

Jean-Michel AnÃ©©

List of Publications by Year in descending order

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96
papers

8,084
citations

66343

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docs citations

103
times ranked

7307
citing authors

#	ARTICLE	IF	CITATIONS
1	A Putative Ca ²⁺ and Calmodulin-Dependent Protein Kinase Required for Bacterial and Fungal Symbioses. <i>Science</i> , 2004, 303, 1361-1364.	12.6	697
2	<i>Medicago truncatula</i> DMI1 Required for Bacterial and Fungal Symbioses in Legumes. <i>Science</i> , 2004, 303, 1364-1367.	12.6	493
3	Symbiotic Nitrogen Fixation and the Challenges to Its Extension to Nonlegumes. <i>Applied and Environmental Microbiology</i> , 2016, 82, 3698-3710.	3.1	443
4	Phylogenomics reveals multiple losses of nitrogen-fixing root nodule symbiosis. <i>Science</i> , 2018, 361, .	12.6	339
5	Algal ancestor of land plants was preadapted for symbiosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13390-13395.	7.1	292
6	Standards for plant synthetic biology: a common syntax for exchange of <sc>DNA</sc> parts. <i>New Phytologist</i> , 2015, 208, 13-19.	7.3	263
7	Presence of three mycorrhizal genes in the common ancestor of land plants suggests a key role of mycorrhizas in the colonization of land by plants. <i>New Phytologist</i> , 2010, 186, 514-525.	7.3	246
8	A Novel Nuclear Protein Interacts With the Symbiotic DMI3 Calcium- and Calmodulin-Dependent Protein Kinase of <i>Medicago truncatula</i>. <i>Molecular Plant-Microbe Interactions</i> , 2007, 20, 912-921.	2.6	245
9	Nitrogen fixation in a landrace of maize is supported by a mucilage-associated diazotrophic microbiota. <i>PLoS Biology</i> , 2018, 16, e2006352.	5.6	236
10	Comparative Phylogenomics Uncovers the Impact of Symbiotic Associations on Host Genome Evolution. <i>PLoS Genetics</i> , 2014, 10, e1004487.	3.5	229
11	Nuclear membranes control symbiotic calcium signaling of legumes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 14348-14353.	7.1	191
12	Activation of Symbiosis Signaling by Arbuscular Mycorrhizal Fungi in Legumes and Rice. <i>Plant Cell</i> , 2015, 27, 823-838.	6.6	188
13	The molecular genetic linkage map of the model legume <i>Medicago truncatula</i> : an essential tool for comparative legume genomics and the isolation of agronomically important genes. <i>BMC Plant Biology</i> , 2002, 2, 1.	3.6	183
14	Evolution of the plantâ€™microbe symbiotic â€™toolkitâ€™. <i>Trends in Plant Science</i> , 2013, 18, 298-304.	8.8	159
15	3-Hydroxy-3-Methylglutaryl Coenzyme A Reductase1 Interacts with NOR1 and Is Crucial for Nodulation in <i>Medicago truncatula</i>. <i>Plant Cell</i> , 2007, 19, 3974-3989.	6.6	158
16	<i>Medicago truncatula</i> IPD3 Is a Member of the Common Symbiotic Signaling Pathway Required for Rhizobial and Mycorrhizal Symbioses. <i>Molecular Plant-Microbe Interactions</i> , 2011, 24, 1345-1358.	2.6	147
17	Molecular signals required for the establishment and maintenance of ectomycorrhizal symbioses. <i>New Phytologist</i> , 2015, 208, 79-87.	7.3	139
18	Control of nitrogen fixation in bacteria that associate with cereals. <i>Nature Microbiology</i> , 2020, 5, 314-330.	13.3	135

