Thomas J Baum

List of Publications by Year
in descending order

		36303	37204
102	9,800	51	96
papers	citations	h-index	g-index

108	108	108	5092
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Genome sequence of the metazoan plant-parasitic nematode Meloidogyne incognita. Nature Biotechnology, 2008, 26, 909-915.	17.5	1,012
2	Engineering broad root-knot resistance in transgenic plants by RNAi silencing of a conserved and essential root-knot nematode parasitism gene. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14302-14306.	7.1	543
3	A soybean cyst nematode resistance gene points to a new mechanism of plant resistance to pathogens. Nature, 2012, 492, 256-260.	27.8	332
4	Getting to the roots of parasitism by nematodes. Trends in Parasitology, 2004, 20, 134-141.	3.3	273
5	Nematode Parasitism Genes. Annual Review of Phytopathology, 2000, 38, 365-396.	7.8	270
6	Nematode effector proteins: an emerging paradigm of parasitism. New Phytologist, 2013, 199, 879-894.	7.3	269
7	The Parasitome of the Phytonematode Heterodera glycines. Molecular Plant-Microbe Interactions, 2003, 16, 720-726.	2.6	257
8	Developmental Transcript Profiling of Cyst Nematode Feeding Cells in Soybean Roots. Molecular Plant-Microbe Interactions, 2007, 20, 510-525.	2.6	240
9	Parasitism proteins in nematodeâ€“plant interactions. Current Opinion in Plant Biology, 2008, 11, 360-366.	7.1	223
10	A parasitism gene from a plant-parasitic nematode with function similar toCLAVATA3/ESR (CLE)ofArabidopsis thaliana. Molecular Plant Pathology, 2005, 6, 187-191.	4.2	215
11	The Arabidopsis MicroRNA396-<i>GRF1/GRF3</i> Regulatory Module Acts as a Developmental Regulator in the Reprogramming of Root Cells during Cyst Nematode Infection Â Â. Plant Physiology, 2012, 159, 321-335.	4.8	214
12	A Profile of Putative Parasitism Genes Expressed in the Esophageal Gland Cells of the Root-knot Nematode Meloidogyne incognita. Molecular Plant-Microbe Interactions, 2003, 16, 376-381.	2.6	211
13	Cellulose Binding Protein from the Parasitic Nematode <i>Heterodera schachtii</i> Interacts with <i>Arabidopsis</i> Pectin Methylesterase: Cooperative Cell Wall Modification during Parasitism. Plant Cell, 2008, 20, 3080-3093.	6.6	201
14	Parallel Genome-Wide Expression Profiling of Host and Pathogen During Soybean Cyst Nematode Infection of Soybean. Molecular Plant-Microbe Interactions, 2007, 20, 293-305.	2.6	197
15	A Root-Knot Nematode Secretory Peptide Functions as a Ligand for a Plant Transcription Factor. Molecular Plant-Microbe Interactions, 2006, 19, 463-470.	2.6	189
16	Arabidopsis Spermidine Synthase Is Targeted by an Effector Protein of the Cyst Nematode <i>Heterodera schachtii</i>. Plant Physiology, 2010, 152, 968-984.	4.8	189
17	Isolation of a cDNA Encoding a Î²-1,4-endoglucanase in the Root-Knot Nematode Meloidogyne incognita and Expression Analysis During Plant Parasitism. Molecular Plant-Microbe Interactions, 1999, 12, 585-591.	2.6	188
18	Manipulation of Plant Cells by Cyst and Root-Knot Nematode Effectors. Molecular Plant-Microbe Interactions, 2013, 26, 9-16.	2.6	184

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19	Arabidopsisgene expression changes during cyst nematode parasitism revealed by statistical analyses of microarray expression profiles. Plant Journal, 2003, 33, 911-921.	5.7	180
20	Signal Peptide-Selection of cDNA Cloned Directly from the Esophageal Gland Cells of the Soybean Cyst Nematode Heterodera glycines. Molecular Plant-Microbe Interactions, 2001, 14, 536-544.	2.6	156
