# Patrick Meir

## List of Publications by Year in Descending Order



| | | | |
|---|---|---|---|
| 195 papers | 17,291 citations | 69 h-index | 128 g-index |
| 205 ext. papers | 20,721 ext. citations | 8 avg, IF | 6.15 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 195 | Thirty-eight years of CO<sub>2</sub> fertilization has outpaced growing aridity to drive greening of Australian woody ecosystems. *Biogeosciences*, **2022**, 19, 491-515 | 4.6 | 0 |
| 194 | Tropical ant community responses to experimental soil warming.. *Biology Letters*, **2022**, 18, 20210518 | 3.6 | 2 |
| 193 | Forest system hydraulic conductance: partitioning tree and soil components. *New Phytologist*, **2021** , | 9.8 | 1 |
| 192 | No evidence of positive feedback between litter deposition and seedling growth rate in Neotropical savannas. *Plant and Soil*, **2021**, 469, 305 | 4.2 | 1 |
| 191 | Predicting tropical tree mortality with leaf spectroscopy. *Biotropica*, **2021**, 53, 581-595 | 2.3 | 1 |
| 190 | Effects of natural and experimental drought on soil fungi and biogeochemistry in an Amazon rain forest. *Communications Earth & Environment*, **2021**, 2, | 6.1 | 6 |
| 189 | Changes in leaf functional traits with leaf age: When do leaves decrease their photosynthetic capacity in Amazonian trees?. *Tree Physiology*, **2021**, | 4.2 | 3 |
| 188 | Fine root dynamics across pantropical rainforest ecosystems. *Global Change Biology*, **2021**, 27, 3657-3680 | 11.4 | 2 |
| 187 | Root traits explain plant species distributions along climatic gradients yet challenge the nature of ecological trade-offs. *Nature Ecology and Evolution*, **2021**, 5, 1123-1134 | 12.3 | 11 |
| 186 | Global transpiration data from sap flow measurements: the SAPFLUXNET database. *Earth System Science Data*, **2021**, 13, 2607-2649 | 10.5 | 13 |
| 185 | Annual to decadal temperature adaptation of the soil bacterial community after translocation across an elevation gradient in the Andes. *Soil Biology and Biochemistry*, **2021**, 158, 108217 | 7.5 | 2 |
| 184 | Plant traits controlling growth change in response to a drier climate. *New Phytologist*, **2021**, 229, 1363-1374 | 9.8 | 3 |
| 183 | Does economic optimisation explain LAI and leaf trait distributions across an Amazon soil moisture gradient?. *Global Change Biology*, **2021**, 27, 587-605 | 11.4 | 2 |
| 182 | The response of carbon assimilation and storage to long-term drought in tropical trees is dependent on light availability. *Functional Ecology*, **2021**, 35, 43-53 | 5.6 | 4 |
| 181 | Canopy wetness in the Eastern Amazon. *Agricultural and Forest Meteorology*, **2021**, 297, 108250 | 5.8 | 6 |
| 180 | Evolutionary heritage shapes tree distributions along an Amazon-to-Andes elevation gradient. *Biotropica*, **2021**, 53, 38-50 | 2.3 | 9 |
| 179 | Rapid responses of root traits and productivity to phosphorus and cation additions in a tropical lowland forest in Amazonia. *New Phytologist*, **2021**, 230, 116-128 | 9.8 | 14 |

| | | | |
|---|---|---|---|
| 178 | Acclimation of leaf respiration temperature responses across thermally contrasting biomes. *New Phytologist*, **2021**, 229, 1312-1325 | 9.8 | 10 |
| 177 | The Global Ecosystems Monitoring network: Monitoring ecosystem productivity and carbon cycling across the tropics. *Biological Conservation*, **2021**, 253, 108889 | 6.2 | 12 |
| 176 | New insights into large tropical tree mass and structure from direct harvest and terrestrial lidar. *Royal Society Open Science*, **2021**, 8, 201458 | 3.3 | 5 |
| 175 | Detecting forest response to droughts with global observations of vegetation water content. *Global Change Biology*, **2021**, 27, 6005-6024 | 11.4 | 9 |
| 174 | Identifying areas at risk of drought-induced tree mortality across South-Eastern Australia. *Global Change Biology*, **2020**, 26, 5716-5733 | 11.4 | 45 |
| 173 | Rainfall manipulation experiments as simulated by terrestrial biosphere models: Where do we stand?. *Global Change Biology*, **2020**, 26, 3336-3355 | 11.4 | 30 |
| 172 | Amazonia trees have limited capacity to acclimate plant hydraulic properties in response to long-term drought. *Global Change Biology*, **2020**, 26, 3569-3584 | 11.4 | 22 |
