Ton Bisseling

List of Publications by Year
in descending order

110 papers	13,485 citations	29994 54 h-index	27345 106 g-index
150 all docs	150 docs citations	150 times ranked	12604 citing authors

#	Article	IF	Citations
1	High Salt Levels Reduced Dissimilarities in Root-Associated Microbiomes of Two Barley Genotypes. Molecular Plant-Microbe Interactions, 2022, 35, 592-603.	1.4	3
2	Synthetic bacterial community derived from a desert rhizosphere confers salt stress resilience to tomato in the presence of a soil microbiome. ISME Journal, 2022, 16, 1907-1920.	4.4	54
3	Plant growthâ€promoting rhizobacterium <i>Pseudomonas</i> sp. CM11 specifically induces lateral roots. New Phytologist, 2022, 235, 1575-1588.	3.5	14
4	NIN is essential for development of symbiosomes, suppression of defence and premature senescence in <i>Medicago truncatula</i> nodules. New Phytologist, 2021, 230, 290-303.	3.5	33
5	A nuclearâ€targeted effector of <i>Rhizophagus irregularis</i> interferes with histone 2B monoâ€ubiquitination to promote arbuscular mycorrhization. New Phytologist, 2021, 230, 1142-1155.	3.5	26
6	Plant-specific histone deacetylases are essential for early and late stages of Medicago nodule development. Plant Physiology, 2021, 186, 1591-1605.	2.3	9
7	Medicago SPX1 and SPX3 regulate phosphate homeostasis, mycorrhizal colonization, and arbuscule degradation. Plant Cell, 2021, 33, 3470-3486.	3.1	42
8	A lysin motif effector subverts chitinâ€triggered immunity to facilitate arbuscular mycorrhizal symbiosis. New Phytologist, 2020, 225, 448-460.	3.5	87
9	Mutant analysis in the nonlegume <i>Parasponia andersonii</i> identifies NIN and NFâ€YA1 transcription factors as a core genetic network in nitrogenâ€fixing nodule symbioses. New Phytologist, 2020, 226, 541-554.	3.5	32
10	Evolution of NIN and NIN-like Genes in Relation to Nodule Symbiosis. Genes, 2020, 11, 777.	1.0	36
11	Duplication of Symbiotic Lysin Motif Receptors Predates the Evolution of Nitrogen-Fixing Nodule Symbiosis. Plant Physiology, 2020, 184, 1004-1023.	2.3	26
12	Specificity in legume nodule symbiosis. Science, 2020, 369, 620-621.	6.0	9
13	Quantitative comparison between the rhizosphere effect of <i>Arabidopsis thaliana</i> and co-occurring plant species with a longer life history. ISME Journal, 2020, 14, 2433-2448.	4.4	27
14	Magnetic Resonance Microscopy at Cellular Resolution and Localised Spectroscopy of Medicago truncatula at 22.3 Tesla. Scientific Reports, 2020, 10, 971.	1.6	13
15	A Homeotic Mutation Changes Legume Nodule Ontogeny into Actinorhizal-Type Ontogeny. Plant Cell, 2020, 32, 1868-1885.	3.1	24
16	SNARE Complexity in Arbuscular Mycorrhizal Symbiosis. Frontiers in Plant Science, 2020, 11, 354.	1.7	9
17	The Evolutionary Aspects of Legume Nitrogenâ€“Fixing Nodule Symbiosis. Results and Problems in Cell Differentiation, 2020, 69, 387-408.	0.2	5
18	Lateral root formation involving cell division in both pericycle, cortex and endodermis is a common and ancestral trait in seed plants. Development (Cambridge), 2019, 146, .	1.2	24