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19	Large-Scale Phosphoprotein Analysis in <i>Medicago truncatula</i> Roots Provides Insight into in Vivo Kinase Activity in Legumes. <i>Plant Physiology</i> , 2009, 152, 19-28.	4.8	133
20	A proteomic atlas of the legume <i>Medicago truncatula</i> and its nitrogen-fixing endosymbiont <i>Sinorhizobium meliloti</i> . <i>Nature Biotechnology</i> , 2016, 34, 1198-1205.	17.5	133
21	Symbiosis and the social network of higher plants. <i>Current Opinion in Plant Biology</i> , 2013, 16, 118-127.	7.1	130
22	MALDI mass spectrometry-assisted molecular imaging of metabolites during nitrogen fixation in the <i>Medicago truncatula</i> – <i>Sinorhizobium meliloti</i> symbiosis. <i>Plant Journal</i> , 2013, 75, 130-145.	5.7	119
23	Are we there yet? The long walk towards the development of efficient symbiotic associations between nitrogen-fixing bacteria and non-leguminous crops. <i>BMC Biology</i> , 2019, 17, 99.	3.8	114
24	The symbiotic ion channel homolog DMI1 is localized in the nuclear membrane of <i>Medicago truncatula</i> roots. <i>Plant Journal</i> , 2007, 49, 208-216.	5.7	113
25	Rapid Phosphoproteomic and Transcriptomic Changes in the Rhizobia-legume Symbiosis. <i>Molecular and Cellular Proteomics</i> , 2012, 11, 724-744.	3.8	112
26	Agrobacterium-Mediated Transient Gene Expression and Silencing: A Rapid Tool for Functional Gene Assay in Potato. <i>PLoS ONE</i> , 2009, 4, e5812.	2.5	111
27	A role for the mevalonate pathway in early plant symbiotic signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 9781-9786.	7.1	111
28	Tracing Nonlegume Orthologs of Legume Genes Required for Nodulation and Arbuscular Mycorrhizal Symbioses. <i>Genetics</i> , 2006, 172, 2491-2499.	2.9	107
29	The <i>Medicago truncatula</i> DMI1 Protein Modulates Cytosolic Calcium Signaling. <i>Plant Physiology</i> , 2007, 145, 192-203.	4.8	99
30	Plant Responses to Bacterial N-Acyl-L-Homoserine Lactones are Dependent on Enzymatic Degradation to L-Homoserine. <i>ACS Chemical Biology</i> , 2014, 9, 1834-1845.	3.4	93
31	Genetic and genomic analysis in model legumes bring Nod-factor signaling to center stage. <i>Current Opinion in Plant Biology</i> , 2004, 7, 408-413.	7.1	92
32	Microbiomes of Streptophyte Algae and Bryophytes Suggest That a Functional Suite of Microbiota Fostered Plant Colonization of Land. <i>International Journal of Plant Sciences</i> , 2015, 176, 405-420.	1.3	88
33	Germinating Spore Exudates from Arbuscular Mycorrhizal Fungi: Molecular and Developmental Responses in Plants and Their Regulation by Ethylene. <i>Molecular Plant-Microbe Interactions</i> , 2011, 24, 260-270.	2.6	83
34	OslPD3, an ortholog of the <i>Medicago truncatula</i> DMI3 interacting protein IPD3, is required for mycorrhizal symbiosis in rice. <i>New Phytologist</i> , 2008, 180, 311-315.	7.3	77
35	The Ectomycorrhizal Fungus <i>Laccaria bicolor</i> Produces Lipochitooligosaccharides and Uses the Common Symbiosis Pathway to Colonize <i>Populus</i> Roots. <i>Plant Cell</i> , 2019, 31, 2386-2410.	6.6	73
36	Physiological Responses and Gene Co-Expression Network of Mycorrhizal Roots under K ⁺ Deprivation. <i>Plant Physiology</i> , 2017, 173, 1811-1823.	4.8	69

