Laurent Laplaze

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5539118/publications.pdf

Version: 2024-02-01

112 papers	9,014 citations	61984 43 h-index	43889 91 g-index
124 all docs	124 docs citations	124 times ranked	8372 citing authors

#	ARTICLE	IF	CITATIONS
1	RACINE2.2: A Software Application for Processing and Mapping Spatial Distribution of Root Length and Potential Root Extraction Ratio from Root Counts on Trench Profiles. Methods in Molecular Biology, 2022, 2395, 247-258.	0.9	0
2	Postembryonic in Plants: Experimental Induction of New Shoot and Root Organs. Methods in Molecular Biology, 2022, 2395, 79-95.	0.9	0
3	Cultivated and wild pearl millet display contrasting patterns of abundance and co-occurrence in their root mycobiome. Scientific Reports, 2022, 12, 207.	3.3	5
4	Root traits for low input agroecosystems in Africa: Lessons from three case studies. Plant, Cell and Environment, 2022, 45, 637-649.	5.7	9
5	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
6	Physiological and genetic control of transpiration efficiency in African rice, <i>Oryza glaberrima</i> Steud. Journal of Experimental Botany, 2022, 73, 5279-5293.	4.8	12
7	<scp>CROWN ROOTLESS1</scp> binds <scp>DNA</scp> with a relaxed specificity and activates <i>OsROP</i> and <i>OsbHLH044</i> genes involved in crown root formation in rice. Plant Journal, 2022, 111, 546-566.	5.7	7
8	AP2/ERF transcription factors orchestrate very long chain fatty acid biosynthesis during Arabidopsis lateral root development. Molecular Plant, 2021, 14, 205-207.	8.3	11
9	Pearl millet genotype impacts microbial diversity and enzymatic activities in relation to root-adhering soil aggregation. Plant and Soil, 2021, 464, 109.	3.7	22
10	Aquaporins are main contributors to root hydraulic conductivity in pearl millet [Pennisetum glaucum (L) R. Br.]. PLoS ONE, 2020, 15, e0233481.	2.5	18
11	Effect of Casuarina Plantations Inoculated with Arbuscular Mycorrhizal Fungi and Frankia on the Diversity of Herbaceous Vegetation in Saline Environments in Senegal. Diversity, 2020, 12, 293.	1.7	11
12	The rhizosheath: from desert plants adaptation to crop breeding. Plant and Soil, 2020, 456, 1-13.	3.7	47
13	Zinc, lead, and cadmium tolerance and accumulation in <i>Cistus libanotis, Cistus albidus</i>, and <i>Cistus salviifolius</i>: Perspectives on phytoremediation. Remediation, 2020, 30, 73-80.	2.4	10
14	An extended root phenotype: the rhizosphere, its formation and impacts on plant fitness. Plant Journal, 2020, 103, 951-964.	5.7	151
15	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
16	Establishment of Actinorhizal Symbiosis in Response to Ethylene, Salicylic Acid, and Jasmonate. Methods in Molecular Biology, 2020, 2085, 117-130.	0.9	1
17	Title is missing!. , 2020, 15, e0238736.		0
18	Title is missing!. , 2020, 15, e0238736.		0

#	ARTICLE	IF	CITATIONS
19	Title is missing!. , 2020, 15, e0238736.		0
20	Title is missing!. , 2020, 15, e0238736.		0
21	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
22	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
23	Lateral Root Formation in Arabidopsis: A Well-Ordered LRexit. Trends in Plant Science, 2019, 24, 826-839.	8.8	109
24	Editorial: Root Branching: From Lateral Root Primordium Initiation and Morphogenesis to Function. Frontiers in Plant Science, 2019, 10, 1462.	3.6	2
25	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
26	The plant-growth-promoting actinobacteria of the genus Nocardia induces root nodule formation in Casuarina glauca. Antonie Van Leeuwenhoek, 2019, 112, 75-90.	1.7	24
27	Response to early drought stress and identification of QTLs controlling biomass production under drought in pearl millet. PLoS ONE, 2018, 13, e0201635.	2.5	46
28	Arbuscular mycorrhizal symbiosis in rice: Establishment, environmental control and impact on plant growth and resistance to abiotic stresses. Rhizosphere, 2018, 8, 12-26.	3.0	53
29	Editorial: Harvesting Plant and Microbial Biodiversity for Sustainably Enhanced Food Security. Frontiers in Plant Science, 2018, 9, 42.	3.6	2
30	Selection of arbuscular mycorrhizal fungal strains to improve Casuarina equisetifolia L. and Casuarina glauca Sieb. tolerance to salinity. Annals of Forest Science, 2018, 75, 1.	2.0	17
31	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
32	Pearl Millet Genome: Lessons from a Tough Crop. Trends in Plant Science, 2017, 22, 911-913.	8.8	23
33	Characterization of Pearl Millet Root Architecture and Anatomy Reveals Three Types of Lateral Roots. Frontiers in Plant Science, 2016, 7, 829.	3.6	79
34	Symbiotic Performance of Diverse Frankia Strains on Salt-Stressed Casuarina glauca and Casuarina equisetifolia Plants. Frontiers in Plant Science, 2016, 7, 1331.	3.6	43
35	New Insights on Plant Salt Tolerance Mechanisms and Their Potential Use for Breeding. Frontiers in Plant Science, 2016, 7, 1787.	3.6	568
36	Tolerance to environmental stress by the nitrogen-fixing actinobacterium Frankia and its role in actinorhizal plants adaptation. Symbiosis, 2016, 70, 17-29.	2.3	42

