Maurizio Mencuccini

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Small understorey trees have greater capacity than canopy trees to adjust hydraulic traits following prolonged experimental drought in a tropical forest. Tree Physiology, 2022, 42, 537-556. | 1.4 | 7 |
| 2 | Variation of nonâ€structural carbohydrates across the fast–slow continuum in Amazon Forest canopy trees. Functional Ecology, 2022, 36, 341-355. | 1.7 | 9 |
| 3 | Forest system hydraulic conductance: partitioning tree and soil components. New Phytologist, 2022, 233, 1667-1681. | 3.5 | 6 |
| 4 | The 2018 European heatwave led to stem dehydration but not to consistent growth reductions in forests. Nature Communications, 2022, 13, 28. | 5.8 | 66 |
| 5 | Forest canopy nitrogen uptake can supply entire foliar demand. Functional Ecology, 2022, 36, 933-949. | 1.7 | 9 |
| 6 | Wood density and hydraulic traits influence species' growth response to drought across biomes. Global Change Biology, 2022, 28, 3871-3882. | 4.2 | 34 |
| 7 | Mechanisms of woody-plant mortality under rising drought, CO2 and vapour pressure deficit. Nature Reviews Earth & Environment, 2022, 3, 294-308. | 12.2 | 163 |
| 8 | Vapour pressure deficit is the main driver of tree canopy conductance across biomes. Agricultural and Forest Meteorology, 2022, 322, 109029. | 1.9 | 9 |
| 9 | High exposure of global tree diversity to human pressure. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 3.3 | 18 |
| 10 | Unravelling the effect of species mixing on water use and drought stress in Mediterranean forests: A modelling approach. Agricultural and Forest Meteorology, 2021, 296, 108233. | 1.9 | 30 |
| 11 | Plant traits controlling growth change in response to a drier climate. New Phytologist, 2021, 229, 1363-1374. | 3.5 | 26 |
| 12 | The response of carbon assimilation and storage to longâ€ŧerm drought in tropical trees is dependent on light availability. Functional Ecology, 2021, 35, 43-53. | 1.7 | 14 |
| 13 | Canopy wetness in the Eastern Amazon. Agricultural and Forest Meteorology, 2021, 297, 108250. | 1.9 | 15 |
| 14 | Life after recovery: Increased resolution of forest resilience assessment sheds new light on postâ€drought compensatory growth and recovery dynamics. Journal of Ecology, 2021, 109, 3157-3170. | 1.9 | 41 |
| 15 | Disentangling biology from mathematical necessity in twentieth-century gymnosperm resilience trends. Nature Ecology and Evolution, 2021, 5, 733-735. | 3.4 | 10 |
| 16 | Non-structural carbohydrates mediate seasonal water stress across Amazon forests. Nature Communications, 2021, 12, 2310. | 5.8 | 59 |
| 17 | Hard times for high expectations from hydraulics: predicting droughtâ€induced forest mortality at landscape scales remains a challenge. New Phytologist, 2021, 230, 1685-1687. | 3.5 | 15 |
| 18 | Climate and functional traits jointly mediate tree waterâ€use strategies. New Phytologist, 2021, 231, 617-630. | 3.5 | 53 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Shifting access to pools of shoot water sustains gas exchange and increases stem hydraulic safety during seasonal atmospheric drought. Plant, Cell and Environment, 2021, 44, 2898-2911. | 2.8 | 17 |
| 20 | Global transpiration data from sap flow measurements: the SAPFLUXNET database. Earth System Science Data, 2021, 13, 2607-2649. | 3.7 | 65 |