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37	Genetic and Cytogenetic Mapping of DMI1, DMI2, and DMI3 Genes of <i>Medicago truncatula</i> Involved in Nod Factor Transduction, Nodulation, and Mycorrhization. <i>Molecular Plant-Microbe Interactions</i> , 2002, 15, 1108-1118.	2.6	67
38	Lipo-chitooligosaccharides as regulatory signals of fungal growth and development. <i>Nature Communications</i> , 2020, 11, 3897.	12.8	65
39	The Recent Evolution of a Symbiotic Ion Channel in the Legume Family Altered Ion Conductance and Improved Functionality in Calcium Signaling. <i>Plant Cell</i> , 2012, 24, 2528-2545.	6.6	57
40	Biology and evolution of arbuscular mycorrhizal symbiosis in the light of genomics. <i>New Phytologist</i> , 2017, 213, 531-536.	7.3	53
41	Multifaceted Investigation of Metabolites During Nitrogen Fixation in <i>Medicago</i> via High Resolution MALDI-MS Imaging and ESI-MS. <i>Journal of the American Society for Mass Spectrometry</i> , 2015, 26, 149-158.	2.8	48
42	The pathogenic development of <i>Sclerotinia sclerotiorum</i> in soybean requires specific host NADPH oxidases. <i>Molecular Plant Pathology</i> , 2018, 19, 700-714.	4.2	47
43	Crop rotation, but not cover crops, influenced soil bacterial community composition in a corn-soybean system in southern Wisconsin. <i>Applied Soil Ecology</i> , 2020, 154, 103603.	4.3	47
44	A rhamnose-deficient lipopolysaccharide mutant of <i>Rhizobium</i> sp. IRBG74 is defective in root colonization and beneficial interactions with its flooding-tolerant hosts <i>Sesbania cannabina</i> and wetland rice. <i>Journal of Experimental Botany</i> , 2016, 67, 5869-5884.	4.8	45
45	A Model for Nitrogen Fixation in Cereal Crops. <i>Trends in Plant Science</i> , 2020, 25, 226-235.	8.8	43
46	Leveraging Proteomics to Understand Plant-Microbe Interactions. <i>Frontiers in Plant Science</i> , 2012, 3, 44.	3.6	42
47	Metabolomic profiling reveals suppression of oxylipin biosynthesis during the early stages of legume-rhizobia symbiosis. <i>FEBS Letters</i> , 2012, 586, 3150-3158.	2.8	42
48	Mediation of plant-mycorrhizal interaction by a lectin receptor-like kinase. <i>Nature Plants</i> , 2019, 5, 676-680.	9.3	42
49	Enabling Biological Nitrogen Fixation for Cereal Crops in Fertilized Fields. <i>ACS Synthetic Biology</i> , 2021, 10, 3264-3277.	3.8	42
50	Recent Advances in <i>Medicago truncatula</i> Genomics. <i>International Journal of Plant Genomics</i> , 2008, 2008, 1-11.	2.2	40
51	Complete Genome Sequence of the <i>Sesbania</i> Symbiont and Rice Growth-Promoting Endophyte <i>Rhizobium</i> sp. Strain IRBG74. <i>Genome Announcements</i> , 2013, 1, .	0.8	39
52	Comparison of Vacuum MALDI and AP-MALDI Platforms for the Mass Spectrometry Imaging of Metabolites Involved in Salt Stress in <i>Medicago truncatula</i> . <i>Frontiers in Plant Science</i> , 2018, 9, 1238.	3.6	39
53	Staying in touch: mechanical signals in plant-microbe interactions. <i>Current Opinion in Plant Biology</i> , 2014, 20, 104-109.	7.1	36
54	Diazotrophic Bacteria and Their Mechanisms to Interact and Benefit Cereals. <i>Molecular Plant-Microbe Interactions</i> , 2021, 34, 491-498.	2.6	36

