Florian M W Grundler

List of Publications by Year
in descending order

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114 papers	5,462 citations	81900 39 h-index	91884 69 g-index
120 all docs	120 docs citations	120 times ranked	4020 citing authors

#	Article	IF	Citations
1	Positional Cloning of a Gene for Nematode Resistance in Sugar Beet. Science, 1997, 275, 832-834.	12.6	451
2	Arabidopsis thalianaas a new model host for plant-parasitic nematodes. Plant Journal, 1991, 1, 245-254.	5.7	336
3	The transcriptome of syncytia induced by the cyst nematode <i>Heterodera schachtii</i> in Arabidopsis roots. Plant Journal, 2009, 57, 771-784.	5.7	211
4	The Parasitic Behaviour of Second-Stage Juveniles of Meloidogyne Incognita in Roots of Arabidopsis Thaliana. Nematologica, 1992, 38, 98-111.	0.2	202
5	Changes in the structure ofArabidopsis thaliana during female development of the plant-parasitic nematodeHeterodera schachtii. Protoplasma, 1996, 194, 103-116.	2.1	167
6	Metabolic profiling reveals local and systemic responses of host plants to nematode parasitism. Plant Journal, 2010, 62, 1058-1071.	5.7	152
7	A Role for AtWRKY23 in Feeding Site Establishment of Plant-Parasitic Nematodes. Plant Physiology, 2008, 148, 358-368.	4.8	145
8	Plant basal resistance to nematodes: an update. Journal of Experimental Botany, 2016, 67, 2049-2061.	4.8	137
9	Arabidopsis leucine-rich repeat receptorâ€“like kinase NILR1 is required for induction of innate immunity to parasitic nematodes. PLoS Pathogens, 2017, 13, e1006284.	4.7	135
10	Expansins are involved in the formation of nematode-induced syncytia in roots ofArabidopsis thaliana. Plant Journal, 2006, 48, 98-112.	5.7	132
11	PYK10, a Î²â€glucosidase located in the endoplasmatic reticulum, is crucial for the beneficial interaction between <i>Arabidopsis thaliana</i> and the endophytic fungus <i>Piriformospora indica</i>. Plant Journal, 2008, 54, 428-439.	5.7	127
12	Studies on the nutrient uptake by the beet cyst nematode<i>Heterodera schachtii</i>by<i>in situ</i>microinjection of fluorescent probes into the feeding structures in<i>Arabidopsis thaliana</i>. Parasitology, 1994, 109, 249-255.	1.5	126
13	Parasitic Worms Stimulate Host NADPH Oxidases to Produce Reactive Oxygen Species That Limit Plant Cell Death and Promote Infection. Science Signaling, 2014, 7, ra33.	3.6	125
14	A parasitic nematode releases cytokinin that controls cell division and orchestrates feeding site formation in host plants. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12669-12674.	7.1	113
15	Role of stressâ€related hormones in plant defence during early infection of the cyst nematode <i>Heterodera schachtii</i> in Arabidopsis. New Phytologist, 2015, 207, 778-789.	7.3	108
16	Regulatory sequences of Arabidopsis drive reporter gene expression in nematode feeding structures.. Plant Cell, 1997, 9, 2119-2134.	6.6	99
17	Pyk10, a seedling and root specific gene and promoter from Arabidopsis thaliana. Plant Science, 2001, 161, 337-346.	3.6	96
18	Bioactive secondary metabolites with multiple activities from a fungal endophyte. Microbial Biotechnology, 2017, 10, 175-188.	4.2	85