| 171 | The impact of a simple representation of non-structural carbohydrates on the simulated response of tropical forests to drought. *Biogeosciences*, **2020**, 17, 3589-3612 | 4.6 | 6 |
| 170 | Equivalence of foliar water uptake and stomatal conductance?. *Plant, Cell and Environment*, **2020**, 43, 524-528 | 8.4 | 12 |
| 169 | Stomatal optimization based on xylem hydraulics (SOX) improves land surface model simulation of vegetation responses to climate. *New Phytologist*, **2020**, 226, 1622-1637 | 9.8 | 48 |
| 168 | TRY plant trait database - enhanced coverage and open access. *Global Change Biology*, **2020**, 26, 119-188 | 11.4 | 399 |
| 167 | Respiration in wood: integrating across tissues, functions and scales. *New Phytologist*, **2020**, 225, 1824-1827 | 9.8 | 1 |
| 166 | Small tropical forest trees have a greater capacity to adjust carbon metabolism to long-term drought than large canopy trees. *Plant, Cell and Environment*, **2020**, 43, 2380-2393 | 8.4 | 6 |
| 165 | Tree mode of death and mortality risk factors across Amazon forests. *Nature Communications*, **2020**, 11, 5515 | 17.4 | 24 |
| 164 | Soil carbon loss by experimental warming in a tropical forest. *Nature*, **2020**, 584, 234-237 | 50.4 | 51 |
| 163 | Multiple phosphorus acquisition strategies adopted by fine roots in low-fertility soils in Central Amazonia. *Plant and Soil*, **2020**, 450, 49-63 | 4.2 | 26 |
| 162 | Foliar water uptake in Amazonian trees: Evidence and consequences. *Global Change Biology*, **2019**, 25, 2678-2690 | 11.4 | 20 |
| 161 | Exceptionally high mangrove root production rates in the Kelantan Delta, Malaysia; An experimental and comparative study. *Forest Ecology and Management*, **2019**, 444, 214-224 | 3.9 | 13 |

| | | | |
|---|---|---|---|
| 160 | Performance of Laser-Based Electronic Devices for Structural Analysis of Amazonian Terra-Firme Forests. *Remote Sensing*, **2019**, 11, 510 | 5 | 4 |
| 159 | Microbial responses to warming enhance soil carbon loss following translocation across a tropical forest elevation gradient. *Ecology Letters*, **2019**, 22, 1889-1899 | 10 | 18 |
| 158 | The importance of physiological, structural and trait responses to drought stress in driving spatial and temporal variation in GPP across Amazon forests. *Biogeosciences*, **2019**, 16, 4463-4484 | 4.6 | 9 |
| 157 | Carbon and nitrogen inputs differentially affect priming of soil organic matter in tropical lowland and montane soils. *Soil Biology and Biochemistry*, **2019**, 129, 212-222 | 7.5 | 35 |
| 156 | Adaptation of soil microbial growth to temperature: Using a tropical elevation gradient to predict future changes. *Global Change Biology*, **2019**, 25, 827-838 | 11.4 | 41 |
| 155 | Drivers and mechanisms of tree mortality in moist tropical forests. *New Phytologist*, **2018**, 219, 851-869 | 9.8 | 209 |
| 154 | Drought stress and tree size determine stem CO efflux in a tropical forest. *New Phytologist*, **2018**, 218, 1393-1405 | 9.8 | 19 |
| 153 | Shock and stabilisation following long-term drought in tropical forest from 15 years of litterfall dynamics. *Journal of Ecology*, **2018**, 106, 1673-1682 | 6 | 17 |
| 152 | Manipulative experiments demonstrate how long-term soil moisture changes alter controls of plant water use. *Environmental and Experimental Botany*, **2018**, 152, 19-27 | 5.9 | 30 |
| 151 | What controls variation in carbon use efficiency among Amazonian tropical forests?. *Biotropica*, **2018**, 50, 16-25 | 2.3 | 20 |
| 150 | Microbes follow Humboldt: temperature drives plant and soil microbial diversity patterns from the Amazon to the Andes. *Ecology*, **2018**, 99, 2455-2466 | 4.6 | 95 |
| 149 | Isoprene emission structures tropical tree biogeography and community assembly responses to climate. *New Phytologist*, **2018**, 220, 435-446 | 9.8 | 17 |
| 148 | Asymmetric responses of primary productivity to altered precipitation simulated by ecosystem models across three long-term grassland sites. *Biogeosciences*, **2018**, 15, 3421-3437 | 4.6 | 36 |
| 147 | Nutrient limitations to bacterial and fungal growth during cellulose decomposition in tropical forest soils. *Biology and Fertility of Soils*, **2018**, 54, 219-228 | 6.1 | 50 |
