotic and Biotic Stress in Forest Trees. <i>Forests</i> , 2019, 10, 711.  | 2.1 | 6         |
| 249 | Effective Defense of Aleppo Pine Against the Giant Scale <i>Marchalina hellenica</i> Through Ecophysiological and Metabolic Changes. <i>Frontiers in Plant Science</i> , 2020, 11, 581693.   | 3.6 | 6         |
| 250 | Soil Layers Matter: Vertical Stratification of Root-Associated Fungal Assemblages in Temperate Forests Reveals Differences in Habitat Colonization. <i>Microorganisms</i> , 2021, 9, 2131.   | 3.6 | 6         |
| 251 | Impact of ectomycorrhizal community composition and soil treatment on inorganic nitrogen nutrition and performance of beech ( <i>Fagus sylvatica</i> L.) provenances. <i>Trees - Structure and Function</i> , 2017, 31, 1891-1904. | 1.9 | 5         |
| 252 | Early Stage Root-Associated Fungi Show a High Temporal Turnover, but Are Independent of Beech Progeny. <i>Microorganisms</i> , 2020, 8, 210.   | 3.6 | 5         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 253 | Phosphorus Availability Alters the Effect of Tree Girdling on the Diversity of Phosphorus Solubilizing Soil Bacterial Communities in Temperate Beech Forests. <i>Frontiers in Forests and Global Change</i> , 2021, 4, .                     | 2.3 | 5         |
| 254 | 5-Oxo-prolinase activity in tobacco suspension cultures: Regulation by sulfate nutrition. <i>Physiologia Plantarum</i> , 1983, 59, 61-66.  | 5.2 | 4         |
| 255 | A novel method to quantify H <sup>+</sup> -ATPase-dependent Na <sup>+</sup> transport across plasma membrane vesicles. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007, 1768, 2078-2088.  | 2.6 | 4         |
| 256 | Ectomycorrhizal Fungal Strains Facilitate Cd <sup>2+</sup> Enrichment in a Woody Hyperaccumulator under Co-Existing Stress of Cadmium and Salt. <i>International Journal of Molecular Sciences</i> , 2021, 22, 11651.                        | 4.1 | 4         |
| 257 | Early Effects of Fertilizer and Herbicide Reduction on Root-Associated Biota in Oil Palm Plantations. <i>Agronomy</i> , 2022, 12, 199.   | 3.0 | 4         |
| 258 | Differential stress responses of antioxidative systems to drought in pendunculate oak ( <i>Quercus</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5<br><i>Experimental Botany</i> , 2001, 52, 133-143.   | 4.8 | 3         |
| 259 | Editorial: Ecological Consequences of Biodiversity and Biotechnology in Agriculture and Forestry. <i>Frontiers in Plant Science</i> , 2016, 7, 210.  | 3.6 | 3         |
| 260 | Hybrid and Environmental Effects on Gene Expression in Poplar Clones in Pure and Mixed with Black Locust Stands. <i>Forests</i> , 2020, 11, 1075.  | 2.1 | 3         |
| 261 | Wood properties and transcriptional responses of poplar hybrids in mixed cropping with the nitrogen-fixing species <i>Robinia pseudoacacia</i> . <i>Tree Physiology</i> , 2021, 41, 865-881.   | 3.1 | 3         |
| 262 | Interaction between growth environment and host progeny shape fungal endophytic assemblages in transplanted <i>Fagus sylvatica</i> . <i>Fungal Ecology</i> , 2022, 60, 101175.   | 1.6 | 2         |
| 263 | A tribute to Sally E. Smith. <i>New Phytologist</i> , 2020, 228, 397-402.  | 7.3 | 1         |
| 264 | Drought Deteriorates the N Stoichiometry of Biomass Production in European Beech Saplings Under Global Change. <i>Frontiers in Forests and Global Change</i> , 2021, 4, .  | 2.3 | 1         |
| 265 | Diffusion Barriers for Protons at the External Surface of Thylakoids. , 1984, , 261-264.   |     | 1         |
| 266 | Response of Poplar Leaf Transcriptome to Changed Management and Environmental Conditions in Pure and Mixed with Black Locust Stands. <i>Forests</i> , 2022, 13, 147.   | 2.1 | 1         |
| 267 | Resistance against oxidative stress in leaves of young beech trees grown in model ecosystems with different soil qualities, elevated CO <sub>2</sub> , and lachnid infestation. <i>European Journal of Forest Research</i> , 2001, 120, 1-7. | 0.3 | 0         |
| 268 | Changes in culm surface temperature with maturity of the bamboo species <i>Guadua angustifolia</i> . <i>Journal of Forestry Research</i> , 2016, 27, 419-425.  | 3.6 | 0         |
| 269 | Genotypic and tissue-specific variation of <i>Populus nigra</i> transcriptome profiles in response to drought. <i>Scientific Data</i> , 2022, 9, .   | 5.3 | 0         |