Rene Geurts

List of Publications by Year
in descending order

74 papers	11,054 citations	40 h-index (76326)	74 g-index (76900)
80 all docs	80 docs citations	80 times ranked	12132 citing authors

#	Article	IF	Citations
1	Primer3Plus, an enhanced web interface to Primer3. Nucleic Acids Research, 2007, 35, W71-W74.	14.5	2,323
2	The Medicago genome provides insight into the evolution of rhizobial symbioses. Nature, 2011, 480, 520-524.	27.8	1,166
3	LysM Domain Receptor Kinases Regulating Rhizobial Nod Factor-Induced Infection. Science, 2003, 302, 630-633.	12.6	725
4	A Putative Ca2+ and Calmodulin-Dependent Protein Kinase Required for Bacterial and Fungal Symbioses. Science, 2004, 303, 1361-1364.	12.6	697
5	NSP1 of the GRAS Protein Family Is Essential for Rhizobial Nod Factor-Induced Transcription. Science, 2005, 308, 1789-1791.	12.6	534
6	The Medicago truncatula Lysine Motif-Receptor-Like Kinase Gene Family Includes NFP and New Nodule-Expressed Genes. Plant Physiology, 2006, 142, 265-279.	4.8	467
7	Medicago LYK3, an Entry Receptor in Rhizobial Nodulation Factor Signaling. Plant Physiology, 2007, 145, 183-191.	4.8	322
8	RNA interference in Agrobacterium rhizogenes-transformed roots of Arabidopsis and Medicago truncatula. Journal of Experimental Botany, 2004, 55, 983-992.	4.8	292
9	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.	6.6	291
10	LysM-Type Mycorrhizal Receptor Recruited for Rhizobium Symbiosis in Nonlegume <i>Parasponia</i>. Science, 2011, 331, 909-912.	12.6	273
11	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.	7.1	253
12	Single Nucleus Genome Sequencing Reveals High Similarity among Nuclei of an Endomycorrhizal Fungus. PLoS Genetics, 2014, 10, e1004078.	3.5	238
13	Evolution of endemism on a young tropical mountain. Nature, 2015, 524, 347-350.	27.8	234
14	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.	7.1	227
15	<i>Rhizobium</i>Nod Factor Perception and Signalling. Plant Cell, 2002, 14, S239-S249.	6.6	195
16	Integration of the FISH pachytene and genetic maps of <i>Medicago truncatula</i>. Plant Journal, 2001, 27, 49-58.	5.7	186
17	Nod factor signaling genes and their function in the early stages of Rhizobium infection. Current Opinion in Plant Biology, 2005, 8, 346-352.	7.1	182
18	Rhizobium Lipo-chitooligosaccharide Signaling Triggers Accumulation of Cytokinins in Medicago truncatula Roots. Molecular Plant, 2015, 8, 1213-1226.	8.3	146

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19	Red clover (Trifolium pratense L.) draft genome provides a platform for trait improvement. Scientific Reports, 2015, 5, 17394.	3.3	136
20	RDML: structured language and reporting guidelines for real-time quantitative PCR data. Nucleic Acids Research, 2009, 37, 2065-2069.	14.5	123
21	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.	5.7	118
22	The strigolactone biosynthesis gene DWARF27 is co-opted in rhizobium symbiosis. BMC Plant Biology, 2015, 15, 260.	3.6	118
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.	6.6	101
24	Lipochitooligosaccharides Modulate Plant Host Immunity to Enable Endosymbioses. Annual Review of Phytopathology, 2015, 53, 311-334.	7.8	98
25	A Phylogenetic Strategy Based on a Legume-Specific Whole Genome Duplication Yields Symbiotic Cytokinin Type-A Response Regulators. Plant Physiology, 2011, 157, 2013-2022.	4.8	91
26	Bacterialâ€induced calcium oscillations are common to nitrogenâ€fixing associations of nodulating legumes and nonâ€legumes. New Phytologist, 2015, 207, 551-558.	7.3	89
27	Interaction of Medicago truncatula Lysin Motif Receptor-Like Kinases, NFP and LYK3, Produced in Nicotiana benthamiana Induces Defence-Like Responses. PLoS ONE, 2013, 8, e65055.	2.5	86
28	A Resurrected Scenario: Single Gain and Massive Loss of Nitrogen-Fixing Nodulation. Trends in Plant Science, 2019, 24, 49-57.	8.8	80
29	Evolution of a symbiotic receptor through gene duplications in the legumeâ€“rhizobium mutualism. New Phytologist, 2014, 201, 961-972.	7.3	71
30	What Does It Take to Evolve A Nitrogen-Fixing Endosymbiosis?. Trends in Plant Science, 2016, 21, 199-208.	8.8	71
31	Microsynteny between pea and Medicago truncatula in the SYM2 region. Plant Molecular Biology, 2002, 50, 225-235.	3.9	65
32	Exploiting an ancient signalling machinery to enjoy a nitrogen fixing symbiosis. Current Opinion in Plant Biology, 2012, 15, 438-443.	7.1	62
33	Use of the Fluorescent Timer DsRED-E5 as Reporter to Monitor Dynamics of Gene Activity in Plants. Plant Physiology, 2004, 135, 1879-1887.	4.8	58
34	Satellite repeats in the functional centromere and pericentromeric heterochromatin of Medicago truncatula. Chromosoma, 2004, 113, 276-283.	2.2	58
35	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.	2.6	55
36	Inter- and intracellular colonization of Arabidopsis roots by endophytic actinobacteria and the impact of plant hormones on their antimicrobial activity. Antonie Van Leeuwenhoek, 2018, 111, 679-690.	1.7	54