#	ARTICLE	IF	CITATIONS
37	Quiescent center initiation in the <i>Arabidopsis</i> lateral root primordia is dependent on the <i>SCARECROW</i> transcription factor. Development (Cambridge), 2016, 143, 3363-71.	2.5	61
38	Intraspecies variation in sodium partitioning, potassium and proline accumulation under salt stress in Casuarina equisetifolia Forst. Symbiosis, 2016, 70, 117-127.	2.3	7
39	PIN Transcriptional Regulation Shapes Root System Architecture. Trends in Plant Science, 2016, 21, 175-177.	8.8	18
40	Symbiotic ability of diverse Frankia strains on Casuarina glauca plants in hydroponic conditions. Symbiosis, 2016, 70, 79-86.	2.3	11
41	Quiescent center initiation in the Arabidopsis lateral root primordia is dependent on the SCARECROW transcription factor. Journal of Cell Science, 2016, 129, e1.2-e1.2.	2.0	1
42	Field Trials Reveal Ecotype-Specific Responses to Mycorrhizal Inoculation in Rice. PLoS ONE, 2016, 11, e0167014.	2.5	28
43	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
44	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
45	A fluorescent hormone biosensor reveals the dynamics of jasmonate signalling in plants. Nature Communications, 2015, 6, 6043.	12.8	130
46	The circadian clock rephases during lateral root organ initiation in Arabidopsis thaliana. Nature Communications, 2015, 6, 7641.	12.8	119
47	Rhizobial root hair infection requires auxin signaling. Trends in Plant Science, 2015, 20, 332-334.	8.8	20
48	Assessment of lead tolerance and accumulation in metallicolous and non-metallicolous populations of Hirschfeldia incana. Environmental and Experimental Botany, 2015, 109, 186-192.	4.2	27
49	Remediation of Heavy Metal-Contaminated Soils and Enhancement of Their Fertility with Actinorhizal Plants. Soil Biology, 2015, , 355-366.	0.8	12
50	Identification of potential transcriptional regulators of actinorhizal symbioses in Casuarina glauca and Alnus glutinosa. BMC Plant Biology, 2014, 14, 342.	3.6	34
51	The roots of future rice harvests. Rice, 2014, 7, 29.	4.0	57
52	Role of auxin during intercellular infection of Discaria trinervis by Frankia. Frontiers in Plant Science, 2014, 5, 399.	3.6	19
53	The Dicot Root as a Model System for Studying Organogenesis. Methods in Molecular Biology, 2013, 959, 45-67.	0.9	4
54	Biosensors for phytohormone quantification: challenges, solutions, and opportunities. Trends in Plant Science, 2013, 18, 244-249.	8.8	33