| 21 | Harvesting water from unsaturated atmospheres: deliquescence of salt secreted onto leaf surfaces drives reverse sap flow in a dominant arid climate mangrove, <i>Avicennia marina</i> . New Phytologist, 2021, 231, 1401-1414. | 3.5 | 30 |
| 22 | Towards a statistically robust determination of minimum water potential and hydraulic risk in plants. New Phytologist, 2021, 232, 404-417. | 3.5 | 19 |
| 23 | Detecting forest response to droughts with global observations of vegetation water content. Global Change Biology, 2021, 27, 6005-6024. | 4.2 | 73 |
| 24 | Are leaf, stem and hydraulic traits good predictors of individual tree growth?. Functional Ecology, 2021, 35, 2435-2447. | 1.7 | 16 |
| 25 | Threshold Response to Extreme Drought Shifts Inter-Tree Growth Dominance in Pinus sylvestris. Frontiers in Forests and Global Change, 2021, 4, . | 1.0 | 2 |
| 26 | A review of the suitability of eucalypts for short rotation forestry for energy in the UK. New Forests, 2020, 51, 1-19. | 0.7 | 13 |
| 27 | Partitioning between atmospheric deposition and canopy microbial nitrification into throughfall nitrate fluxes in a Mediterranean forest. Journal of Ecology, 2020, 108, 626-640. | 1.9 | 20 |
| 28 | Equivalence of foliar water uptake and stomatal conductance?. Plant, Cell and Environment, 2020, 43, 524-528. | 2.8 | 26 |
| 29 | Transpiration from subarctic deciduous woodlands: Environmental controls and contribution to ecosystem evapotranspiration. Ecohydrology, 2020, 13, e2190. | 1.1 | 12 |
| 30 | Stomatal optimization based on xylem hydraulics (SOX) improves land surface model simulation of vegetation responses to climate. New Phytologist, 2020, 226, 1622-1637. | 3.5 | 95 |
| 31 | TRY plant trait database – enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188. | 4.2 | 1,038 |
| 32 | Respiration in wood: integrating across tissues, functions and scales. New Phytologist, 2020, 225, 1824-1827. | 3.5 | 3 |
| 33 | Bioclimatic distance and performance of apical shoot extension: Disentangling the role of growth rate and duration in ecotypic differentiation. Forest Ecology and Management, 2020, 477, 118483. | 1.4 | 10 |
| 34 | Small tropical forest trees have a greater capacity to adjust carbon metabolism to longâ€ŧerm drought than large canopy trees. Plant, Cell and Environment, 2020, 43, 2380-2393. | 2.8 | 22 |
| 35 | Climate and atmospheric deposition effects on forest water-use efficiency and nitrogen availability across Britain. Scientific Reports, 2020, 10, 12418. | 1.6 | 18 |
| 36 | Adaptation and coordinated evolution of plant hydraulic traits. Ecology Letters, 2020, 23, 1599-1610. | 3.0 | 58 |

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|----|--|-----|-----------|
| 37 | Amazonia trees have limited capacity to acclimate plant hydraulic properties in response to longâ€ŧerm drought. Global Change Biology, 2020, 26, 3569-3584. | 4.2 | 56 |
| 38 | Determinants of legacy effects in pine trees – implications from an irrigationâ€stop experiment. New Phytologist, 2020, 227, 1081-1096. | 3.5 | 52 |
| 39 | Using the SAPFLUXNET database to understand transpiration regulation of trees and forests. Acta Horticulturae, 2020, , 179-186. | 0.1 | 3 |
| 40 | The impact of a simple representation of non-structural carbohydrates on the simulated response of tropical forests to drought. Biogeosciences, 2020, 17, 3589-3612. | 1.3 | 24 |
| 41 | sPlot – A new tool for global vegetation analyses. Journal of Vegetation Science, 2019, 30, 161-186. | 1.1 | 185 |