21	Effective and specific in planta RNAi in cyst nematodes: expression interference of four parasitism genes reduces parasitic success. Journal of Experimental Botany, 2009, 60, 315-324.	4.8	144
22	The Novel Cyst Nematode Effector Protein 19C07 Interacts with the Arabidopsis Auxin Influx Transporter LAX3 to Control Feeding Site Development Â Â. Plant Physiology, 2011, 155, 866-880.	4.8	141
23	Susceptibility to the Sugar Beet Cyst Nematode Is Modulated by Ethylene Signal Transduction in Arabidopsis thaliana. Molecular Plant-Microbe Interactions, 2001, 14, 1206-1212.	2.6	134
24	Genomic organization of four Î²-1,4-endoglucanase genes in plant-parasitic cyst nematodes and its evolutionary implications. Gene, 1998, 220, 61-70.	2.2	128
25	<i>Arabidopsis</i> Small RNAs and Their Targets During Cyst Nematode Parasitism. Molecular Plant-Microbe Interactions, 2008, 21, 1622-1634.	2.6	124
26	Dual roles for the variable domain in protein trafficking and hostâ€specific recognition of <i>Heterodera glycines</i> CLE effector proteins. New Phytologist, 2010, 187, 1003-1017.	7.3	116
27	A nematode effector protein similar to annexins in host plants. Journal of Experimental Botany, 2010, 61, 235-248.	4.8	114
28	In Planta Localization of a Î²-1,4-Endoglucanase Secreted by Heterodera glycines. Molecular Plant-Microbe Interactions, 1999, 12, 64-67.	2.6	113
29	Nematode CLE signaling in Arabidopsis requires CLAVATA2 and CORYNE. Plant Journal, 2011, 65, 430-440.	5.7	108
30	Identification of Putative Parasitism Genes Expressed in the Esophageal Gland Cells of the Soybean Cyst Nematode Heterodera glycines. Molecular Plant-Microbe Interactions, 2001, 14, 1247-1254.	2.6	107
31	The Soybean <i>Rhg1</i> Locus for Resistance to the Soybean Cyst Nematode <i>Heterodera glycines</i> Regulates the Expression of a Large Number of Stress- and Defense-Related Genes in Degenerating Feeding Cells Â Â Â. Plant Physiology, 2011, 155, 1960-1975.	4.8	102
32	A ubiquitin carboxyl extension protein secreted from a plantâ€parasitic nematode <i>Globodera rostochiensis</i> is cleaved <i>in planta</i> to promote plant parasitism. Plant Journal, 2013, 74, 185-196.	5.7	98
33	Identification of potential host plant mimics of CLAVATA3/ESR (CLE)â€like peptides from the plantâ€parasitic nematode <i>Heterodera schachtii</i>. Molecular Plant Pathology, 2011, 12, 177-186.	4.2	95
34	Developmental Expression of Secretory Î²-1,4-endoglucanases in the Subventral Esophageal Glands of Heterodera glycines. Molecular Plant-Microbe Interactions, 1999, 12, 663-669.	2.6	87
35	The <i>8D05</i> Parasitism Gene of <i>Meloidogyne incognita</i> Is Required for Successful Infection of Host Roots. Phytopathology, 2013, 103, 175-181.	2.2	86
36	Expression of an Arabidopsis phosphoglycerate mutase homologue is localized to apical meristems, regulated by hormones, and induced by sedentary plant-parasitic nematodes. Plant Molecular Biology, 2003, 53, 513-530.	3.9	85

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37	The Cyst Nematode Effector Protein 10A07 Targets and Recruits Host Posttranslational Machinery to Mediate Its Nuclear Trafficking and to Promote Parasitism in Arabidopsis. Plant Cell, 2015, 27, 891-907.	6.6	84
38	The interaction of the novel 30C02 cyst nematode effector protein with a plant Î²-1,3-endoglucanase may suppress host defence to promote parasitism. Journal of Experimental Botany, 2012, 63, 3683-3695.	4.8	80
39	A Small Cysteine-Rich Protein from the Asian Soybean Rust Fungus, Phakopsora pachyrhizi, Suppresses Plant Immunity. PLoS Pathogens, 2016, 12, e1005827.	4.7	79