#	ARTICLE	IF	CITATIONS
55	Lateral root development in Arabidopsis: fifty shades of auxin. Trends in Plant Science, 2013, 18, 450-458.	8.8	536
56	Use of<i>Frankia</i>and Actinorhizal Plants for Degraded Lands Reclamation. BioMed Research International, 2013, 2013, 1-9.	1.9	71
57	Effect of lead on root growth. Frontiers in Plant Science, 2013, 4, 175.	3.6	198
58	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
59	Lead Tolerance and Accumulation in Hirschfeldia incana, a Mediterranean Brassicaceae from Metalliferous Mine Spoils. PLoS ONE, 2013, 8, e61932.	2.5	40
60	Establishment of Actinorhizal Symbioses. Soil Biology, 2013, , 89-101.	0.8	2
61	Casuarina Root Exudates Alter the Physiology, Surface Properties, and Plant Infectivity of Frankia sp. Strain CcI3. Applied and Environmental Microbiology, 2012, 78, 575-580.	3.1	43
62	Early development and gravitropic response of lateral roots in<i>Arabidopsis thaliana</i>. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 1509-1516.	4.0	49
63	Composite Cucurbita pepo plants with transgenic roots as a tool to study root development. Annals of Botany, 2012, 110, 479-489.	2.9	39
64	Analyzing Lateral Root Development: How to Move Forward. Plant Cell, 2012, 24, 15-20.	6.6	125
65	<i>AUX/LAX</i> Genes Encode a Family of Auxin Influx Transporters That Perform Distinct Functions during <i>Arabidopsis</i> Development. Plant Cell, 2012, 24, 2874-2885.	6.6	373
66	Integrated genetic and computation methods for in planta cytometry. Nature Methods, 2012, 9, 483-485.	19.0	92
67	Heart of Endosymbioses: Transcriptomics Reveals a Conserved Genetic Program among Arbuscular Mycorrhizal, Actinorhizal and Legume-Rhizobial Symbioses. PLoS ONE, 2012, 7, e44742.	2.5	77
68	Plant systems biology: network matters. Plant, Cell and Environment, 2011, 34, 535-553.	5.7	70
69	Symbiotic Signaling in Actinorhizal Symbioses. Current Protein and Peptide Science, 2011, 12, 156-164.	1.4	56
70	Symbiotic Signaling in Actinorhizal Symbioses. Current Protein and Peptide Science, 2011, 999, 1-9.	1.4	3
71	Contribution of transgenic Casuarinaceae to our knowledge of the actinorhizal symbioses. Symbiosis, 2010, 50, 3-11.	2.3	24
72	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

#	ARTICLE	IF	CITATIONS
73	Ã‰valuation deÂlaÂcontamination parÂlesÂÃ©lÃ©ments-traces mÃ©talliques dansÂune zone miniÃ¨re duÂMaroc oriental*. Cahiers Agricultures, 2010, 19, 273-279.	0.9	24
74	Arabidopsis lateral root development: an emerging story. Trends in Plant Science, 2009, 14, 399-408.	8.8	681
75	Les symbioses actinorhiziennes fixatrices dâ€™azote : unÂexemple dâ€™adaptation auxÂcontraintes abiotiques duÂsol. Cahiers Agricultures, 2009, 18, 498-505.	0.9	6
76	Root growth in Arabidopsis requires gibberellin/DELLA signalling in the endodermis. Nature Cell Biology, 2008, 10, 625-628.	10.3	273
77	The auxin influx carrier LAX3 promotes lateral root emergence. Nature Cell Biology, 2008, 10, 946-954.	10.3	715
78	Lateral root emergence: A paradigm for cell signaling in plants. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2008, 150, S144.	1.8	0
79	SymRK defines a common genetic basis for plant root endosymbioses with arbuscular mycorrhiza fungi, rhizobia, and <i>Frankia</i> bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 4928-4932.	7.1	259
80	Diarch Symmetry of the Vascular Bundle in Arabidopsis Root Encompasses the Pericycle and Is Reflected in Distich Lateral Root Initiation. Plant Physiology, 2008, 146, 140-148.	4.8	163
81	Auxin fluxes in the root apex co-regulate gravitropism and lateral root initiation. Journal of Experimental Botany, 2008, 59, 55-66.	4.8	134
82	A role for auxin during actinorhizal symbioses formation?. Plant Signaling and Behavior, 2008, 3, 34-35.	2.4	30
83	Cytokinins Act Directly on Lateral Root Founder Cells to Inhibit Root Initiation. Plant Cell, 2008, 19, 3889-3900.	6.6	498
84	An Auxin Transport-Based Model of Root Branching in Arabidopsis thaliana. PLoS ONE, 2008, 3, e3673.	2.5	74
85	Actinorhizal Nodules and Gene Expression. Current Plant Science and Biotechnology in Agriculture, 2008, , 195-199.	0.0	0
86	Auxin-dependent regulation of lateral root positioning in the basal meristem of Arabidopsis. Development (Cambridge), 2007, 134, 681-690.	2.5	540
87	Functional Analysis of the Metallothionein Gene cgMT1 Isolated from the Actinorhizal Tree Casuarina glauca. Molecular Plant-Microbe Interactions, 2007, 20, 1231-1240.	2.6	28
88	Auxin Influx Activity Is Associated with Frankia Infection during Actinorhizal Nodule Formation in Casuarina glauca Â. Plant Physiology, 2007, 144, 1852-1862.	4.8	84
89	The cell-cycle promoter cdc2aAt from Arabidopsis thaliana is induced in the lateral roots of the actinorhizal tree Allocasuarina verticillata during the early stages of the symbiotic interaction with Frankia. Physiologia Plantarum, 2007, 130, 409-417.	5.2	8
90	Expressed sequenceâ€tag analysis in Casuarina glauca actinorhizal nodule and root. New Phytologist, 2006, 169, 681-688.	7.3	61