| 42 | Leaf economics and plant hydraulics drive leaf : wood area ratios. New Phytologist, 2019, 224, 1544-1556. | 3.5 | 77 |
| 43 | Foliar water uptake in Amazonian trees: Evidence and consequences. Global Change Biology, 2019, 25, 2678-2690. | 4.2 | 45 |
| 44 | Exceptionally high mangrove root production rates in the Kelantan Delta, Malaysia; An experimental and comparative study. Forest Ecology and Management, 2019, 444, 214-224. | 1.4 | 20 |
| 45 | Drought-induced mortality in Scots pine: opening the metabolic black box. Tree Physiology, 2019, 39, 1358-1370. | 1.4 | 10 |
| 46 | Temperature and masting control Norway spruce growth, but with high individual tree variability. Forest Ecology and Management, 2019, 438, 142-150. | 1.4 | 34 |
| 47 | Modelling water fluxes in plants: from tissues to biosphere. New Phytologist, 2019, 222, 1207-1222. | 3.5 | 138 |
| 48 | Adjustments and coordination of hydraulic, leaf and stem traits along a water availability gradient. New Phytologist, 2019, 223, 632-646. | 3.5 | 184 |
| 49 | Drivers and mechanisms of tree mortality in moist tropical forests. New Phytologist, 2018, 219, 851-869. | 3.5 | 341 |
| 50 | Drought stress and tree size determine stem <scp>CO</scp> ₂ efflux in a tropical forest. New Phytologist, 2018, 218, 1393-1405. | 3.5 | 26 |
| 51 | Shock and stabilisation following longâ€ŧerm drought in tropical forest from 15 years of litterfall dynamics. Journal of Ecology, 2018, 106, 1673-1682. | 1.9 | 26 |
| 52 | Preliminary growth functions for Eucalyptus gunnii in the UK. Biomass and Bioenergy, 2018, 108, 464-469. | 2.9 | 6 |
| 53 | Manipulative experiments demonstrate how long-term soil moisture changes alter controls of plant water use. Environmental and Experimental Botany, 2018, 152, 19-27. | 2.0 | 49 |
| 54 | Changes in tree resistance, recovery and resilience across three successive extreme droughts in the northeast Iberian Peninsula. Oecologia, 2018, 187, 343-354. | 0.9 | 94 |

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|----|--|-----|-----------|
| 55 | Tree size and climatic water deficit control root to shoot ratio in individual trees globally. New Phytologist, 2018, 217, 8-11. | 3.5 | 108 |
| 56 | Xylem hydraulic safety and construction costs determine tropical tree growth. Plant, Cell and Environment, 2018, 41, 548-562. | 2.8 | 70 |
| 57 | Stand dynamics modulate water cycling and mortality risk in droughted tropical forest. Global Change Biology, 2018, 24, 249-258. | 4.2 | 39 |
| 58 | Global trait–environment relationships of plant communities. Nature Ecology and Evolution, 2018, 2, 1906-1917. | 3.4 | 397 |
| 59 | Rainforest trees respond to drought by modifying their hydraulic architecture. Ecology and Evolution, 2018, 8, 12479-12491. | 0.8 | 34 |
| 60 | Short-term effects of drought on tropical forest do not fully predict impacts of repeated or long-term drought: gas exchange versus growth. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170311. | 1.8 | 30 |
| 61 | Modelling tropical forest responses to drought and El Niño with a stomatal optimization model based on xylem hydraulics. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170315. | 1.8 | 69 |
| 62 | Gap-filling aÂspatially explicit plant trait database: comparing imputation methods and different levels of environmental information. Biogeosciences, 2018, 15, 2601-2617. | 1.3 | 13 |
| 63 | Estimating carbon avoided from the implementation of reduced-impact logging in Sabah, Malaysia. International Forestry Review, 2018, 20, 58-78. | 0.3 | 6 |
