Thomas J Baum

List of Publications by Year
in descending order

102 papers	9,800 citations	36303 51 h-index	37204 96 g-index
108 all docs	108 docs citations	108 times ranked	5092 citing authors

#	Article	IF	Citations
1	Recognition and Response in Plantâ€“Nematode Interactions. Annual Review of Phytopathology, 2022, 60, 143-162.	7.8	23
2	miR778 mediates gene expression, histone modification, and DNA methylation during cyst nematode parasitism. Plant Physiology, 2022, 189, 2432-2453.	4.8	4
3	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
4	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
5	A chromosomal assembly of the soybean cyst nematode genome. Molecular Ecology Resources, 2021, 21, 2407-2422.	4.8	10
6	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
7	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
8	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
9	Large tandem duplications affect gene expression, 3D organization, and plantâ€“pathogen response. Genome Research, 2020, 30, 1583-1592.	5.5	31
10	Screening soybean cyst nematode effectors for their ability to suppress plant immunity. Molecular Plant Pathology, 2020, 21, 1240-1247.	4.2	24
11	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
12	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
13	SCNBase: a genomics portal for the soybean cyst nematode (Heterodera glycines). Database: the Journal of Biological Databases and Curation, 2019, 2019, .	3.0	9
14	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
15	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
16	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
17	Reâ€targeting of a plant defense protease by a cyst nematode effector. Plant Journal, 2019, 98, 1000-1014.	5.7	30
18	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

#	Article	IF	Citations
19	Identification of candidate effector genes of <i>Pratylenchus penetrans</i>. Molecular Plant Pathology, 2018, 19, 1887-1907.	4.2	36
20	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
21	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
22	The plantâ€parasitic cyst nematode effector GLAND4 is a DNAâ€binding protein. Molecular Plant Pathology, 2018, 19, 2263-2276.	4.2	31
23	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
24	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
25	â€œCyst-ainedâ€•research into Heterodera parasitism. PLoS Pathogens, 2018, 14, e1006791.	4.7	26
26	Cooperative Regulatory Functions of miR858 and MYB83 during Cyst Nematode Parasitism. Plant Physiology, 2017, 174, 1897-1912.	4.8	46
27	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
28	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
29	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
30	Horizontal gene transfer of acetyltransferases, invertases and chorismate mutases from different bacteria to diverse recipients. BMC Evolutionary Biology, 2016, 16, 74.	3.2	19
31	A Small Cysteine-Rich Protein from the Asian Soybean Rust Fungus, Phakopsora pachyrhizi, Suppresses Plant Immunity. PLoS Pathogens, 2016, 12, e1005827.	4.7	79
32	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
33	Gene Silencing in Nematode Feeding Sites. Advances in Botanical Research, 2015, 73, 221-239.	1.1	12
34	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
35	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
36	Synchronization of Developmental Processes and Defense Signaling by Growth Regulating Transcription Factors. PLoS ONE, 2014, 9, e98477.	2.5	76

#	Article	IF	Citations
37	A virus-induced gene silencing method to study soybean cyst nematode parasitism in Glycine max. BMC Research Notes, 2013, 6, 255.	1.4	28
38	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
39	Manipulation of Plant Cells by Cyst and Root-Knot Nematode Effectors. Molecular Plant-Microbe Interactions, 2013, 26, 9-16.	2.6	184
40	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
41	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
42	Nematode effector proteins: an emerging paradigm of parasitism. New Phytologist, 2013, 199, 879-894.	7.3	269
43	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
44	Complex feedback regulations govern the expression of miRNA396 and its GRF target genes. Plant Signaling and Behavior, 2012, 7, 749-751.	2.4	52
45	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
46	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
47	A soybean cyst nematode resistance gene points to a new mechanism of plant resistance to pathogens. Nature, 2012, 492, 256-260.	27.8	332
48	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
49	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
50	Nematode CLE signaling in Arabidopsis requires CLAVATA2 and CORYNE. Plant Journal, 2011, 65, 430-440.	5.7	108
51	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
52	Arabidopsis peroxidase AtPRX53 influences cell elongation and susceptibility to<i>Heterodera schachtii</i>. Plant Signaling and Behavior, 2011, 6, 1778-1786.	2.4	30
53	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
54	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