| 146 | Stand dynamics modulate water cycling and mortality risk in droughted tropical forest. *Global Change Biology*, **2018**, 24, 249-258 | 11.4 | 22 |
| 145 | A generic pixel-to-point comparison for simulated large-scale ecosystem properties and ground-based observations: an example from the Amazon region. *Geoscientific Model Development*, **2018**, 11, 5203-5215 | 6.3 | 4 |
| 144 | ENSO Drives interannual variation of forest woody growth across the tropics. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2018**, 373, | 5.8 | 28 |
| 143 | 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, | 5.8 | 18 |

| | | | |
|---|---|---|---|
| 142 | 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, | 5.8 | 49 |
| 141 | Guidelines and considerations for designing field experiments simulating precipitation extremes in forest ecosystems. *Methods in Ecology and Evolution*, **2018**, 9, 2310-2325 | 7.7 | 15 |
| 140 | Scaling leaf respiration with nitrogen and phosphorus in tropical forests across two continents. *New Phytologist*, **2017**, 214, 1064-1077 | 9.8 | 19 |
| 139 | Differences in xylem and leaf hydraulic traits explain differences in drought tolerance among mature Amazon rainforest trees. *Global Change Biology*, **2017**, 23, 4280-4293 | 11.4 | 40 |
| 138 | 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 | 8.4 | 58 |
| 137 | Nitrogen and phosphorus availabilities interact to modulate leaf trait scaling relationships across six plant functional types in a controlled-environment study. *New Phytologist*, **2017**, 215, 992-1008 | 9.8 | 29 |
| 136 | Solar radiation and functional traits explain the decline of forest primary productivity along a tropical elevation gradient. *Ecology Letters*, **2017**, 20, 730-740 | 10 | 62 |
| 135 | Linking plant hydraulics and beta diversity in tropical forests. *New Phytologist*, **2017**, 215, 12-14 | 9.8 | 1 |
| 134 | How do leaf and ecosystem measures of water-use efficiency compare?. *New Phytologist*, **2017**, 216, 758-770 | 9.8 | 89 |
| 133 | Leaf water storage increases with salinity and aridity in the mangrove Avicennia marina: integration of leaf structure, osmotic adjustment and access to multiple water sources. *Plant, Cell and Environment*, **2017**, 40, 1576-1591 | 8.4 | 40 |
| 132 | Biogeographic distributions of neotropical trees reflect their directly measured drought tolerances. *Scientific Reports*, **2017**, 7, 8334 | 4.9 | 35 |
| 131 | Mapping local and global variability in plant trait distributions. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E10937-E10946 | 11.5 | 103 |
| 130 | Implications of improved representations of plant respiration in a changing climate. *Nature Communications*, **2017**, 8, 1602 | 17.4 | 67 |
| 129 | The variation of productivity and its allocation along a tropical elevation gradient: a whole carbon budget perspective. *New Phytologist*, **2017**, 214, 1019-1032 | 9.8 | 68 |
| 128 | Thermal limits of leaf metabolism across biomes. *Global Change Biology*, **2017**, 23, 209-223 | 11.4 | 126 |
| 127 | Plumbing the depths: extracellular water storage in specialized leaf structures and its functional expression in a three-domain pressure -volume relationship. *Plant, Cell and Environment*, **2017**, 40, 1021-1038 | 8.4 | 22 |
| 126 | Leaf-level photosynthetic capacity in lowland Amazonian and high-elevation Andean tropical moist forests of Peru. *New Phytologist*, **2017**, 214, 1002-1018 | 9.8 | 62 |
| 125 | Plant Structure-Function Relationships and Woody Tissue Respiration: Upscaling to Forests from Laser-Derived Measurements. *Advances in Photosynthesis and Respiration*, **2017**, 89-105 | 1.7 | 8 |

| | | | |
|---|---|---|---|
| 124 | Complex controls on nitrous oxide flux across a large-elevation gradient in the tropical Peruvian Andes. *Biogeosciences*, **2017**, 14, 5077-5097 | 4.6 | 4 |
| 123 | Source to sink: Evolution of lignin composition in the Madre de Dios River system with connection to the Amazon basin and offshore. *Journal of Geophysical Research G: Biogeosciences*, **2016**, 121, 1316-1338 | 3.7 | 29 |