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55	Crop Rotation and Management Effect on <i>Fusarium</i> spp. Populations. <i>Crop Science</i> , 2015, 55, 365-376.	1.8	34
56	Ca ²⁺ -regulated Ca ²⁺ channels with an RCK gating ring control plant symbiotic associations. <i>Nature Communications</i> , 2019, 10, 3703.	12.8	34
57	A critical review of 25 years of glomalin research: a better mechanical understanding and robust quantification techniques are required. <i>New Phytologist</i> , 2021, 232, 1572-1581.	7.3	34
58	New insights into Nod factor biosynthesis: Analyses of chitooligomers and lipo-chitooligomers of <i>Rhizobium</i> sp. IRBG74 mutants. <i>Carbohydrate Research</i> , 2016, 434, 83-93.	2.3	32
59	Identification of legume <i>RopGEF</i> gene families and characterization of a <i>Medicago truncatula</i> <i>RopGEF</i> mediating polar growth of root hairs. <i>Plant Journal</i> , 2011, 65, 230-243.	5.7	30
60	Soybean Response to Soil Rhizobia and Seed-applied Rhizobia Inoculants in Wisconsin. <i>Crop Science</i> , 2012, 52, 339-344.	1.8	30
61	Examination of Endogenous Peptides in <i>Medicago truncatula</i> Using Mass Spectrometry Imaging. <i>Journal of Proteome Research</i> , 2016, 15, 4403-4411.	3.7	29
62	Medicago PhosphoProtein Database: a repository for <i>Medicago truncatula</i> phosphoprotein data. <i>Frontiers in Plant Science</i> , 2012, 3, 122.	3.6	28
63	A Proteogenomic Survey of the <i>Medicago truncatula</i> Genome. <i>Molecular and Cellular Proteomics</i> , 2012, 11, 933-944.	3.8	27
64	Unravelling the molecular basis for symbiotic signal transduction in legumes. <i>Molecular Plant Pathology</i> , 2006, 7, 197-207.	4.2	24
65	Response of <i>Medicago truncatula</i> Seedlings to Colonization by <i>Salmonella enterica</i> and <i>Escherichia coli</i> O157:H7. <i>PLoS ONE</i> , 2014, 9, e87970.	2.5	22
66	Interkingdom Responses to Bacterial Quorum Sensing Signals Regulate Frequency and Rate of Nodulation in Legume-Rhizobia Symbiosis. <i>ChemBioChem</i> , 2016, 17, 2199-2205.	2.6	18
67	Corn-soybean rotation, tillage, and foliar fungicides: Impacts on yield and soil fungi. <i>Field Crops Research</i> , 2021, 262, 108030.	5.1	16
68	Identification of the phosphorylation targets of symbiotic receptor-like kinases using a high-throughput multiplexed assay for kinase specificity. <i>Plant Journal</i> , 2017, 90, 1196-1207.	5.7	15
69	Yield Response to Crop/Genotype Rotations and Fungicide Use to Manage <i>Fusarium</i> -related Diseases. <i>Crop Science</i> , 2015, 55, 889-898.	1.8	13
70	Isolation, Characterization, and Complete Genome Sequence of a Bradyrhizobium Strain Lb8 From Nodules of Peanut Utilizing Crack Entry Infection. <i>Frontiers in Microbiology</i> , 2020, 11, 93.	3.5	13
71	Mass Spectrometric-Based Selected Reaction Monitoring of Protein Phosphorylation during Symbiotic Signaling in the Model Legume, <i>Medicago truncatula</i> . <i>PLoS ONE</i> , 2016, 11, e0155460.	2.5	13
72	Deciphering the Chitin Code in Plant Symbiosis, Defense, and Microbial Networks. <i>Annual Review of Microbiology</i> , 2021, 75, 583-607.	7.3	13