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37	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.	9.8	54
38	Parasponia: a novel system for studying mutualism stability. Trends in Plant Science, 2014, 19, 757-763.	8.8	50
39	Modeling a Cortical Auxin Maximum for Nodulation: Different Signatures of Potential Strategies. Frontiers in Plant Science, 2012, 3, 96.	3.6	44
40	A Roadmap toward Engineered Nitrogen-Fixing Nodule Symbiosis. Plant Communications, 2020, 1, 100019.	7.7	44
41	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.	3.6	41
42	Evolutionary origin of rhizobium Nod factor signaling. Plant Signaling and Behavior, 2011, 6, 1510-1514.	2.4	36
43	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.	2.5	35
44	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.	7.3	32
45	Quantitative modelling of legume root nodule primordium induction by a diffusive signal of epidermal origin that inhibits auxin efflux. BMC Plant Biology, 2016, 16, 254.	3.6	29
46	Restriction of Host Range by the sym2 Allele of Afghan Pea Is Nonspecific for the Type of Modification at the Reducing Terminus of Nodulation Signals. Molecular Plant-Microbe Interactions, 1998, 11, 418-422.	2.6	27
47	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.	9.8	27
48	Direct imaging of glycans in Arabidopsis roots via click labeling of metabolically incorporated azido-monosaccharides. BMC Plant Biology, 2016, 16, 220.	3.6	26
49	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.	3.6	26
50	Duplication of Symbiotic Lysin Motif Receptors Predates the Evolution of Nitrogen-Fixing Nodule Symbiosis. Plant Physiology, 2020, 184, 1004-1023.	4.8	26
51	A Homeotic Mutation Changes Legume Nodule Ontogeny into Actinorhizal-Type Ontogeny. Plant Cell, 2020, 32, 1868-1885.	6.6	24
52	The Non-Legume Parasponia andersonii Mediates the Fitness of Nitrogen-Fixing Rhizobial Symbionts Under High Nitrogen Conditions. Frontiers in Plant Science, 2019, 10, 1779.	3.6	17
53	Efficiency of Agrobacterium rhizogenesâ€“mediated root transformation of Parasponia and Trema is temperature dependent. Plant Growth Regulation, 2012, 68, 459-465.	3.4	16
54	Draft Genome Sequence of the Nitrogen-Fixing Rhizobium sullae Type Strain IS123T Focusing on the Key Genes for Symbiosis with its Host Hedysarum coronarium L.. Frontiers in Microbiology, 2017, 8, 1348.	3.5	15

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55	Soil moisture deficit selects for desiccation tolerant Rhizobium leguminosarum bv. trifolii. Applied Soil Ecology, 2016, 108, 371-380.	4.3	13
56	The Effect of Exogenous Nitrate on LCO Signalling, Cytokinin Accumulation, and Nodule Initiation in Medicago truncatula. Genes, 2021, 12, 988.	2.4	13
57	Plantâ€driven genome selection of arbuscular mycorrhizal fungi. Molecular Plant Pathology, 2014, 15, 531-534.	4.2	12
58	Transforming, Genome Editing and Phenotyping the Nitrogen-fixing Tropical Cannabaceae Tree Parasponia andersonii. Journal of Visualized Experiments, 2019, , .	0.3	11
59	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
60	Specificity in legume nodule symbiosis. Science, 2020, 369, 620-621.	12.6	9
61	High spatial variation in population size and symbiotic performance of Rhizobium leguminosarum bv. trifolii with white clover in New Zealand pasture soils. PLoS ONE, 2018, 13, e0192607.	2.5	9
62	Mycorrhizal Symbiosis: Ancient Signalling Mechanisms Co-opted. Current Biology, 2012, 22, R997-R999.	3.9	8
63	Phylogeographic distribution of rhizobia nodulating common bean (<i>Phaseolus vulgaris</i> L.) in Ethiopia. FEMS Microbiology Ecology, 2021, 97, .	2.7	8
64	Fluorescent In Situ Hybridization (FISH) on Pachytene Chromosomes as a Tool for Genome Characterization. Methods in Molecular Biology, 2013, 1069, 15-24.	0.9	6
65	Transcriptional Regulation of Nutrient Exchange in Arbuscular Mycorrhizal Symbiosis. Molecular Plant, 2018, 11, 1421-1423.	8.3	6
66	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
67	Draft Genome Sequence of Ochrobactrum intermedium Strain SA148, a Plant Growth-Promoting Desert Rhizobacterium. Genome Announcements, 2017, 5, .	0.8	5
68	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
69	The Medicago truncatula nodule identity gene MtNOOT1 is required for coordinated apical-basal development of the root. BMC Plant Biology, 2019, 19, 571.	3.6	5
70	GeneNoteBook, a collaborative notebook for comparative genomics. Bioinformatics, 2019, 35, 4779-4781.	4.1	3
71	The BOPâ€type coâ€transcriptional regulator NODULE ROOT1 promotes stem secondary growth of the tropical Cannabaceae tree Parasponia andersonii. Plant Journal, 2021, 106, 1366-1386.	5.7	3
72	High Salt Levels Reduced Dissimilarities in Root-Associated Microbiomes of Two Barley Genotypes. Molecular Plant-Microbe Interactions, 2022, 35, 592-603.	2.6	3

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73	Pseudogenization of the rhizobium-responsive EXOPOLYSACCHARIDE RECEPTOR in Parasponia is a rare event in nodulating plants. BMC Plant Biology, 2022, 22, 225.	3.6	3
74	Medicago truncatula Rop GTPases expression in young nodules. Journal of Biological Researches, 2005, 10, 89-92.	0.1	0