Nicolas Delpierre

List of Publications by Year
in descending order

58 papers	5,344 citations	147566 31 h-index	138251 58 g-index
69 all docs	69 docs citations	69 times ranked	8025 citing authors

#	Article	IF	Citations
1	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	4.2	1,038
2	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. Scientific Data, 2020, 7, 225.	2.4	646
3	Evaluation of the potential of MODIS satellite data to predict vegetation phenology in different biomes: An investigation using ground-based NDVI measurements. Remote Sensing of Environment, 2013, 132, 145-158.	4.6	343
4	Assessing the effects of climate change on the phenology of European temperate trees. Agricultural and Forest Meteorology, 2011, 151, 969-980.	1.9	286
5	Modelling interannual and spatial variability of leaf senescence for three deciduous tree species in France. Agricultural and Forest Meteorology, 2009, 149, 938-948.	1.9	241
6	Temperate and boreal forest tree phenology: from organ-scale processes to terrestrial ecosystem models. Annals of Forest Science, 2016, 73, 5-25.	0.8	187
7	Ground-based Network of NDVI measurements for tracking temporal dynamics of canopy structure and vegetation phenology in different biomes. Remote Sensing of Environment, 2012, 123, 234-245.	4.6	161
8	Evaluation of the onset of green-up in temperate deciduous broadleaf forests derived from Moderate Resolution Imaging Spectroradiometer (MODIS) data. Remote Sensing of Environment, 2008, 112, 2643-2655.	4.6	154
9	Climate control of terrestrial carbon exchange across biomes and continents. Environmental Research Letters, 2010, 5, 034007.	2.2	137
10	Assessing parameter variability in a photosynthesis model within and between plant functional types using global Fluxnet eddy covariance data. Agricultural and Forest Meteorology, 2011, 151, 22-38.	1.9	135
11	Predicting Climate Change Impacts on the Amount and Duration of Autumn Colors in a New England Forest. PLoS ONE, 2013, 8, e57373.	1.1	125
12	Larger temperature response of autumn leaf senescence than spring leafâ€out phenology. Global Change Biology, 2018, 24, 2159-2168.	4.2	124
13	Wood phenology, not carbon input, controls the interannual variability of wood growth in a temperate oak forest. New Phytologist, 2016, 210, 459-470.	3.5	122
14	Exceptional carbon uptake in European forests during the warm spring of 2007: a dataâ€“model analysis. Global Change Biology, 2009, 15, 1455-1474.	4.2	110
15	Ecosystem transpiration and evaporation: Insights from three water flux partitioning methods across FLUXNET sites. Global Change Biology, 2020, 26, 6916-6930.	4.2	97
16	Estimating nocturnal ecosystem respiration from the vertical turbulent flux and change in storage of CO2. Agricultural and Forest Meteorology, 2009, 149, 1919-1930.	1.9	91
17	Warmer winters reduce the advance of tree spring phenology induced by warmer springs in the Alps. Agricultural and Forest Meteorology, 2018, 252, 220-230.	1.9	87
18	Cross-biome synthesis of source versus sink limits to tree growth. Science, 2022, 376, 758-761.	6.0	76

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19	Relationships between photochemical reflectance index and light-use efficiency in deciduous and evergreen broadleaf forests. Remote Sensing of Environment, 2014, 144, 73-84.	4.6	72
20	Chilling and forcing temperatures interact to predict the onset of wood formation in Northern Hemisphere conifers. Global Change Biology, 2019, 25, 1089-1105.	4.2	72
21	The 2018 European heatwave led to stem dehydration but not to consistent growth reductions in forests. Nature Communications, 2022, 13, 28.	5.8	66
22	Spatial variability of soil CO2 efflux linked to soil parameters and ecosystem characteristics in a temperate beech forest. Agricultural and Forest Meteorology, 2012, 154-155, 136-146.	1.9	65
23	Global transpiration data from sap flow measurements: the SAPFLUXNET database. Earth System Science Data, 2021, 13, 2607-2649.	3.7	65
24	Environmental control of carbon allocation matters for modelling forest growth. New Phytologist, 2017, 214, 180-193.	3.5	63
25	Coupling Water and Carbon Fluxes to Constrain Estimates of Transpiration: The TEA Algorithm. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3617-3632.	1.3	56
26	Influence of physiological phenology on the seasonal pattern of ecosystem respiration in deciduous forests. Global Change Biology, 2015, 21, 363-376.	4.2	52
27	Tree phenological ranks repeat from year to year and correlate with growth in temperate deciduous forests. Agricultural and Forest Meteorology, 2017, 234-235, 1-10.	1.9	47
28	Antagonistic effects of growing season and autumn temperatures on the timing of leaf coloration in winter deciduous trees. Global Change Biology, 2018, 24, 3537-3545.	4.2	42
29	The dynamic of the annual carbon allocation to wood in European tree species is consistent with a combined sourceâ€“sink limitation of growth: implications for modelling. Biogeosciences, 2015, 12, 2773-2790.	1.3	41
30	Nutrient availability alters the correlation between spring leaf-out and autumn leaf senescence dates. Tree Physiology, 2019, 39, 1277-1284.	1.4	37
31	Assessing the effects of management on forest growth across France: insights from a new functionalâ€“structural model. Annals of Botany, 2014, 114, 779-793.	1.4	35
32	Assessing the roles of temperature, carbon inputs and airborne pollen as drivers of fructification in European temperate deciduous forests. European Journal of Forest Research, 2018, 137, 349-365.	1.1	31
33	Linking intra-seasonal variations in climate and tree-ring Î´13C: A functional modelling approach. Ecological Modelling, 2010, 221, 1779-1797.	1.2	30
34	Forest summer albedo is sensitive to species and thinning: how should we account for this in Earth system models?. Biogeosciences, 2014, 11, 2411-2427.	1.3	29
35	Interaction of drought and frost in tree ecophysiology: rethinking the timing of risks. Annals of Forest Science, 2021, 78, 1.	0.8	26
36	Seasonal changes in carbon and nitrogen compound concentrations in a Quercus petraea chronosequence. Tree Physiology, 2014, 34, 716-729.	1.4	24