40	GmEREBP1 Is a Transcription Factor Activating Defense Genes in Soybean and Arabidopsis. Molecular Plant-Microbe Interactions, 2007, 20, 107-119.	2.6	78
41	Synchronization of Developmental Processes and Defense Signaling by Growth Regulating Transcription Factors. PLoS ONE, 2014, 9, e98477.	2.5	76
42	Molecular characterisation and expression of two venom allergen-like protein genes in Heterodera glycines. International Journal for Parasitology, 2001, 31, 1617-1625.	3.1	75
43	Active uptake of cyst nematode parasitism proteins into the plant cell nucleus. International Journal for Parasitology, 2007, 37, 1269-1279.	3.1	73
44	Two chorismate mutase genes from the root-knot nematodeMeloidogyne incognita. Molecular Plant Pathology, 2005, 6, 23-30.	4.2	66
45	Arabidopsis miR827 mediates postâ€transcriptional gene silencing of its ubiquitin E3 ligase target gene in the syncytium of the cyst nematode <i>Heterodera schachtii</i> to enhance susceptibility. Plant Journal, 2016, 88, 179-192.	5.7	65
46	Identification and Characterization of a Soybean Ethylene-Responsive Element-Binding Protein Gene Whose mRNA Expression Changes During Soybean Cyst Nematode Infection. Molecular Plant-Microbe Interactions, 2002, 15, 577-586.	2.6	64
47	Developmental expression and molecular analysis of two Meloidogyne incognita pectate lyase genes. International Journal for Parasitology, 2005, 35, 685-692.	3.1	63
48	Secrets in secretions: genes that control nematode parasitism of plants. Brazilian Journal of Plant Physiology, 2002, 14, 183-194.	0.5	59
49	Transcriptome analyses and virus induced gene silencing identify genes in the Rpp4-mediated Asian soybean rust resistance pathway. Functional Plant Biology, 2013, 40, 1029.	2.1	57
50	Eighteen New Candidate Effectors of the Phytonematode <i>Heterodera glycines</i> Produced Specifically in the Secretory Esophageal Gland Cells During Parasitism. Phytopathology, 2015, 105, 1362-1372.	2.2	57
51	Isolation of Whole Esophageal Gland Cells from Plant-Parasitic Nematodes for Transcriptome Analyses and Effector Identification. Molecular Plant-Microbe Interactions, 2013, 26, 31-35.	2.6	56
52	The genome of the soybean cyst nematode (Heterodera glycines) reveals complex patterns of duplications involved in the evolution of parasitism genes. BMC Genomics, 2019, 20, 119.	2.8	55
53	Suppression or Activation of Immune Responses by Predicted Secreted Proteins of the Soybean Rust Pathogen <i>Phakopsora pachyrhizi</i>. Molecular Plant-Microbe Interactions, 2018, 31, 163-174.	2.6	54
54	Differential Display Analysis of the Early Compatible Interaction Between Soybean and the Soybean Cyst Nematode. Molecular Plant-Microbe Interactions, 1998, 11, 1258-1263.	2.6	52

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55	Complex feedback regulations govern the expression of miRNA396 and its GRF target genes. Plant Signaling and Behavior, 2012, 7, 749-751.	2.4	52
56	Root-Knot and Cyst Nematode Parasitism Genes: The Molecular Basis of Plant Parasitism. , 2007, 28, 17-43.		49
57	Use of solid-phase subtractive hybridization for the identification of parasitism gene candidates from the root-knot nematode Meloidogyne incognita. Molecular Plant Pathology, 2004, 5, 217-222.	4.2	48
58	Mutation of a UDP-glucose-4-epimerase alters nematode susceptibility and ethylene responses in Arabidopsis roots. Plant Journal, 2004, 40, 712-724.	5.7	47