#	Article	IF	Citations
55	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
56	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
57	A nematode effector protein similar to annexins in host plants. Journal of Experimental Botany, 2010, 61, 235-248.	4.8	114
58	Sequence divergences between cyst nematode effector protein orthologs may contribute to host specificity. Plant Signaling and Behavior, 2010, 5, 187-189.	2.4	5
59	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
60	Parasitism Genes: What They Reveal about Parasitism. Plant Cell Monographs, 2009, , 15-44.	0.4	12
61	Sequence mining and transcript profiling to explore cyst nematode parasitism. BMC Genomics, 2009, 10, 58.	2.8	43
62	Genome sequence of the metazoan plant-parasitic nematode Meloidogyne incognita. Nature Biotechnology, 2008, 26, 909-915.	17.5	1,012
63	Parasitism proteins in nematodeâ€"plant interactions. Current Opinion in Plant Biology, 2008, 11, 360-366.	7.1	223
64	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
65	<i>Arabidopsis</i> Small RNAs and Their Targets During Cyst Nematode Parasitism. Molecular Plant-Microbe Interactions, 2008, 21, 1622-1634.	2.6	124
66	Genomics of the Soybean Cyst Nematode-Soybean Interaction. , 2008, , 321-341.		7
67	GmEREBP1 Is a Transcription Factor Activating Defense Genes in Soybean and Arabidopsis. Molecular Plant-Microbe Interactions, 2007, 20, 107-119.	2.6	78
68	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
69	Developmental Transcript Profiling of Cyst Nematode Feeding Cells in Soybean Roots. Molecular Plant-Microbe Interactions, 2007, 20, 510-525.	2.6	240
70	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
71	Root-Knot and Cyst Nematode Parasitism Genes: The Molecular Basis of Plant Parasitism. , 2007, 28, 17-43.		49
72	Active uptake of cyst nematode parasitism proteins into the plant cell nucleus. International Journal for Parasitology, 2007, 37, 1269-1279.	3.1	73

#	Article	IF	Citations
73	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
74	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
75	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
76	Two chorismate mutase genes from the root-knot nematodeMeloidogyne incognita. Molecular Plant Pathology, 2005, 6, 23-30.	4.2	66
77	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
78	Developmental expression and molecular analysis of two Meloidogyne incognita pectate lyase genes. International Journal for Parasitology, 2005, 35, 685-692.	3.1	63
79	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
80	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
81	Homologous soybean and Arabidopsis genes share responsiveness to cyst nematode infection. Molecular Plant Pathology, 2004, 5, 409-423.	4.2	16
82	Getting to the roots of parasitism by nematodes. Trends in Parasitology, 2004, 20, 134-141.	3.3	273
83	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
84	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
85	Arabidopsisgene expression changes during cyst nematode parasitism revealed by statistical analyses of microarray expression profiles. Plant Journal, 2003, 33, 911-921.	5.7	180
86	The Parasitome of the Phytonematode Heterodera glycines. Molecular Plant-Microbe Interactions, 2003, 16, 720-726.	2.6	257
87	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
88	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
89	Secrets in secretions: genes that control nematode parasitism of plants. Brazilian Journal of Plant Physiology, 2002, 14, 183-194.	0.5	59
90	Characterisation and developmental expression of a chitinase gene in Heterodera glycines. International Journal for Parasitology, 2002, 32, 1293-1300.	3.1	43

#	Article	IF	Citations
91	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
92	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
93	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
94	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
95	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
96	Changes in mRNA Abundance within Heterodera schachtii-Infected Roots of Arabidopsis thaliana. Molecular Plant-Microbe Interactions, 2000, 13, 309-315.	2.6	46
97	Nematode Parasitism Genes. Annual Review of Phytopathology, 2000, 38, 365-396.	7.8	270
98	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
99	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
100	In Planta Localization of a Î²-1,4-Endoglucanase Secreted by Heterodera glycines. Molecular Plant-Microbe Interactions, 1999, 12, 64-67.	2.6	113
101	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
102	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