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37	Detecting the critical periods that underpin interannual fluctuations in the carbon balance of European forests. Journal of Geophysical Research, 2010, 115, .	3.3	22
38	Covariations between plant functional traits emerge from constraining parameterization of a terrestrial biosphere model. Global Ecology and Biogeography, 2019, 28, 1351-1365.	2.7	22
39	Carbonâ€"nitrogen interactions in European forests and semi-natural vegetation â€" Part 1: Fluxes and budgets of carbon, nitrogen and greenhouse gases from ecosystem monitoring and modelling. Biogeosciences, 2020, 17, 1583-1620.	1.3	21
40	Limits to reproduction and seed size-number trade-offs that shape forest dominance and future recovery. Nature Communications, 2022, 13, 2381.	5.8	21
41	Modelling leaf coloration dates over temperate China by considering effects of leafy season climate. Ecological Modelling, 2019, 394, 34-43.	1.2	20
42	Climate and Atmosphere Simulator for Experiments on Ecological Systems in Changing Environments. Environmental Science & Technology, 2014, 48, 8744-8753.	4.6	18
43	The within-population variability of leaf spring and autumn phenology is influenced by temperature in temperate deciduous trees. International Journal of Biometeorology, 2021, 65, 369-379.	1.3	18
44	Drought-induced decoupling between carbon uptake and tree growth impacts forest carbon turnover time. Agricultural and Forest Meteorology, 2022, 322, 108996.	1.9	16
45	Potassium limitation of wood productivity: A review of elementary processes and ways forward to modelling illustrated by Eucalyptus plantations. Forest Ecology and Management, 2021, 494, 119275.	1.4	14
46	Potential of C-band Synthetic Aperture Radar Sentinel-1 time-series for the monitoring of phenological cycles in a deciduous forest. International Journal of Applied Earth Observation and Geoinformation, 2021, 104, 102505.	1.4	14
47	â€œGreen pointillismâ€: detecting the within-population variability of budburst in temperate deciduous trees with phenological cameras. International Journal of Biometeorology, 2020, 64, 663-670.	1.3	13
48	Soil sampling and preparation for monitoring soil carbon. International Agrophysics, 2018, 32, 633-643.	0.7	12
49	Globally, tree fecundity exceeds productivity gradients. Ecology Letters, 2022, 25, 1471-1482.	3.0	11
50	A new probabilistic canopy dynamics model (SLCD) that is suitable for evergreen and deciduous forest ecosystems. Ecological Modelling, 2014, 290, 121-133.	1.2	10
51	A survey of proximal methods for monitoring leaf phenology in temperate deciduous forests. Biogeosciences, 2021, 18, 3391-3408.	1.3	9
52	Spring phenology in subtropical trees: Developing process-based models on an experimental basis. Agricultural and Forest Meteorology, 2022, 314, 108802.	1.9	9
53	Higher sample sizes and observer interâ€calibration are needed for reliable scoring of leaf phenology in trees. Journal of Ecology, 2021, 109, 2461-2474.	1.9	7
54	Drought elicits contrasting responses on the autumn dynamics of wood formation in late successional deciduous tree species. Tree Physiology, 2021, 41, 1171-1185.	1.4	5

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55	Environmental control of land-atmosphere CO₂ fluxes from temperate ecosystems: a statistical approach based on homogenized time series from five land-use types. Tellus, Series B: Chemical and Physical Meteorology, 2022, 72, 1784689.	0.8	4
56	Budburst date of Quercus petraea is delayed in mixed stands with Pinus sylvestris. Agricultural and Forest Meteorology, 2021, 300, 108326.	1.9	4
57	Contribution of deep soil layers to the transpiration of a temperate deciduous forest: Implications for the modelling of productivity. Science of the Total Environment, 2022, 838, 155981.	3.9	3
58	Recently absorbed nitrogen incorporates into new and old tissues: evidence from a 15ÂN-labelling experiment in deciduous oaks. Plant and Soil, 0, , .	1.8	0