| 64 | Long-term temporal relationships between environmental conditions and xylem functional traits: a meta-analysis across a range of woody species along climatic and nitrogen deposition gradients. Tree Physiology, 2017, 37, 4-17. | 1.4 | 37 |
| 65 | An empirical method that separates irreversible stem radial growth from bark water content changes in trees: theory and case studies. Plant, Cell and Environment, 2017, 40, 290-303. | 2.8 | 86 |
| 66 | Physiological and Biochemical Processes Related to Ageing and Senescence in Plants. , 2017, , 257-283. | | 30 |
| 67 | Assimilation of repeated woody biomass observations constrains decadal ecosystem carbon cycle uncertainty in aggrading forests. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 528-545. | 1.3 | 41 |
| 68 | Xylem. , 2017, , 141-148. | | 0 |
| 69 | Morphological and physiological responses to drought stress of European provenances of Scots pine. European Journal of Forest Research, 2017, 136, 91-104. | 1.1 | 31 |
| 70 | Predicting stomatal responses to the environment from the optimization of photosynthetic gain and hydraulic cost. Plant, Cell and Environment, 2017, 40, 816-830. | 2.8 | 276 |
| 71 | Decomposition nitrogen is better retained than simulated deposition from mineral amendments in a temperate forest. Global Change Biology, 2017, 23, 1711-1724. | 4.2 | 6 |
| 72 | Plumbing the depths: extracellular water storage in specialized leaf structures and its functional expression in a threeâ€domain pressure –volume relationship. Plant, Cell and Environment, 2017, 40, 1021-1038. | 2.8 | 35 |

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|----|--|------|-----------|
| 73 | The Anatomy and Functioning of the Xylem in Oaks. Tree Physiology, 2017, , 261-302. | 0.9 | 15 |
| 74 | A multi-species synthesis of physiological mechanisms in drought-induced tree mortality. Nature Ecology and Evolution, 2017, 1, 1285-1291. | 3.4 | 739 |
| 75 | A resource capture efficiency index to compare differences in early growth of four tree species in northern England. IForest, 2017, 10, 397-405. | 0.5 | 7 |
| 76 | Linking hydraulic traits to tropical forest function in a size-structured and trait-driven model (TFSÂv.1-Hydro). Geoscientific Model Development, 2016, 9, 4227-4255. | 1.3 | 211 |
| 77 | The Application of Leaf Ultrasonic Resonance to Vitis vinifera L. Suggests the Existence of a Diurnal Osmotic Adjustment Subjected to Photosynthesis. Frontiers in Plant Science, 2016, 7, 1601. | 1.7 | 13 |
| 78 | Allocation, stress tolerance and carbon transport in plants: how does phloem physiology affect plant ecology?. Plant, Cell and Environment, 2016, 39, 709-725. | 2.8 | 164 |
| 79 | Plasticity in leafâ€level water relations of tropical rainforest trees in response to experimental drought. New Phytologist, 2016, 211, 477-488. | 3.5 | 62 |
| 80 | Weak tradeoff between xylem safety and xylemâ€specific hydraulic efficiency across the world's woody plant species. New Phytologist, 2016, 209, 123-136. | 3.5 | 466 |
| 81 | Limited acclimation in leaf anatomy to experimental drought in tropical rainforest trees. Tree Physiology, 2016, 36, 1550-1561. | 1.4 | 27 |
| 82 | SAPFLUXNET: towards a global database of sap flow measurements. Tree Physiology, 2016, 36, 1449-1455. | 1.4 | 86 |
| 83 | Direct observation and modelling of embolism spread between xylem conduits: a case study in Scots pine. Plant, Cell and Environment, 2016, 39, 2774-2785. | 2.8 | 27 |