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19	Hybrid de novo genome assembly of Chinese chestnut (Castanea mollissima). GigaScience, 2019, 8, .	3.3	55
20	A <i>Medicago truncatula </i><scp>SWEET</scp> transporter implicated in arbuscule maintenance during arbuscular mycorrhizal symbiosis. New Phytologist, 2019, 224, 396-408.	3.5	101
21	GeneNoteBook, a collaborative notebook for comparative genomics. Bioinformatics, 2019, 35, 4779-4781.	1.8	3
22	The Medicago truncatula nodule identity gene MtNOOT1 is required for coordinated apical-basal development of the root. BMC Plant Biology, 2019, 19, 571.	1.6	5
23	A Remote <i>cis</i>-Regulatory Region Is Required for <i>NIN</i> Expression in the Pericycle to Initiate Nodule Primordium Formation in <i>Medicago truncatula</i>. Plant Cell, 2019, 31, 68-83.	3.1	101
24	Hostâ€•and stageâ€dependent secretome of the arbuscular mycorrhizal fungus <i>Rhizophagus irregularis</i>. Plant Journal, 2018, 94, 411-425.	2.8	88
25	A genetically and functionally diverse group of non-diazotrophic Bradyrhizobium spp. colonizes the root endophytic compartment of Arabidopsis thaliana. BMC Plant Biology, 2018, 18, 61.	1.6	26
26	CRISPR/Cas9-Mediated Mutagenesis of Four Putative Symbiosis Genes of the Tropical Tree Parasponia andersonii Reveals Novel Phenotypes. Frontiers in Plant Science, 2018, 9, 284.	1.7	41
27	Comparative transcriptome analysis of Poncirus trifoliata identifies a core set of genes involved in arbuscular mycorrhizal symbiosis. Journal of Experimental Botany, 2018, 69, 5255-5264.	2.4	19
28	In Situ Hybridization Method for Localization of mRNA Molecules in Medicago Tissue Sections. Methods in Molecular Biology, 2018, 1822, 145-159.	0.4	9
29	Comparative genomics of the nonlegume <i>Parasponia</i> reveals insights into evolution of nitrogen-fixing rhizobium symbioses. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4700-E4709.	3.3	253
30	Draft Genome Sequence of the Plant Growthâ€"Promoting Rhizobacterium Acinetobacter radioresistens Strain SA188 Isolated from the Desert Plant Indigofera argentea. Genome Announcements, 2017, 5, .	0.8	5
31	Microsymbiont discrimination mediated by a host-secreted peptide in <i>Medicago truncatula</i>. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6848-6853.	3.3	110
32	Plant-Specific Histone Deacetylases HDT1/2 Regulate <i>GIBBERELLIN 2-OXIDASE2</i> Expression to Control Arabidopsis Root Meristem Cell Number. Plant Cell, 2017, 29, 2183-2196.	3.1	69
33	Draft Genome Sequence of Ochrobactrum intermedium Strain SA148, a Plant Growth-Promoting Desert Rhizobacterium. Genome Announcements, 2017, 5, .	0.8	5
34	Draft Genome Sequence of <i>Enterobacter</i> sp. Sa187, an Endophytic Bacterium Isolated from the Desert Plant <i>Indigofera argentea</i>. Genome Announcements, 2017, 5, .	0.8	5
35	Interface Symbiotic Membrane Formation in Root Nodules of Medicago truncatula: the Role of Synaptotagmins MtSyt1, MtSyt2 and MtSyt3. Frontiers in Plant Science, 2017, 8, 201.	1.7	39
36	MAPK-triggered chromatin reprogramming by histone deacetylase in plant innate immunity. Genome Biology, 2017, 18, 131.	3.8	73