| 122 | Seasonal trends of Amazonian rainforest phenology, net primary productivity, and carbon allocation. *Global Biogeochemical Cycles*, **2016**, 30, 700-715 | 5.9 | 34 |
| 121 | Variation in stem mortality rates determines patterns of above-ground biomass in Amazonian forests: implications for dynamic global vegetation models. *Global Change Biology*, **2016**, 22, 3996-4013 | 11.4 | 99 |
| 120 | A test of the 'one-point methods' for estimating maximum carboxylation capacity from field-measured, light-saturated photosynthesis. *New Phytologist*, **2016**, 210, 1130-44 | 9.8 | 92 |
| 119 | Convergence in the temperature response of leaf respiration across biomes and plant functional types. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 3832-7 | 11.5 | 139 |
| 118 | Drivers of atmospheric methane uptake by montane forest soils in the southern Peruvian Andes. *Biogeosciences*, **2016**, 13, 4151-4165 | 4.6 | 10 |
| 117 | Linking hydraulic traits to tropical forest function in a size-structured and trait-driven model (TFS´v.1-Hydro). *Geoscientific Model Development*, **2016**, 9, 4227-4255 | 6.3 | 150 |
| 116 | Plasticity in leaf-level water relations of tropical rainforest trees in response to experimental drought. *New Phytologist*, **2016**, 211, 477-88 | 9.8 | 46 |
| 115 | Separating species and environmental determinants of leaf functional traits in temperate rainforest plants along a soil-development chronosequence. *Functional Plant Biology*, **2016**, 43, 751-765 | 2.7 | 12 |
| 114 | Temperature sensitivity of soil enzymes along an elevation gradient in the Peruvian Andes. *Biogeochemistry*, **2016**, 127, 217-230 | 3.8 | 45 |
| 113 | Limited acclimation in leaf anatomy to experimental drought in tropical rainforest trees. *Tree Physiology*, **2016**, 36, 1550-1561 | 4.2 | 17 |
| 112 | Reply to Adams et al.: Empirical versus process-based approaches to modeling temperature responses of leaf respiration. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E5996-E5997 | 11.5 | 4 |
| 111 | Drought impact on forest carbon dynamics and fluxes in Amazonia. *Nature*, **2015**, 519, 78-82 | 50.4 | 341 |
| 110 | Modelling climate change responses in tropical forests: similar productivity estimates across five models, but different mechanisms and responses. *Geoscientific Model Development*, **2015**, 8, 1097-1110 | 6.3 | 29 |
| 109 | Drought-related tree mortality: addressing the gaps in understanding and prediction. *New Phytologist*, **2015**, 207, 28-33 | 9.8 | 89 |
| 108 | Biome-specific effects of nitrogen and phosphorus on the photosynthetic characteristics of trees at a forest-savanna boundary in Cameroon. *Oecologia*, **2015**, 178, 659-72 | 2.9 | 18 |
| 107 | Optimal stomatal behaviour around the world. *Nature Climate Change*, **2015**, 5, 459-464 | 21.4 | 264 |

| | | | |
|---|---|---|---|
| 106 | Climate Warming and Soil Carbon in Tropical Forests: Insights from an Elevation Gradient in the Peruvian Andes. *BioScience*, **2015**, 65, 906-921 | 5.7 | 53 |
| 105 | Threshold Responses to Soil Moisture Deficit by Trees and Soil in Tropical Rain Forests: Insights from Field Experiments. *BioScience*, **2015**, 65, 882-892 | 5.7 | 79 |
| 104 | After more than a decade of soil moisture deficit, tropical rainforest trees maintain photosynthetic capacity, despite increased leaf respiration. *Global Change Biology*, **2015**, 21, 4662-72 | 11.4 | 53 |
| 103 | Balancing the risks of hydraulic failure and carbon starvation: a twig scale analysis in declining Scots pine. *Plant, Cell and Environment*, **2015**, 38, 2575-88 | 8.4 | 56 |
| 102 | Comparative assessment of the sensitivity of oilseed rape and wheat to limited water supply. *Annals of Applied Biology*, **2015**, 167, 102-115 | 2.6 | 10 |
| 101 | Source and sink carbon dynamics and carbon allocation in the Amazon basin. *Global Biogeochemical Cycles*, **2015**, 29, 645-655 | 5.9 | 33 |
| 100 | Soil microbial nutrient constraints along a tropical forest elevation gradient: a belowground test of a biogeochemical paradigm. *Biogeosciences*, **2015**, 12, 6071-6083 | 4.6 | 42 |
| 99 | Death from drought in tropical forests is triggered by hydraulics not carbon starvation. *Nature*, **2015**, 528, 119-22 | 50.4 | 339 |