| 84 | Separating waterâ€potential induced swelling and shrinking from measured radial stem variations reveals a cambial growth and osmotic concentration signal. Plant, Cell and Environment, 2016, 39, 233-244. | 2.8 | 79 |
| 85 | Does canopy nitrogen uptake enhance carbon sequestration by trees?. Global Change Biology, 2016, 22, 875-888. | 4.2 | 45 |
| 86 | After more than a decade of soil moisture deficit, tropical rainforest trees maintain photosynthetic capacity, despite increased leaf respiration. Global Change Biology, 2015, 21, 4662-4672. | 4.2 | 67 |
| 87 | Balancing the risks of hydraulic failure and carbon starvation: a twig scale analysis in declining <scp>S</scp> cots pine. Plant, Cell and Environment, 2015, 38, 2575-2588. | 2.8 | 79 |
| 88 | lsotopic evidence for the occurrence of biological nitrification and nitrogen deposition processing in forest canopies. Global Change Biology, 2015, 21, 4613-4626. | 4.2 | 63 |
| 89 | Coordination of physiological traits involved in droughtâ€induced mortality of woody plants. New Phytologist, 2015, 208, 396-409. | 3.5 | 123 |
| 90 | Death from drought in tropical forests is triggered by hydraulics not carbon starvation. Nature, 2015, 528, 119-122. | 13.7 | 482 |

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|-----|--|-----|-----------|
| 91 | Hydraulic functioning of tree stems—fusing ray anatomy, radial transfer and capacitance. Tree Physiology, 2015, 35, 706-722. | 1.4 | 110 |
| 92 | Tall, leafy conifers lose out. Nature Climate Change, 2015, 5, 625-626. | 8.1 | 11 |
| 93 | Bayesian calibration and Bayesian model comparison of a stand level dynamic growth model for Sitka spruce and Scots pine. Forestry, 2015, 88, 326-335. | 1.2 | 4 |
| 94 | Droughtâ€related tree mortality: addressing the gaps in understanding and prediction. New Phytologist, 2015, 207, 28-33. | 3.5 | 111 |
| 95 | Sap flow as a key trait in the understanding of plant hydraulic functioning. Tree Physiology, 2015, 35, 341-345. | 1.4 | 70 |
| 96 | Dwarf trees, superâ€sized shrubs and scaling: why is plant stature so important?. Plant, Cell and Environment, 2015, 38, 1-3. | 2.8 | 11 |
| 97 | A comparison of models for quantifying growth and standing carbon in UK Scots pine forests. IForest, 2015, 8, 596-605. | 0.5 | 8 |
| 98 | Rapid Losses of Surface Elevation following Tree Girdling and Cutting in Tropical Mangroves. PLoS ONE, 2014, 9, e107868. | 1.1 | 78 |
| 99 | Managing forests for ecosystem services - can spruce forests show the way?. Forestry, 2014, 87, 189-191. | 1.2 | 5 |
| 100 | Stem injection of 15N-NH4NO3 into mature Sitka spruce (Picea sitchensis). Tree Physiology, 2014, 34, 1130-1140. | 1.4 | 7 |
| 101 | Frost damage to eucalypts in a short-rotation forestry trial in Cumbria (England). IForest, 2014, 7, 156-161. | 0.5 | 4 |
| 102 | Improved allometric models to estimate the aboveground biomass of tropical trees. Global Change Biology, 2014, 20, 3177-3190. | 4.2 | 1,712 |
| 103 | No signs of meristem senescence in old <scp>S</scp> cots pine. Journal of Ecology, 2014, 102, 555-565. | 1.9 | 27 |
| 104 | Temporal scales for the coordination of tree carbon and water economies during droughts. Tree Physiology, 2014, 34, 439-442. | 1.4 | 19 |
| 105 | Sensitivity of colour indices for discriminating leaf colours from digital photographs. Methods in Ecology and Evolution, 2014, 5, 1078-1085. | 2.2 | 21 |