#	ARTICLE	IF	CITATIONS
91	Time of day modulates low-temperature Ca2+signals in Arabidopsis. Plant Journal, 2006, 48, 962-973.	5.7	145
92	Analysis of the Expression Pattern Conferred by the PsEnod12B Promoter from the Early Nodulin Gene of Pisum sativum in Transgenic Actinorhizal Trees of the Casuarinaceae Family. Plant and Soil, 2006, 281, 281-289.	3.7	7
93	Armadillo-related proteins promote lateral root development in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1621-1626.	7.1	90
94	Marking cell lineages in living tissues. Plant Journal, 2005, 42, 444-453.	5.7	141
95	Comparison of four constitutive promoters for the expression of transgenes in the tropical nitrogen-fixing tree Allocasuarina verticillata. Plant Cell Reports, 2005, 24, 540-548.	5.6	19
96	Early Events in Nodulation of Casuarina glauca by Frankia. , 2005, , 205-206.		0
97	GAL4-GFP enhancer trap lines for genetic manipulation of lateral root development in Arabidopsis thaliana. Journal of Experimental Botany, 2005, 56, 2433-2442.	4.8	168
98	Infection-Related Activation of the cg12 Promoter Is Conserved between Actinorhizal and Legume-Rhizobia Root Nodule Symbiosis. Plant Physiology, 2004, 136, 3191-3197.	4.8	52
99	The promoter of a metallothionein-like gene from the tropical tree Casuarina glauca is active in both annual dicotyledonous and monocotyledonous plants. Transgenic Research, 2003, 12, 271-281.	2.4	8
100	Expression pattern of ara12*, an Arabidopsis homologue of the nodule-specific actinorhizal subtilases cg12/ag12. Plant and Soil, 2003, 254, 239-244.	3.7	7
101	cg12 Expression Is Specifically Linked to Infection of Root Hairs and Cortical Cells during Casuarina glauca and Allocasuarina verticillata Actinorhizal Nodule Development. Molecular Plant-Microbe Interactions, 2003, 16, 600-607.	2.6	78
102	Symbiotic and non-symbiotic expression of cgMT1, a metallothionein-like gene from the actinorhizal tree Casuarina glauca. Plant Molecular Biology, 2002, 49, 81-92.	3.9	39
103	Research note: The 35S promoter is not constitutively expressed in the transgenic tropical actinorhizal tree Casuarina glauca. Functional Plant Biology, 2002, 29, 649.	2.1	40
104	Casuarina glauca Prenodule Cells Display the Same Differentiation as the Corresponding Nodule Cells. Molecular Plant-Microbe Interactions, 2000, 13, 107-112.	2.6	57
105	Characterization of a Casuarina glauca Nodule-Specific Subtilisin-like Protease Gene, a Homolog of Alnus glutinosa ag12. Molecular Plant-Microbe Interactions, 2000, 13, 113-117.	2.6	87
106	Molecular Biology of Tropical Nitrogen-Fixing Trees in the Casuarinaceae Family. Forestry Sciences, 2000, , 269-285.	0.4	8
107	Flavan-Containing Cells Delimit Frankia-Infected Compartments in Casuarina glauca Nodules. Plant Physiology, 1999, 121, 113-122.	4.8	63
108	Evaluation of phenotypic and molecular typing techniques for determining diversity in Erwinia carotovora subsp. atroseptica. Journal of Applied Microbiology, 1999, 87, 770-781.	3.1	31

#	ARTICLE	IF	CITATIONS
109	Actinorhizal Symbioses: Recent Advances in Plant Molecular and Genetic Transformation Studies. Critical Reviews in Plant Sciences, 1998, 17, 1-28.	5.7	45
110	Soybean (lbc3), Parasponia, and Trema Hemoglobin Gene Promoters Retain Symbiotic and Nonsymbiotic Specificity in Transgenic Casuarinaceae: Implications for Hemoglobin Gene Evolution and Root Nodule Symbioses. Molecular Plant-Microbe Interactions, 1998, 11, 887-894.	2.6	37
111	Actinorhizal Symbioses: Recent Advances in Plant Molecular and Genetic Transformation Studies. Critical Reviews in Plant Sciences, 1998, 17, 1-28.	5.7	34
112	When Plants Socialize: Symbioses and Root Development. , 0, , 209-238.		9