| 98 | Describing termite assemblage structure in a Peruvian lowland tropical rain forest: a comparison of two alternative methods. *Insectes Sociaux*, **2015**, 62, 141-150 | 1.5 | 12 |
| 97 | Density-body mass relationships: Inconsistent intercontinental patterns among termite feeding-groups. *Acta Oecologica*, **2015**, 63, 16-21 | 1.7 | 2 |
| 96 | Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. *New Phytologist*, **2015**, 206, 614-36 | 9.8 | 244 |
| 95 | The linkages between photosynthesis, productivity, growth and biomass in lowland Amazonian forests. *Global Change Biology*, **2015**, 21, 2283-95 | 11.4 | 105 |
| 94 | Termites promote soil carbon and nitrogen depletion: Results from an in situ macrofauna exclusion experiment, Peru. *Soil Biology and Biochemistry*, **2014**, 77, 109-111 | 7.5 | 11 |
| 93 | Temperature sensitivity of soil respiration rates enhanced by microbial community response. *Nature*, **2014**, 513, 81-4 | 50.4 | 368 |
| 92 | Gross Primary Productivity of a High Elevation Tropical Montane Cloud Forest. *Ecosystems*, **2014**, 17, 751 | 3.9 | 24 |
| 91 | Amazon forest biomass density maps: tackling the uncertainty in carbon emission estimates. *Climatic Change*, **2014**, 124, 545-560 | 4.5 | 32 |
| 90 | Productivity and carbon allocation in a tropical montane cloud forest in the Peruvian Andes. *Plant Ecology and Diversity*, **2014**, 7, 107-123 | 2.2 | 55 |
| 89 | Understanding the relationships between ecosystem services and poverty alleviation: A conceptual framework. *Ecosystem Services*, **2014**, 7, 34-45 | 6.1 | 138 |

| | | | |
|---|---|---|---|
| 88 | Ecosystem protection and poverty alleviation in the tropics: Perspective from a historical evolution of policy-making in the Brazilian Amazon. *Ecosystem Services*, **2014**, 8, 97-109 | 6.1 | 30 |
| 87 | Microbial community composition explains soil respiration responses to changing carbon inputs along an Andes-to-Amazon elevation gradient. *Journal of Ecology*, **2014**, 102, 1058-1071 | 6 | 133 |
| 86 | Can current moisture responses predict soil CO<sub>2</sub> efflux under altered precipitation regimes? A synthesis of manipulation experiments. *Biogeosciences*, **2014**, 11, 2991-3013 | 4.6 | 60 |
| 85 | Methane and nitrous oxide fluxes across an elevation gradient in the tropical Peruvian Andes. *Biogeosciences*, **2014**, 11, 2325-2339 | 4.6 | 26 |
| 84 | Predicting the response of the Amazon rainforest to persistent drought conditions under current and future climates: a major challenge for global land surface models. *Geoscientific Model Development*, **2014**, 7, 2933-2950 | 6.3 | 32 |
| 83 | Seasonal production, allocation and cycling of carbon in two mid-elevation tropical montane forest plots in the Peruvian Andes. *Plant Ecology and Diversity*, **2014**, 7, 125-142 | 2.2 | 38 |
| 82 | Microbial carbon mineralization in tropical lowland and montane forest soils of Peru. *Frontiers in Microbiology*, **2014**, 5, 720 | 5.7 | 23 |
| 81 | Evidence for strong seasonality in the carbon storage and carbon use efficiency of an Amazonian forest. *Global Change Biology*, **2014**, 20, 979-91 | 11.4 | 49 |
| 80 | Markedly divergent estimates of Amazon forest carbon density from ground plots and satellites. *Global Ecology and Biogeography*, **2014**, 23, 935-946 | 6.1 | 205 |
| 79 | First comparison of quantitative estimates of termite biomass and abundance reveals strong intercontinental differences. *Journal of Tropical Ecology*, **2014**, 30, 143-152 | 1.3 | 34 |
| 78 | Seasonality of above-ground net primary productivity along an Andean altitudinal transect in Peru. *Journal of Tropical Ecology*, **2014**, 30, 503-519 | 1.3 | 20 |
| 77 | The productivity, metabolism and carbon cycle of two lowland tropical forest plots in south-western Amazonia, Peru. *Plant Ecology and Diversity*, **2014**, 7, 85-105 | 2.2 | 73 |
| 76 | Ecosystem respiration and net primary productivity after 8–10 years of experimental through-fall reduction in an eastern Amazon forest. *Plant Ecology and Diversity*, **2014**, 7, 7-24 | 2.2 | 43 |