| 106 | Ecophysiological Aspects of Phloem Transport in Trees. Plant Ecophysiology, 2014, , 25-36. | 1.5 | 6 |
| 107 | A new look at water transport regulation in plants. New Phytologist, 2014, 204, 105-115. | 3.5 | 404 |
| 108 | Plump trees win under drought. Nature Climate Change, 2014, 4, 666-667. | 8.1 | 23 |

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| # | Article | IF | CITATIONS |
|-----|---|-----------|--------------|
| 109 | The utility of optical remote sensing for characterizing changes in the photosynthetic efficiency of Norway maple saplings following transplantation. International Journal of Remote Sensing, 2013, 34, 655-667. | 1.3 | 2 |
| 110 | Species mixing boosts root yield in mangrove trees. Oecologia, 2013, 172, 271-278. | 0.9 | 42 |
| 111 | Effects of Long-Term Nitrogen Addition and Atmospheric Nitrogen Deposition on Carbon Accumulation in Picea sitchensis Plantations. Ecosystems, 2013, 16, 1310-1324. | 1.6 | 14 |
| 112 | Evaluating theories of droughtâ€induced vegetation mortality using a multimodel–experiment framework. New Phytologist, 2013, 200, 304-321. | 3.5 | 340 |
| 113 | Propagating uncertainty to estimates of above-ground biomass for Kenyan mangroves: A scaling procedure from tree to landscape level. Forest Ecology and Management, 2013, 310, 968-982. | 1.4 | 38 |
| 114 | The relationship between carbon dioxide uptake and canopy colour from two camera systems in a deciduous forest in southern <scp>E</scp> ngland. Functional Ecology, 2013, 27, 196-207. | 1.7 | 59 |
| 115 | Concurrent measurements of change in the bark and xylem diameters of trees reveal a phloemâ€generated turgor signal. New Phytologist, 2013, 198, 1143-1154. | 3.5 | 92 |
| 116 | The regulation of sapwood area, water transport and heartwood formation in Sitka spruce. Plant Ecology and Diversity, 2013, 6, 45-56. | 1.0 | 16 |
| 117 | Paul Jarvis, FRS, FRSE: plant ecologist who showed the link between forests and the atmosphere. IForest, 2013, 6, 100-101. | 0.5 | 1 |
| 118 | Droughtâ€induced defoliation and long periods of nearâ€zero gas exchange play a key role in accentuating metabolic decline of Scots pine. New Phytologist, 2013, 200, 388-401. | 3.5 | 140 |
| 119 | â€~Forests, instruments and ideas' – a tribute to John Grace's career. Plant Ecology and Diversity, 2013, 6, 3-6. | 1.0 | 0 |
| 120 | The effects of site preparation practices on carbon dioxide, methane and nitrous oxide fluxes from a peaty gley soil. Forestry, 2012, 85, 1-15. | 1.2 | 22 |
| 121 | Global convergence in the vulnerability of forests to drought. Nature, 2012, 491, 752-755. | 13.7 | 1,944 |
| 122 | Seasonal controls on net branch CO2 assimilation in sub-Arctic Mountain Birch (Betula pubescens) Tj ETQq0 0 0 r | gBT /Over | loçk 10 Tf 5 |
| 123 | Spatial distribution and packing of xylem conduits. American Journal of Botany, 2012, 99, 1189-1196. | 0.8 | 52 |
| 124 | The potential for Eucalyptus as a wood fuel in the UK. Applied Energy, 2012, 89, 176-182. | 5.1 | 47 |
| 125 | Understanding trait interactions and their impacts on growth in Scots pine branches across Europe. Functional Ecology, 2012, 26, 541-549. | 1.7 | 52 |
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Assessing the effects of nitrogen deposition and climate on carbon isotope discrimination and intrinsic waterâ€use efficiency of angiosperm and conifer trees under rising <scp>CO</scp>₂ conditions. Global Change Biology, 2012, 18, 2925-2944.