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37	<scp>VAMP</scp>721a and <scp>VAMP</scp>721d are important for pectin dynamics and release of bacteria in soybean nodules. New Phytologist, 2016, 210, 1011-1021.	3.5	38
38	A symbiosisâ€dedicated SYNTAXIN OF PLANTS 13II isoform controls the formation of a stable hostâ€“microbe interface in symbiosis. New Phytologist, 2016, 211, 1338-1351.	3.5	83
39	Draft Genome Sequence of the Phosphate-Solubilizing Bacterium Pseudomonas argentinensis Strain SA190 Isolated from the Desert Plant <i>Indigofera argentea</i>. Genome Announcements, 2016, 4, .	0.8	9
40	Compact tomato seedlings and plants upon overexpression of a tomato chromatin remodelling <scp>ATP</scp>ase gene. Plant Biotechnology Journal, 2016, 14, 581-591.	4.1	7
41	Haustorium Formation in <i>Medicago truncatula</i> Roots Infected by <i>Phytophthora palmivora</i> Does Not Involve the Common Endosymbiotic Program Shared by Arbuscular Mycorrhizal Fungi and Rhizobia. Molecular Plant-Microbe Interactions, 2015, 28, 1271-1280.	1.4	27
42	Growth and development: Close relations of secretion and K+. Nature Plants, 2015, 1, 15113.	4.7	1
43	The strigolactone biosynthesis gene DWARF27 is co-opted in rhizobium symbiosis. BMC Plant Biology, 2015, 15, 260.	1.6	118
44	The Scion/Rootstock Genotypes and Habitats Affect Arbuscular Mycorrhizal Fungal Community in Citrus. Frontiers in Microbiology, 2015, 6, 1372.	1.5	24
45	ARP2/3-Mediated Actin Nucleation Associated With Symbiosome Membrane Is Essential for the Development of Symbiosomes in Infected Cells of <i>Medicago truncatula</i> Root Nodules. Molecular Plant-Microbe Interactions, 2015, 28, 605-614.	1.4	68
46	Rhizobium Lipo-chitooligosaccharide Signaling Triggers Accumulation of Cytokinins in Medicago truncatula Roots. Molecular Plant, 2015, 8, 1213-1226.	3.9	146
47	Root developmental programs shape the<i>Medicago truncatula</i>nodule meristem. Development (Cambridge), 2015, 142, 2941-50.	1.2	78
48	Single Nucleus Genome Sequencing Reveals High Similarity among Nuclei of an Endomycorrhizal Fungus. PLoS Genetics, 2014, 10, e1004078.	1.5	238
49	Adjustment of Host Cells for Accommodation of Symbiotic Bacteria: Vacuole Defunctionalization, HOPS Suppression, and TIP1g Retargeting in <i>Medicago</i> Â Â Â. Plant Cell, 2014, 26, 3809-3822.	3.1	73
50	Evolution of a symbiotic receptor through gene duplications in the legumeâ€“rhizobium mutualism. New Phytologist, 2014, 201, 961-972.	3.5	71
51	Nod Factor Receptors Form Heteromeric Complexes and Are Essential for Intracellular Infection in<i>Medicago</i>Nodules. Plant Cell, 2014, 26, 4188-4199.	3.1	92
52	The birth of cooperation. Science, 2014, 345, 29-30.	6.0	17
53	Nutrient computation for root architecture. Science, 2014, 346, 300-301.	6.0	36
54	Fate map of <i>Medicago truncatula</i> root nodules. Development (Cambridge), 2014, 141, 3517-3528.	1.2	245