59	A <i>Plasmodium</i>â€like virulence effector of the soybean cyst nematode suppresses plant innate immunity. New Phytologist, 2016, 212, 444-460.	7.3	47
60	Changes in mRNA Abundance within Heterodera schachtii-Infected Roots of Arabidopsis thaliana. Molecular Plant-Microbe Interactions, 2000, 13, 309-315.	2.6	46
61	Cooperative Regulatory Functions of miR858 and MYB83 during Cyst Nematode Parasitism. Plant Physiology, 2017, 174, 1897-1912.	4.8	46
62	Characterisation and developmental expression of a chitinase gene in Heterodera glycines. International Journal for Parasitology, 2002, 32, 1293-1300.	3.1	43
63	Sequence mining and transcript profiling to explore cyst nematode parasitism. BMC Genomics, 2009, 10, 58.	2.8	43
64	Molecular characterisation and developmental expression of a cellulose-binding protein gene in the soybean cyst nematode Heterodera glycinesâ˜†. International Journal for Parasitology, 2004, 34, 1377-1383.	3.1	40
65	Divergent evolution of arrested development in the dauer stage of Caenorhabditis elegans and the infective stage of Heterodera glycines. Genome Biology, 2007, 8, R211.	9.6	40
66	The Arabidopsis bHLH25 and bHLH27 transcription factors contribute to susceptibility to the cyst nematode <i>Heterodera schachtii</i>. Plant Journal, 2011, 65, 319-328.	5.7	40
67	The novel cyst nematode effector protein 30D08 targets host nuclear functions to alter gene expression in feeding sites. New Phytologist, 2018, 219, 697-713.	7.3	38
68	Identification of candidate effector genes of <i>Pratylenchus penetrans</i>. Molecular Plant Pathology, 2018, 19, 1887-1907.	4.2	36
69	A cyst nematode effector binds to diverse plant proteins, increases nematode susceptibility and affects root morphology. Molecular Plant Pathology, 2016, 17, 832-844.	4.2	32
70	A role for Arabidopsis growth-regulating factors 1 and 3 in growthâ€“stress antagonism. Journal of Experimental Botany, 2020, 71, 1402-1417.	4.8	32
71	Novel global effector mining from the transcriptome of early life stages of the soybean cyst nematode Heterodera glycines. Scientific Reports, 2018, 8, 2505.	3.3	31
72	The plantâ€parasitic cyst nematode effector GLAND4 is a DNAâ€binding protein. Molecular Plant Pathology, 2018, 19, 2263-2276.	4.2	31

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73	Large tandem duplications affect gene expression, 3D organization, and plantâ€"pathogen response. Genome Research, 2020, 30, 1583-1592.	5.5	31
74	Arabidopsis peroxidase AtPRX53 influences cell elongation and susceptibility to<i>Heterodera schachtii</i>. Plant Signaling and Behavior, 2011, 6, 1778-1786.	2.4	30
75	An Effector from the Cyst Nematode Heterodera schachtii Derepresses Host rRNA Genes by Altering Histone Acetylation. Plant Cell, 2018, 30, 2795-2812.	6.6	30
76	Reâ€targeting of a plant defense protease by a cyst nematode effector. Plant Journal, 2019, 98, 1000-1014.	5.7	30
77	A virus-induced gene silencing method to study soybean cyst nematode parasitism in Glycine max. BMC Research Notes, 2013, 6, 255.	1.4	28
78	Homeostasis in the soybean miRNA396â€"<i>GRF</i>network is essential for productive soybean cyst nematode infections. Journal of Experimental Botany, 2019, 70, 1653-1668.	4.8	27
79	STATAWAARS: a promoter motif associated with spatial expression in the major effector-producing tissues of the plant-parasitic nematode Bursaphelenchus xylophilus. BMC Genomics, 2018, 19, 553.	2.8	26
80	â€œCyst-ainedâ€•research into Heterodera parasitism. PLoS Pathogens, 2018, 14, e1006791.	4.7	26