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73	Effect of drought on Bradyrhizobium japonicum populations in Midwest soils. Plant and Soil, 2014, 382, 165-173.	3.7	12
74	Enumeration of Soybean-Associated Rhizobia with Quantitative Real-Time Polymerase Chain Reaction. Crop Science, 2010, 50, 2591-2596.	1.8	11
75	Soybean Cyst Nematode Control with <i>Pasteuria nishizawae</i> Under Different Management Practices. Agronomy Journal, 2018, 110, 2534-2540.	1.8	11
76	Transcription Factors Controlling the Rhizobium-Legume Symbiosis: Integrating Infection, Organogenesis and the Abiotic Environment. Plant and Cell Physiology, 2022, 63, 1326-1343.	3.1	11
77	Salmonella entericaserovar Typhimurium ATCC 14028S is tolerant to plant defenses triggered by the flagellin receptor FLS2. FEMS Microbiology Letters, 2019, 366, .	1.8	10
78	A Novel Positive Regulator of the Early Stages of Root Nodule Symbiosis Identified by Phosphoproteomics. Plant and Cell Physiology, 2019, 60, 575-586.	3.1	10
79	Spatiotemporal cytokinin response imaging and ISOPENTENYLTRANSFERASE 3 function in Medicago nodule development. Plant Physiology, 2022, 188, 560-575.	4.8	10
80	Potential regulatory phosphorylation sites in a <i>Medicago truncatula</i> plasma membrane proton pump implicated during early symbiotic signaling in roots. FEBS Letters, 2015, 589, 2186-2193.	2.8	9
81	<i>KIN3</i> impacts arbuscular mycorrhizal symbiosis and promotes fungal colonisation in <i>Medicago truncatula</i> . Plant Journal, 2022, 110, 513-528.	5.7	9
82	Genetic Determinants of Ammonium Excretion in <i>nifL</i> Mutants of <i>Azotobacter vinelandii</i> . Applied and Environmental Microbiology, 2022, 88, AEM0187621.	3.1	9
83	Role of cytosolic, tyrosine-insensitive prephenate dehydrogenase in <i>Medicago truncatula</i> . Plant Direct, 2020, 4, e00218.	1.9	7
84	Influence of PRE-emergence herbicides on soybean development, root nodulation and symbiotic nitrogen fixation. Crop Protection, 2021, 144, 105576.	2.1	7
85	Soybean Response to Rhizobia on Previously Flooded Sites in Southern Wisconsin. Agronomy Journal, 2011, 103, 573-576.	1.8	6
86	Comparative Analysis of Secretomes from Ectomycorrhizal Fungi with an Emphasis on Small-Secreted Proteins. Frontiers in Microbiology, 2016, 7, 1734.	3.5	6
87	Perception of lipo-chitoooligosaccharides by the bioenergy crop <i>Populus</i> . Plant Signaling and Behavior, 2021, 16, 1903758.	2.4	6
88	Polymorphic responses of <i>Medicago truncatula</i> accessions to potassium deprivation. Plant Signaling and Behavior, 2017, 12, e1307494.	2.4	5
89	Inoculation with arbuscular mycorrhizal fungi has a more significant positive impact on the growth of open-pollinated heirloom varieties of carrots than on hybrid cultivars under organic management conditions. Agriculture, Ecosystems and Environment, 2020, 289, 106712.	5.3	5
90	A network-based comparative framework to study conservation and divergence of proteomes in plant phylogenies. Nucleic Acids Research, 2021, 49, e3-e3.	14.5	5

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91	Characterizing the Effect of Foliar Lipo-chitooligosaccharide Application on Sudden Death Syndrome and Sclerotinia Stem Rot in Soybean. <i>Plant Health Progress</i> , 2018, 19, 46-53.	1.4	4
92	Expanding the Biological Role of Lipo-Chitooligosaccharides and Chitooligosaccharides in <i>Laccaria bicolor</i> Growth and Development. <i>Frontiers in Fungal Biology</i> , 2022, 3, .	2.0	4
93	Functional and comparative genomics reveals conserved noncoding sequences in the nitrogen-fixing clade. <i>New Phytologist</i> , 2022, 234, 634-649.	7.3	2
94	Stress-associated developmental reprogramming in moss protonemata by synthetic activation of the common symbiosis pathway. <i>IScience</i> , 2022, 25, 103754.	4.1	2
95	Symbiosis research, technology, and education: Proceedings of the 6th International Symbiosis Society Congress held in Madison Wisconsin, USA, August 2009. <i>Symbiosis</i> , 2010, 51, 1-12.	2.3	1
96	Genetic and Molecular Analysis of Nod Factor Signalling in <i>Medicago truncatula</i> . , 2005, , 165-168.		0