Félicien Meunier

List of Publications by Year
in descending order

27 papers	803 citations	623574 14 h-index	610775 24 g-index
37 all docs	37 docs citations	37 times ranked	1058 citing authors

#	Article	IF	Citations
1	Plant Water Uptake in Drying Soils. Plant Physiology, 2014, 164, 1619-1627.	2.3	122
2	Root System Markup Language: Toward a Unified Root Architecture Description Language. Plant Physiology, 2015, 167, 617-627.	2.3	105
3	Root type matters: measurement of water uptake by seminal, crown, and lateral roots in maize. Journal of Experimental Botany, 2018, 69, 1199-1206.	2.4	100
4	Impact of contrasted maize root traits at flowering on water stress tolerance – A simulation study. Field Crops Research, 2014, 165, 125-137.	2.3	79
5	Hydraulic conductivity of soil-grown lupine and maize unbranched roots and maize root-shoot junctions. Journal of Plant Physiology, 2018, 227, 31-44.	1.6	46
6	Estimation of the hydraulic conductivities of lupine roots by inverse modelling of high-resolution measurements of root water uptake. Annals of Botany, 2016, 118, 853-864.	1.4	42
7	A hybrid analytical-numerical method for solving water flow equations in root hydraulic architectures. Applied Mathematical Modelling, 2017, 52, 648-663.	2.2	36
8	Modeling the impact of liana infestation on the demography and carbon cycle of tropical forests. Global Change Biology, 2019, 25, 3767-3780.	4.2	33
9	Measuring and Modeling Hydraulic Lift of *Lolium multiflorum* Using Stable Water Isotopes. Vadose Zone Journal, 2018, 17, 1-15.	1.3	31
10	Unraveling the relative role of light and water competition between lianas and trees in tropical forests: A vegetation model analysis. Journal of Ecology, 2021, 109, 519-540.	1.9	24
11	Functional–structural root-system model validation using a soil MRI experiment. Journal of Experimental Botany, 2019, 70, 2797-2809.	2.4	22
12	Connecting the dots between computational tools to analyse soil–root water relations. Journal of Experimental Botany, 2019, 70, 2345-2357.	2.4	22
13	Century‐long apparent decrease in intrinsic water‐use efficiency with no evidence of progressive nutrient limitation in African tropical forests. Global Change Biology, 2020, 26, 4449-4461.	4.2	20
14	Call for Participation: Collaborative Benchmarking of Functional-Structural Root Architecture Models. The Case of Root Water Uptake. Frontiers in Plant Science, 2020, 11, 316.	1.7	18
15	Water movement through plant roots – exact solutions of the water flow equation in roots with linear or exponential piecewise hydraulic properties. Hydrology and Earth System Sciences, 2017, 21, 6519-6540.	1.9	16
16	From hydraulic root architecture models to macroscopic representations of root hydraulics in soil water flow and land surface models. Hydrology and Earth System Sciences, 2021, 25, 4835-4860.	1.9	14
17	Impact of Maize Roots on Soil–Root Electrical Conductivity: A Simulation Study. Vadose Zone Journal, 2019, 18, 190037.	1.3	13
18	Liana optical traits increase tropical forest albedo and reduce ecosystem productivity. Global Change Biology, 2022, 28, 227-244.	4.2	10

#	Article	IF	Citations
19	MARSHAL, a novel tool for virtual phenotyping of maize root system hydraulic architectures. In Silico Plants, 2020, 2, .	0.8	8
20	A new model for optimizing the water acquisition of root hydraulic architectures over full crop cycles. , 2016, , .		7
21	Lianas and trees exhibit divergent intrinsic water‐use efficiency along elevational gradients in South American and African tropical forests. Global Ecology and Biogeography, 2021, 30, 2259-2272.	2.7	7
22	Within-Site Variability of Liana Wood Anatomical Traits: A Case Study in Laussat, French Guiana. Forests, 2020, 11, 523.	0.9	6
23	Lianas Significantly Reduce Aboveground and Belowground Carbon Storage: A Virtual Removal Experiment. Frontiers in Forests and Global Change, 2021, 4, .	1.0	4
24	Using terrestrial laser scanning to constrain forest ecosystem structure and functions in the Ecosystem Demography model (ED2.2). Geoscientific Model Development, 2022, 15, 4783-4803.	1.3	2
25	Implications of 3D Forest Stand Reconstruction Methods for Radiative Transfer Modeling: A Case Study in the Temperate Deciduous Forest. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	2
26	Two Co-occurring Liana Species Strongly Differ in Their Hydraulic Traits in a Water-Limited Neotropical Forest. Frontiers in Forests and Global Change, 2022, 5, .	1.0	1
27	Investigating Soil–Root Interactions with the Numerical Model R-SWMS. Methods in Molecular Biology, 2022, 2395, 259-283.	0.4	0