81	The use of DNA microarrays for the developmental expression analysis of cDNAs from the oesophageal gland cell region ofHeterodera glycines. Molecular Plant Pathology, 2002, 3, 261-270.	4.2	25
82	Quantitative Detection of Double-Stranded RNA-Mediated Gene Silencing of Parasitism Genes in Heterodera glycines. Journal of Nematology, 2007, 39, 145-52.	0.9	25
83	Screening soybean cyst nematode effectors for their ability to suppress plant immunity. Molecular Plant Pathology, 2020, 21, 1240-1247.	4.2	24
84	Phytonematode peptide effectors exploit a host postâ€translational trafficking mechanism to the ER using a novel translocation signal. New Phytologist, 2021, 229, 563-574.	7.3	24
85	Recognition and Response in Plantâ€"Nematode Interactions. Annual Review of Phytopathology, 2022, 60, 143-162.	7.8	23
86	Temporal and spatial <i>Bean pod mottle virus</i>â€induced gene silencing in soybean. Molecular Plant Pathology, 2012, 13, 1140-1148.	4.2	19
87	Horizontal gene transfer of acetyltransferases, invertases and chorismate mutases from different bacteria to diverse recipients. BMC Evolutionary Biology, 2016, 16, 74.	3.2	19
88	Homologous soybean and Arabidopsis genes share responsiveness to cyst nematode infection. Molecular Plant Pathology, 2004, 5, 409-423.	4.2	16
89	A new esophageal gland transcriptome reveals signatures of large scale de novo effector birth in the root lesion nematode Pratylenchus penetrans. BMC Genomics, 2020, 21, 738.	2.8	15
90	Sequence and Spatiotemporal Expression Analysis of CLE-Motif Containing Genes from the Reniform Nematode (Rotylenchulus reniformis Linford & Oliveira). Journal of Nematology, 2015, 47, 159-65.	0.9	13

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91	Parasitism Genes: What They Reveal about Parasitism. Plant Cell Monographs, 2009, , 15-44.	0.4	12
92	Gene Silencing in Nematode Feeding Sites. Advances in Botanical Research, 2015, 73, 221-239.	1.1	12
93	A chromosomal assembly of the soybean cyst nematode genome. Molecular Ecology Resources, 2021, 21, 2407-2422.	4.8	10
94	SCNBase: a genomics portal for the soybean cyst nematode (Heterodera glycines). Database: the Journal of Biological Databases and Curation, 2019, 2019, .	3.0	9
95	Targeted suppression of soybean BAG6â€induced cell death in yeast by soybean cyst nematode effectors. Molecular Plant Pathology, 2020, 21, 1227-1239.	4.2	9
96	Toward genetic modification of plant-parasitic nematodes: delivery of macromolecules to adults and expression of exogenous mRNA in second stage juveniles. G3: Genes, Genomes, Genetics, 2021, 11, .	1.8	9
97	Esophageal Gland RNA-Seq Resource of a Virulent and Avirulent Population of the Soybean Cyst Nematode <i>Heterodera glycines</i>. Molecular Plant-Microbe Interactions, 2021, 34, 1084-1087.	2.6	7
98	Genomics of the Soybean Cyst Nematode-Soybean Interaction. , 2008, , 321-341.		7
99	Sequence divergences between cyst nematode effector protein orthologs may contribute to host specificity. Plant Signaling and Behavior, 2010, 5, 187-189.	2.4	5
100	Heterodera glycines utilizes promiscuous spliced leaders and demonstrates a unique preference for a species-specific spliced leader over C. elegans SL1. Scientific Reports, 2019, 9, 1356.	3.3	5
101	miR778 mediates gene expression, histone modification, and DNA methylation during cyst nematode parasitism. Plant Physiology, 2022, 189, 2432-2453.	4.8	4
102	Targeted transcriptomics reveals signatures of large-scale independent origins and concerted regulation of effector genes in Radopholus similis. PLoS Pathogens, 2021, 17, e1010036.	4.7	2