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|-----|--|-----|-----------|
| 127 | Effects of climate and site characteristics on Scots pine growth. European Journal of Forest Research, 2012, 131, 427-439. | 1.1 | 14 |
| 128 | Effects of species richness, identity and environmental variables on growth in planted mangroves in Kenya. Marine Ecology - Progress Series, 2012, 465, 1-10. | 0.9 | 9 |
| 129 | The comparison of several colour indices for the photographic recording of canopy phenology of <i>Fagus crenata</i> Blume in eastern Japan. Plant Ecology and Diversity, 2011, 4, 67-77. | 1.0 | 28 |
| 130 | A carbon cost–gain model explains the observed patterns of xylem safety and efficiency. Plant, Cell and Environment, 2011, 34, 1819-1834. | 2.8 | 40 |
| 131 | The legacy of enhanced N and S deposition as revealed by the combined analysis of δ13C, δ18O and δ15N in tree rings. Global Change Biology, 2011, 17, 1946-1962. | 4.2 | 66 |
| 132 | Modelling understorey light for seedling regeneration in continuous cover forestry canopies. Forestry, 2011, 84, 397-409. | 1.2 | 14 |
| 133 | Comparative Criteria for Models of the Vascular Transport Systems of Tall Trees. Tree Physiology, 2011, , 309-339. | 0.9 | 19 |
| 134 | Stand and coarse woody debris dynamics in subalpine Norway spruce forests withdrawn from regular management. Annals of Forest Science, 2010, 67, 803-803. | 0.8 | 16 |
| 135 | Effects of site preparation for afforestation on methane fluxes at Harwood Forest, NE England. Biogeochemistry, 2010, 97, 89-107. | 1.7 | 13 |
| 136 | Decomposition of mangrove roots: Effects of location, nutrients, species identity and mix in a Kenyan forest. Estuarine, Coastal and Shelf Science, 2010, 88, 135-142. | 0.9 | 62 |
| 137 | Anthropogenic NOx emissions alter the intrinsic water-use efficiency (WUEi) for Quercus cerris stands under Mediterranean climate conditions. Environmental Pollution, 2010, 158, 2841-2847. | 3.7 | 24 |
| 138 | The significance of phloem transport for the speed with which canopy photosynthesis and belowground respiration are linked. New Phytologist, 2010, 185, 189-203. | 3.5 | 181 |
| 139 | On light bulbs and marbles. Transfer times and teleconnections in plant fluid transport systems. New Phytologist, 2010, 187, 888-891. | 3.5 | 11 |
| 140 | Interspecific variation in functional traits, not climatic differences among species ranges, determines demographic rates across 44 temperate and Mediterranean tree species. Journal of Ecology, 2010, 98, 1462-1475. | 1.9 | 92 |
| 141 | Intra- and interspecific facilitation in mangroves may increase resilience to climate change threats. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 2127-2135. | 1.8 | 90 |
| 142 | The effects of sap ionic composition on xylem vulnerability to cavitation. Journal of Experimental Botany, 2010, 61, 275-285. | 2.4 | 59 |
| 143 | Green spruce aphid infestations cause larger growth reductions to Sitka spruce under shade. Tree Physiology, 2010, 30, 1403-1414. | 1.4 | 5 |
| 144 | A quantitative and statistically robust method for the determination of xylem conduit spatial distribution. American Journal of Botany, 2010, 97, 1247-1259. | 0.8 | 21 |

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|-----|--|------|-----------|
| 145 | Calibration and validation of a simplified process-based model for the prediction of the carbon balance of Scottish Sitka spruce (Picea sitchensis) plantations. Canadian Journal of Forest Research, 2010, 40, 2411-2426. | 0.8 | 18 |
| 146 | Biotic and abiotic factors affecting the ĺ′13C of soil respired CO2in a Mediterranean oak woodlandâ€. Isotopes in Environmental and Health Studies, 2009, 45, 343-359. | 0.5 | 20 |
| 147 | Carbon stock and stock changes across a Sitka spruce chronosequence on surface-water gley soils. Forestry, 2009, 82, 255-272. | 1.2 | 39 |