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55	CYCLOPS: A New Vision on Rhizobium-Induced Nodule Organogenesis. Cell Host and Microbe, 2014, 15, 127-129.	5.1	14
56	Cell- and Tissue-Specific Transcriptome Analyses of Medicago truncatula Root Nodules. PLoS ONE, 2013, 8, e64377.	1.1	86
57	Modeling a Cortical Auxin Maximum for Nodulation: Different Signatures of Potential Strategies. Frontiers in Plant Science, 2012, 3, 96.	1.7	44
58	Exploiting an ancient signalling machinery to enjoy a nitrogen fixing symbiosis. Current Opinion in Plant Biology, 2012, 15, 438-443.	3.5	62
59	Efficiency of Agrobacterium rhizogenesâ€“mediated root transformation of Parasponia and Trema is temperature dependent. Plant Growth Regulation, 2012, 68, 459-465.	1.8	16
60	Nonlegume <i>Parasponia andersonii</i> Deploys a Broad Rhizobium Host Range Strategy Resulting in Largely Variable Symbiotic Effectiveness. Molecular Plant-Microbe Interactions, 2012, 25, 954-963.	1.4	55
61	<i>Rhizobium</i> â€“legume symbiosis shares an exocytotic pathway required for arbuscule formation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8316-8321.	3.3	213
62	Endocytic Accommodation of Microbes in Plants. , 2012, , 271-295.		4
63	One-Step Agrobacterium Mediated Transformation of Eight Genes Essential for Rhizobium Symbiotic Signaling Using the Novel Binary Vector System pHUGE. PLoS ONE, 2012, 7, e47885.	1.1	35
64	The Medicago genome provides insight into the evolution of rhizobial symbioses. Nature, 2011, 480, 520-524.	13.7	1,166
65	LysM-Type Mycorrhizal Receptor Recruited for Rhizobium Symbiosis in Nonlegume <i>Parasponia</i>. Science, 2011, 331, 909-912.	6.0	273
66	IPD3 Controls the Formation of Nitrogen-Fixing Symbiosomes in Pea and <i>Medicago</i> Spp.. Molecular Plant-Microbe Interactions, 2011, 24, 1333-1344.	1.4	143
67	Evolutionary origin of rhizobium Nod factor signaling. Plant Signaling and Behavior, 2011, 6, 1510-1514.	1.2	36
68	A Phylogenetic Strategy Based on a Legume-Specific Whole Genome Duplication Yields Symbiotic Cytokinin Type-A Response Regulators. Plant Physiology, 2011, 157, 2013-2022.	2.3	91
69	Strigolactone Biosynthesis in <i>Medicago</i> Â<i>truncatula</i> and Rice Requires the Symbiotic GRAS-Type Transcription Factors NSP1 and NSP2 Â. Plant Cell, 2011, 23, 3853-3865.	3.1	291
70	Intracellular plant microbe associations: secretory pathways and the formation of perimicrobial compartments. Current Opinion in Plant Biology, 2010, 13, 372-377.	3.5	45
71	A Nodule-Specific Protein Secretory Pathway Required for Nitrogen-Fixing Symbiosis. Science, 2010, 327, 1126-1129.	6.0	251
72	<i>Medicago</i>N2-Fixing Symbiosomes Acquire the Endocytic Identity Marker Rab7 but Delay the Acquisition of Vacuolar Identity. Plant Cell, 2009, 21, 2811-2828.	3.1	142

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73	Next-Generation Communication. Science, 2009, 324, 691-691.	6.0	59
74	A new wholeâ€mount DNA quantification method and the analysis of nuclear DNA content in the stemâ€cell niche of Arabidopsis roots. Plant Journal, 2008, 55, 886-894.	2.8	8
75	Fluorescence In Situ Hybridization on Medicago truncatula Chromosomes. , 2008, , 371-383.		0
76	Medicago LYK3, an Entry Receptor in Rhizobial Nodulation Factor Signaling. Plant Physiology, 2007, 145, 183-191.	2.3	322
77	Primer3Plus, an enhanced web interface to Primer3. Nucleic Acids Research, 2007, 35, W71-W74.	6.5	2,323
78	Model for the robust establishment of precise proportions in the early Drosophila embryo. Journal of Theoretical Biology, 2005, 234, 13-19.	0.8	60
79	Nod factor signaling genes and their function in the early stages of Rhizobium infection. Current Opinion in Plant Biology, 2005, 8, 346-352.	3.5	182
80	Digital learning material for student-directed model building in molecular biology. Biochemistry and Molecular Biology Education, 2005, 33, 325-329.	0.5	1
81	Digital Learning Material for Model Building in Molecular Biology. Journal of Science Education and Technology, 2005, 14, 123-134.	2.4	6
82	Biology by Numbersâ€"Introducing Quantitation into Life Science Education. PLoS Biology, 2005, 3, e1.	2.6	63
83	NSP1 of the GRAS Protein Family Is Essential for Rhizobial Nod Factor-Induced Transcription. Science, 2005, 308, 1789-1791.	6.0	534
84	Formation of organelle-like N2-fixing symbiosomes in legume root nodules is controlled by DMI2. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10375-10380.	3.3	227
85	RNA interference in Agrobacterium rhizogenes-transformed roots of Arabidopsis and Medicago truncatula. Journal of Experimental Botany, 2004, 55, 983-992.	2.4	292
86	Satellite repeats in the functional centromere and pericentromeric heterochromatin of Medicago truncatula. Chromosoma, 2004, 113, 276-283.	1.0	58
87	A Putative Ca2+ and Calmodulin-Dependent Protein Kinase Required for Bacterial and Fungal Symbioses. Science, 2004, 303, 1361-1364.	6.0	697
88	LysM Domain Receptor Kinases Regulating Rhizobial Nod Factor-Induced Infection. Science, 2003, 302, 630-633.	6.0	725
89	Identification of distinct steps during tubule formation by the movement protein of Cowpea mosaic virus. Journal of General Virology, 2003, 84, 3485-3494.	1.3	29
90	<i>Rhizobium</i>Nod Factor Perception and Signalling. Plant Cell, 2002, 14, S239-S249.	3.1	195

