MikaÃ«l Lucas

List of Publications by Year
in descending order

34 papers	2,583 citations	394421 19 h-index	501196 28 g-index
37 all docs	37 docs citations	37 times ranked	3500 citing authors

#	Article	IF	Citations
1	Postembryonic in Plants: Experimental Induction of New Shoot and Root Organs. Methods in Molecular Biology, 2022, 2395, 79-95.	0.9	0
2	Plant : Lessons from. Methods in Molecular Biology, 2022, 2395, 1-12.	0.9	0
3	Future Challenges in Plant. Methods in Molecular Biology, 2022, 2395, 325-337.	0.9	0
4	Plant Systems Biology: Further Reading and Resources. Methods in Molecular Biology, 2022, 2395, 339-346.	0.9	0
5	How to Use the to Infer Gene Regulatory Networks from Transcriptomic Data. Methods in Molecular Biology, 2022, 2395, 13-31.	0.9	0
6	PUCHI represses early meristem formation in developing lateral roots of <i>Arabidopsis thaliana</i>. Journal of Experimental Botany, 2022, 73, 3496-3510.	4.8	11
7	Transcriptome profiling of laser-captured crown root primordia reveals new pathways activated during early stages of crown root formation in rice. PLoS ONE, 2020, 15, e0238736.	2.5	7
8	Inference of the gene regulatory network acting downstream of <scp>CROWN ROOTLESSÂ</scp>1 in rice reveals a regulatory cascade linking genes involved in auxin signaling, crown root initiation, and root meristem specification and maintenance. Plant Journal, 2019, 100, 954-968.	5.7	13
9	Development of a model estimating root length density from root impacts on a soil profile in pearl millet (Pennisetum glaucum (L.) R. Br). Application to measure root system response to water stress in field conditions. PLoS ONE, 2019, 14, e0214182.	2.5	21
10	PUCHI regulates very long chain fatty acid biosynthesis during lateral root and callus formation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14325-14330.	7.1	46
11	The Spring of Systems Biology-Driven Breeding. Trends in Plant Science, 2018, 23, 706-720.	8.8	37
12	A New Phenotyping Pipeline Reveals Three Types of Lateral Roots and a Random Branching Pattern in Two Cereals. Plant Physiology, 2018, 177, 896-910.	4.8	27
13	Virtual Plants Need Water Too: Functional-Structural Root System Models in the Context of Drought Tolerance Breeding. Frontiers in Plant Science, 2017, 8, 1577.	3.6	30
14	Characterization of Pearl Millet Root Architecture and Anatomy Reveals Three Types of Lateral Roots. Frontiers in Plant Science, 2016, 7, 829.	3.6	79
15	A multi-scale model of the interplay between cell signalling and hormone transport in specifying the root meristem of Arabidopsis thaliana. Journal of Theoretical Biology, 2016, 404, 182-205.	1.7	19
16	Inference of the Arabidopsis Lateral Root Gene Regulatory Network Suggests a Bifurcation Mechanism That Defines Primordia Flanking and Central Zones. Plant Cell, 2015, 27, 1368-1388.	6.6	105
17	Inhibition of Auxin Signaling in <i>Frankia</i> Species-Infected Cells in <i>Casuarina glauca</i> Nodules Leads to Increased Nodulation. Plant Physiology, 2015, 167, 1149-1157.	4.8	25
18	The circadian clock rephases during lateral root organ initiation in Arabidopsis thaliana. Nature Communications, 2015, 6, 7641.	12.8	119

#	Article	IF	Citations
19	Rhizobial root hair infection requires auxin signaling. Trends in Plant Science, 2015, 20, 332-334.	8.8	20
20	Integration of hormonal signaling networks and mobile microRNAs is required for vascular patterning in <i>Arabidopsis</i> roots. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 857-862.	7.1	98
21	The roots of future rice harvests. Rice, 2014, 7, 29.	4.0	57
22	Role of auxin during intercellular infection of Discaria trinervis by Frankia. Frontiers in Plant Science, 2014, 5, 399.	3.6	19
23	The Dicot Root as a Model System for Studying Organogenesis. Methods in Molecular Biology, 2013, 959, 45-67.	0.9	4
24	Lateral root development in Arabidopsis: fifty shades of auxin. Trends in Plant Science, 2013, 18, 450-458.	8.8	536
25	Vertex-element models for anisotropic growth of elongated plant organs. Frontiers in Plant Science, 2013, 4, 233.	3.6	42
26	Lateral root morphogenesis is dependent on the mechanical properties of the overlaying tissues. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5229-5234.	7.1	233
27	Auxin regulates aquaporin function to facilitate lateral root emergence. Nature Cell Biology, 2012, 14, 991-998.	10.3	323
28	Plant systems biology: network matters. Plant, Cell and Environment, 2011, 34, 535-553.	5.7	70
29	SHORT-ROOT Regulates Primary, Lateral, and Adventitious Root Development in Arabidopsis Â Â Â. Plant Physiology, 2011, 155, 384-398.	4.8	163
30	Auxin Carriers Localization Drives Auxin Accumulation in Plant Cells Infected by <i>Frankia</i> in <i>Casuarina glauca</i> Actinorhizal Nodules. Plant Physiology, 2010, 154, 1372-1380.	4.8	75
31	Auxin fluxes in the root apex co-regulate gravitropism and lateral root initiation. Journal of Experimental Botany, 2008, 59, 55-66.	4.8	134
32	Flux-Based Transport Enhancement as a Plausible Unifying Mechanism for Auxin Transport in Meristem Development. PLoS Computational Biology, 2008, 4, e1000207.	3.2	182
33	An Auxin Transport-Based Model of Root Branching in Arabidopsis thaliana. PLoS ONE, 2008, 3, e3673.	2.5	74
34	Phenotyping and modeling of root hydraulic architecture reveal critical determinants of axial water transport. Plant Physiology, 0, , .	4.8	12