| 148 | The impact of soil microorganisms on the global budget of δ ¹⁸ O in atmospheric CO ₂ . Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22411-22415. | 3.3 | 74 |
| 149 | New Insights into the Mechanisms of Water-Stress-Induced Cavitation in Conifers. Plant Physiology, 2009, 151, 949-954. | 2.3 | 97 |
| 150 | Linking phloem function to structure: Analysis with a coupled xylem–phloem transport model. Journal of Theoretical Biology, 2009, 259, 325-337. | 0.8 | 207 |
| 151 | Capacitive effect of cavitation in xylem conduits: results from a dynamic model. Plant, Cell and Environment, 2009, 32, 10-21. | 2.8 | 115 |
| 152 | Hydraulic adjustment of Scots pine across Europe. New Phytologist, 2009, 184, 353-364. | 3.5 | 337 |
| 153 | THE DISTRIBUTION OF RESISTANCES ALONG THE HYDRAULIC PATHWAY IS CONTROLLED BY THE TAPERING OF XYLEM CONDUITS. Acta Horticulturae, 2009, , 237-242. | 0.1 | 1 |
| 154 | Magnani et al. reply. Nature, 2008, 451, E3-E4. | 13.7 | 20 |
| 155 | Tapering of xylem conduits and hydraulic limitations in sycamore (<i>Acer pseudoplatanus</i>) trees. New Phytologist, 2008, 177, 653-664. | 3.5 | 81 |
| 156 | Evaporation and carbonic anhydrase activity recorded in oxygen isotope signatures of net CO ₂ fluxes from a Mediterranean soil. Global Change Biology, 2008, 14, 2178-2193. | 4.2 | 48 |
| 157 | Sensitivity and uncertainty analysis from a coupled 3-PG and soil organic matter decomposition model. Ecological Modelling, 2008, 219, 1-16. | 1.2 | 78 |
| 158 | Below-ground root yield and distribution in natural and replanted mangrove forests at Gazi bay, Kenya. Forest Ecology and Management, 2008, 256, 1290-1297. | 1.4 | 97 |
| 159 | Age- and size-related changes in physiological characteristics and chemical composition of Acer pseudoplatanus and Fraxinus excelsior trees. Tree Physiology, 2008, 29, 27-38. | 1.4 | 28 |
| 160 | Age and Size Related Changes in Growth of Acer pseudoplatanus and Fraxinus excelsior Species. American Journal of Plant Physiology, 2008, 3, 137-153. | 0.2 | 5 |
| 161 | Xylem vulnerability to cavitation varies among poplar and willow clones and correlates with yield. Tree Physiology, 2007, 27, 1761-1767. | 1.4 | 106 |
| 162 | Plant size, not age, regulates growth and gas exchange in grafted Scots pine trees. Tree Physiology, 2007, 27, 71-79. | 1.4 | 57 |

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|-----|---|------------|--------------|
| 163 | A noninvasive optical system for the measurement of xylem and phloem sap flow in woody plants of small stem size. Tree Physiology, 2007, 27, 169-179. | 1.4 | 31 |
| 164 | Evidence for age- and size-mediated controls of tree growth from grafting studies. Tree Physiology, 2007, 27, 463-473. | 1.4 | 70 |
| 165 | The relevance of xylem network structure for plant hydraulic efficiency and safety. Journal of Theoretical Biology, 2007, 247, 788-803. | 0.8 | 205 |
| 166 | The human footprint in the carbon cycle of temperate and boreal forests. Nature, 2007, 447, 849-851. | 13.7 | 868 |
| 167 | Sanio's laws revisited. Sizeâ€dependent changes in the xylem architecture of trees. Ecology Letters, 2007, 10, 1084-1093. | 3.0 | 92 |
| 168 | Belowâ€ground hydraulic conductance is a function of environmental conditions and tree size in Scots pine. Functional Ecology, 2007, 21, 1072-1083. | 1.7 | 28 |
| 169 | Comparison of xylem flow velocities determined by MRI and a non-invasive heat pulse technique in Golden Alder and Silver Birch. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2007, 146, S65-S66. | 0.8 | 2 |
| 170 | Plasticity in hydraulic architecture of Scots pine across Eurasia. Oecologia, 2007, 153, 245-259. | 0.9 | 98 |
| 171 | Tree height and age-related decline in growth in Scots pine (Pinus sylvestris L.). Oecologia, 2006, 150, 529-544. | 0.9 | 114 |
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