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91	Microsynteny between pea and Medicago truncatula in the SYM2 region. Plant Molecular Biology, 2002, 50, 225-235.	2.0	65
92	Integration of the FISH pachytene and genetic maps ofMedicago truncatula. Plant Journal, 2001, 27, 49-58.	2.8	186
93	In vivofluorescence correlation microscopy (FCM) reveals accumulation and immobilization of Nod factors in root hair cell walls. Plant Journal, 2000, 21, 109-119.	2.8	61
94	The role of actin in root hair morphogenesis: studies with lipochito-oligosaccharide as a growth stimulator and cytochalasin as an actin perturbing drug. Plant Journal, 1999, 17, 141-154.	2.8	273
95	Reâ€evaluation of phytohormoneâ€independent division of tobacco protoplastâ€derived cells. Plant Journal, 1999, 17, 461-466.	2.8	24
96	Lipochito-oligosaccharides re-initiate root hair tip growth in Vicia sativa with high calcium and spectrin-like antigen at the tip. Plant Journal, 1998, 13, 341-350.	2.8	145
97	Endomycorrhizae and rhizobial Nod factors both require SYM8 to induce the expression of the early nodulin genesPsENOD5 and PsENOD12A. Plant Journal, 1998, 15, 605-614.	2.8	118
98	Diversity of Root Nodulation and Rhizobial Infection Processes. , 1998, , 347-360.		28
99	Identification of agthi1, whose product is involved in biosynthesis of the thiamine precursor thiazole, in actinorhizal nodules of Alnus glutinosa. Plant Journal, 1996, 10, 361-368.	2.8	69
100	Nod factor-induced host responses and mechanisms of Nod factor perception. New Phytologist, 1996, 133, 25-43.	3.5	87
101	Gene expression in ineffective actinorhizal nodules ofAlnus glutinosa. Acta Botanica Gallica, 1996, 143, 613-620.	0.9	6
102	Rhizobial and Actinorhizal Symbioses: What Are the Shared Features?. Plant Cell, 1996, 8, 1899.	3.1	42
103	Early nodulin gene expression during Nod factor-induced processes in Vicia sativa. Plant Journal, 1995, 8, 111-119.	2.8	57
104	Characterization of GmENOD40 , a gene showing novel patterns of cell-specific expression during soybean nodule development. Plant Journal, 1993, 3, 573-585.	2.8	224
105	Lipo-oligosaccharides of Rhizobium induce infection-related early nodulin gene expression in pea root hairs. Plant Journal, 1993, 4, 727-733.	2.8	153
106	The PsENOD12 Gene Is Expressed at Two Different Sites in Afghanistan Pea Pseudonodules Induced by Auxin Transport Inhibitors. Plant Physiology, 1992, 100, 1649-1655.	2.3	68
107	Developmental aspects of the Rhizobium-legume symbiosis. Plant Molecular Biology, 1992, 19, 89-107.	2.0	129
108	In-situ localization of chalcone synthase mRNA in pea root nodule development. Plant Journal, 1992, 2, 143-151.	2.8	58

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109	The roots of nodulins. Physiologia Plantarum, 1990, 79, 407-414.	2.6	16
110	Immuno-gold localization of leghaemoglobin in cytoplasm in nitrogen-fixing root nodules of pea. Nature, 1984, 311, 254-256.	13.7	68