| 75 | The sensitivity of wood production to seasonal and interannual variations in climate in a lowland Amazonian rainforest. *Oecologia*, **2014**, 174, 295-306 | 2.9 | 34 |
| 74 | Light inhibition of leaf respiration as soil fertility declines along a post-glacial chronosequence in New Zealand: an analysis using the Kok method. *Plant and Soil*, **2013**, 367, 163-182 | 4.2 | 39 |
| 73 | Nutrient limitation in rainforests and cloud forests along a 3,000-m elevation gradient in the Peruvian Andes. *Oecologia*, **2013**, 172, 889-902 | 2.9 | 139 |
| 72 | Confronting model predictions of carbon fluxes with measurements of Amazon forests subjected to experimental drought. *New Phytologist*, **2013**, 200, 350-365 | 9.8 | 214 |
| 71 | Strengthening conceptual foundations: Analysing frameworks for ecosystem services and poverty alleviation research. *Global Environmental Change*, **2013**, 23, 1098-1111 | 10.1 | 99 |

| | | | |
|---|---|---|---|
| 70 | Simulated resilience of tropical rainforests to CO2-induced climate change. *Nature Geoscience*, **2013**, 6, 268-273 | 18.3 | 293 |
| 69 | The Response of Tropical Rainforest Dead Wood Respiration to Seasonal Drought. *Ecosystems*, **2013**, 16, 1294-1309 | 3.9 | 13 |
| 68 | Fusing radar and optical remote sensing for biomass prediction in mountainous tropical forests **2013**, | | 1 |
| 67 | A novel application of satellite radar data: measuring carbon sequestration and detecting degradation in a community forestry project in Mozambique. *Plant Ecology and Diversity*, **2013**, 6, 159-170 | 2.2 | 23 |
| 66 | Fluxos de CO2 do solo na floresta nacional de Caxiuanã, Pará, durante o experimento ESECAFLOR/LBA. *Revista Brasileira De Meteorologia*, **2013**, 28, 85-94 | 0.4 | 3 |
| 65 | Annual variation in soil respiration and its component parts in two structurally contrasting woody savannas in Central Brazil. *Plant and Soil*, **2012**, 352, 129-142 | 4.2 | 23 |
| 64 | Can composition and physical protection of soil organic matter explain soil respiration temperature sensitivity?. *Biogeochemistry*, **2012**, 107, 423-436 | 3.8 | 60 |
| 63 | Photosynthetic parameters, dark respiration and leaf traits in the canopy of a Peruvian tropical montane cloud forest. *Oecologia*, **2012**, 168, 23-34 | 2.9 | 45 |
| 62 | Mapping tropical forest biomass with radar and spaceborne LiDAR in Lopé National Park, Gabon: overcoming problems of high biomass and persistent cloud. *Biogeosciences*, **2012**, 9, 179-191 | 4.6 | 134 |
| 61 | Drought and ecosystem carbon cycling. *Agricultural and Forest Meteorology*, **2011**, 151, 765-773 | 5.8 | 359 |
| 60 | Measuring biomass changes due to woody encroachment and deforestation/degradation in a forest–savanna boundary region of central Africa using multi-temporal L-band radar backscatter. *Remote Sensing of Environment*, **2011**, 115, 2861-2873 | 13.2 | 175 |
| 59 | Upslope migration of Andean trees. *Journal of Biogeography*, **2011**, 38, 783-791 | 4.1 | 225 |
| 58 | The sensitivity of tropical leaf litter decomposition to temperature: results from a large-scale leaf translocation experiment along an elevation gradient in Peruvian forests. *New Phytologist*, **2011**, 189, 967-977 | 9.8 | 124 |
| 57 | Environmental distribution and abundance of the facultative methanotroph Methylocella. *ISME Journal*, **2011**, 5, 1061-6 | 11.9 | 61 |
| 56 | Microbes do not follow the elevational diversity patterns of plants and animals. *Ecology*, **2011**, 92, 797-804 | 4.6 | 257 |
| 55 | Effect of 7 yr of experimental drought on vegetation dynamics and biomass storage of an eastern Amazonian rainforest. *New Phytologist*, **2010**, 187, 579-91 | 9.8 | 236 |
| 54 | Assessing uncertainties in a second-generation dynamic vegetation model caused by ecological scale limitations. *New Phytologist*, **2010**, 187, 666-81 | 9.8 | 225 |
| 53 | Multiple mechanisms of Amazonian forest biomass losses in three dynamic global vegetation models under climate change. *New Phytologist*, **2010**, 187, 647-65 | 9.8 | 162 |

| | | | |
|---|---|---|---|
| 52 | Drought-mortality relationships for tropical forests. *New Phytologist*, **2010**, 187, 631-46 | 9.8 | 400 |
| 51 | Co-limitation of photosynthetic capacity by nitrogen and phosphorus in West Africa woodlands. *Plant, Cell and Environment*, **2010**, 33, 959-80 | 8.4 | 154 |
| 50 | Impacts of experimentally imposed drought on leaf respiration and morphology in an Amazon rain forest. *Functional Ecology*, **2010**, 24, 524-533 | 5.6 | 33 |
| 49 | Introduction: Elevation gradients in the tropics: laboratories for ecosystem ecology and global change research. *Global Change Biology*, **2010**, 16, 3171-3175 | 11.4 | 189 |
| 48 | Temporal variation and climate dependence of soil respiration and its components along a 3000 m altitudinal tropical forest gradient. *Global Biogeochemical Cycles*, **2010**, 24, n/a-n/a | 5.9 | 55 |
| 47 | Shifts in plant respiration and carbon use efficiency at a large-scale drought experiment in the eastern Amazon. *New Phytologist*, **2010**, 187, 608-21 | 9.8 | 93 |
| 46 | No Differences in Soil Carbon Stocks Across the Tree Line in the Peruvian Andes. *Ecosystems*, **2010**, 13, 62-74 | 3.9 | 57 |
| 45 | Ecosystem Carbon Storage Across the Grassland□Forest Transition in the High Andes of Manu National Park, Peru. *Ecosystems*, **2010**, 13, 1097-1111 | 3.9 | 74 |
| 44 | Above- and below-ground net primary productivity across ten Amazonian forests on contrasting soils. *Biogeosciences*, **2009**, 6, 2759-2778 | 4.6 | 182 |
| 43 | Branch xylem density variations across the Amazon Basin. *Biogeosciences*, **2009**, 6, 545-568 | 4.6 | 73 |
| 42 | Altitudinal variation in leaf mass per unit area, leaf tissue density and foliar nitrogen and phosphorus content along an Amazon-Andes gradient in Peru. *Plant Ecology and Diversity*, **2009**, 2, 243-254 | 2.2 | 73 |
| 41 | Litter contribution to diurnal and annual soil respiration in a tropical montane cloud forest. *Soil Biology and Biochemistry*, **2009**, 41, 1338-1340 | 7.5 | 65 |
| 40 | Climate dependence of heterotrophic soil respiration from a soil-translocation experiment along a 3000 m tropical forest altitudinal gradient. *European Journal of Soil Science*, **2009**, 60, 895-906 | 3.4 | 75 |
| 39 | Integrating plant□soil interactions into global carbon cycle models. *Journal of Ecology*, **2009**, 97, 851-863 | 6 | 205 |
| 38 | Drought sensitivity of the Amazon rainforest. *Science*, **2009**, 323, 1344-7 | 33.3 | 1213 |
| 37 | Exploring the likelihood and mechanism of a climate-change-induced dieback of the Amazon rainforest. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 20610-5 | 11.5 | 628 |
| 36 | Soil Carbon Dynamics. *Geophysical Monograph Series*, **2009**, 429-449 | 1.1 | 34 |
| 35 | Evaluating climatic and soil water controls on evapotranspiration at two Amazonian rainforest sites. *Agricultural and Forest Meteorology*, **2008**, 148, 850-861 | 5.8 | 49 |

| | | | |
|---|---|---|---|
| 34 | Sample sizes for estimating key ecosystem characteristics in a tropical terra firme rainforest. *Forest Ecology and Management*, **2008**, 255, 558-566 | 3.9 | 25 |
| 33 | The fate of assimilated carbon during drought: impacts on respiration in Amazon rainforests. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2008**, 363, 1849-55 | 5.8 | 110 |
| 32 | The effects of water availability on root growth and morphology in an Amazon rainforest. *Plant and Soil*, **2008**, 311, 189-199 | 4.2 | 113 |
| 31 | Factors controlling spatio-temporal variation in carbon dioxide efflux from surface litter, roots, and soil organic matter at four rain forest sites in the eastern Amazon. *Journal of Geophysical Research*, **2007**, 112, n/a-n/a | | 82 |
| 30 | Fluxes of carbon dioxide at Thetford Forest. *Hydrology and Earth System Sciences*, **2007**, 11, 245-255 | 5.5 | 3 |
| 29 | Effects of an induced drought on soil carbon dioxide (CO2) efflux and soil CO2 production in an Eastern Amazonian rainforest, Brazil. *Global Change Biology*, **2007**, 13, 2218-2229 | 11.4 | 97 |
| 28 | The response of an Eastern Amazonian rain forest to drought stress: results and modelling analyses from a throughfall exclusion experiment. *Global Change Biology*, **2007**, 13, 2361-2378 | 11.4 | 226 |
| 27 | A method for extracting plant roots from soil which facilitates rapid sample processing without compromising measurement accuracy. *New Phytologist*, **2007**, 174, 697-703 | 9.8 | 57 |
| 26 | A comparison of methods for converting rhizotron root length measurements into estimates of root mass production per unit ground area. *Plant and Soil*, **2007**, 301, 279-288 | 4.2 | 32 |
| 25 | Transpira□ em esp□cie de grande porte na Floresta Nacional de Caxiuan□Par□*Revista Brasileira De Engenharia Agricola E Ambiental*, **2007**, 11, 180-189 | 0.9 | 8 |
| 24 | The influence of terrestrial ecosystems on climate. *Trends in Ecology and Evolution*, **2006**, 21, 254-60 | 10.9 | 98 |
| 23 | Productivity and carbon fluxes of tropical savannas. *Journal of Biogeography*, **2006**, 33, 387-400 | 4.1 | 411 |
| 22 | The regional variation of aboveground live biomass in old-growth Amazonian forests. *Global Change Biology*, **2006**, 12, 1107-1138 | 11.4 | 424 |
| 21 | Evidence from Amazonian forests is consistent with isohydric control of leaf water potential. *Plant, Cell and Environment*, **2006**, 29, 151-65 | 8.4 | 156 |
| 20 | Modelling Amazonian forest eddy covariance data: a comparison of big leaf versus sun/shade models for the C-14 tower at Manaus I. Canopy photosynthesis. *Acta Amazonica*, **2006**, 36, 69-82 | 0.8 | 29 |
| 19 | The effects of drought on tropical forest ecosystems **2005**, 75-84 | | 12 |
| 18 | Soil CO2 efflux in a tropical forest in the central Amazon. *Global Change Biology*, **2004**, 10, 601-617 | 11.4 | 156 |
| 17 | Acclimation of photosynthetic capacity to irradiance in tree canopies in relation to leaf nitrogen concentration and leaf mass per unit area. *Plant, Cell and Environment*, **2002**, 25, 343-357 | 8.4 | 241 |

| | | | |
|---|---|---|---|
| 16 | Scaling relationships for woody tissue respiration in two tropical rain forests. *Plant, Cell and Environment*, **2002**, 25, 963-973 | 8.4 | 71 |
| 15 | Photosynthetic parameters in seedlings of Eucalyptus grandis as affected by rate of nitrogen supply. *Plant, Cell and Environment*, **2002**, 25, 1677-1688 | 8.4 | 68 |
| 14 | An international network to monitor the structure, composition and dynamics of Amazonian forests (RAINFOR). *Journal of Vegetation Science*, **2002**, 13, 439-450 | 3.1 | 242 |
| 13 | Seasonality in CO2 and H2O flux at an eastern Amazonian rain forest. *Journal of Geophysical Research*, **2002**, 107, LBA 43-1 | | 126 |
| 12 | An international network to monitor the structure, composition and dynamics of Amazonian forests (RAINFOR) **2002**, 13, 439 | | 20 |
| 11 | Leaf respiration in two tropical rainforests: constraints on physiology by phosphorus, nitrogen and temperature. *Functional Ecology*, **2001**, 15, 378-387 | 5.6 | 66 |
| 10 | Photosynthetic capacity in a central Amazonian rain forest. *Tree Physiology*, **2000**, 20, 179-186 | 4.2 | 165 |
| 9 | Photographic method to measure the vertical distribution of leaf area density in forests. *Agricultural and Forest Meteorology*, **2000**, 102, 105-111 | 5.8 | 43 |
| 8 | The effect of aqueous transport of CO(2) in xylem sap on gas exchange in woody plants. *Tree Physiology*, **1999**, 19, 53-58 | 4.2 | 120 |
| 7 | Light distribution and foliage structure in an oak canopy. *Trees - Structure and Function*, **1999**, 14, 55 | 2.6 | 74 |
| 6 | Fluxes of carbon, water and energy over Brazilian cerrado: an analysis using eddy covariance and stable isotopes. *Plant, Cell and Environment*, **1997**, 20, 315-328 | 8.4 | 165 |
| 5 | The use of eddy covariance to infer the net carbon dioxide uptake of Brazilian rain forest. *Global Change Biology*, **1996**, 2, 209-217 | 11.4 | 176 |
| 4 | Fluxes of carbon dioxide and water vapour over an undisturbed tropical forest in south-west Amazonia. *Global Change Biology*, **1995**, 1, 1-12 | 11.4 | 183 |
| 3 | A simple calibrated model of Amazon rainforest productivity based on leaf biochemical properties. *Plant, Cell and Environment*, **1995**, 18, 1129-1145 | 8.4 | 228 |
| 2 | Carbon Dioxide Uptake by an Undisturbed Tropical Rain Forest in Southwest Amazonia, 1992 to 1993. *Science*, **1995**, 270, 778-780 | 33.3 | 358 |
| 1 | Soil carbon and microbes in the warming tropics. *Functional Ecology*, | 5.6 | 0 |