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19	Parasitic nematodes manipulate plant development to establish feeding sites. Current Opinion in Microbiology, 2018, 46, 102-108.	5.1	83
20	Title is missing!. European Journal of Plant Pathology, 1998, 104, 545-551.	1.7	82
21	Singleâ€cell damage elicits regional, nematodeâ€restricting ethylene responses in roots. EMBO Journal, 2019, 38, .	7.8	79
22	Induction of Phloem Unloading in Arabidopsis thaliana Roots by the Parasitic Nematode Heterodera schachtii. Plant Physiology, 1996, 112, 1421-1427.	4.8	71
23	Root endodermal barrier system contributes to defence against plantâ€parasitic cyst and rootâ€knot nematodes. Plant Journal, 2019, 100, 221-236.	5.7	69
24	The Companion Cell-Specific Arabidopsis Disaccharide Carrier AtSUC2 Is Expressed in Nematode-Induced Syncytia. Plant Physiology, 2003, 131, 61-69.	4.8	67
25	Sucrose supply to nematode-induced syncytia depends on the apoplasmic and symplasmic pathways. Journal of Experimental Botany, 2007, 58, 1591-1601.	4.8	63
26	Title is missing!. European Journal of Plant Pathology, 1997, 103, 113-124.	1.7	62
27	Localization of hydrogen peroxide during the defence response of Arabidopsis thaliana against the plant-parasitic nematode Heterodera glycines. Nematology, 1999, 1, 681-686.	0.6	61
28	Arabidopsis endoâ€1,4â€Î²â€glucanases are involved in the formation of root syncytia induced by <i>Heterodera schachtii</i>. Plant Journal, 2008, 53, 336-351.	5.7	60
29	Damage-associated responses of the host contribute to defence against cyst nematodes but not root-knot nematodes. Journal of Experimental Botany, 2017, 68, 5949-5960.	4.8	56
30	The Role of Callose Deposition Along Plasmodesmata in Nematode Feeding Sites. Molecular Plant-Microbe Interactions, 2010, 23, 549-557.	2.6	52
31	Myoâ€inositol oxygenase genes are involved in the development of syncytia induced by <i>Heterodera schachtii</i> in Arabidopsis roots. New Phytologist, 2009, 184, 457-472.	7.3	51
32	Ultrastructure of feeding plugs and feeding tubes formed by Heterodera schachtii. Nematology, 1999, 1, 363-374.	0.6	49
33	Next Generation Sequencing Based Transcriptome Analysis of Septic-Injury Responsive Genes in the Beetle Tribolium castaneum. PLoS ONE, 2013, 8, e52004.	2.5	49
34	Myoâ€inositol oxygenase is important for the removal of excess myoâ€inositol from syncytia induced by <i><scp>H</scp>eterodera schachtii</i> in <scp>A</scp>rabidopsis roots. New Phytologist, 2014, 201, 476-485.	7.3	46
35	Epigallocatechin gallate (EGCG) suppresses lipopolysaccharideâ€induced inflammatory bone resorption, and protects against alveolar bone loss in mice. FEBS Open Bio, 2015, 5, 522-527.	2.3	45
36	Starch Serves as Carbohydrate Storage in Nematode-Induced Syncytia. Plant Physiology, 2008, 146, 228-235.	4.8	44

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37	Diversity and activity of sugar transporters in nematode-induced root syncytia. Journal of Experimental Botany, 2009, 60, 3085-3095.	4.8	44
38	Fungal root endophytes of tomato from Kenya and their nematode biocontrol potential. Mycological Progress, 2016, 15, 1.	1.4	43
39	Divergent expression of cytokinin biosynthesis, signaling and catabolism genes underlying differences in feeding sites induced by cyst and rootâ€knot nematodes. Plant Journal, 2017, 92, 211-228.	5.7	42
40	Defence responses ofArabidopsis thalianaduring invasion and feeding site induction by the plantâ€"parasitic nematodeHeterodera glycines. Physiological and Molecular Plant Pathology, 1997, 50, 419-429.	2.5	41
41	Seminar: Heterodera Schachtii and Arabidopsis Thaliana, a Model Host-Parasite Interaction. Nematologica, 1992, 38, 488-493.	0.2	40
42	Piriformospora indica antagonizes cyst nematode infection and development in Arabidopsis roots. Journal of Experimental Botany, 2013, 64, 3763-3774.	4.8	38
43	Arabidopsis <i>HIPP27</i> is a host susceptibility gene for the beet cyst nematode <i>Heterodera schachtii</i>. Molecular Plant Pathology, 2018, 19, 1917-1928.	4.2	38
44	Ultrastructure and anatomy of nematode-induced syncytia in roots of susceptible and resistant sugar beet. Protoplasma, 2000, 211, 39-50.	2.1	37
45	Cell Wall Ingrowths in Nematode Induced Syncytia Require UGD2 and UGD3. PLoS ONE, 2012, 7, e41515.	2.5	37
46	Genome-Wide Association Study in Wheat Identifies Resistance to the Cereal Cyst Nematode <i>Heterodera filipjevi</i>. Phytopathology, 2016, 106, 1128-1138.	2.2	35
47	Imaging arbuscular mycorrhizal structures in living roots of <i>Nicotiana tabacum</i> by light, epifluorescence, and confocal laser scanning microscopy. Canadian Journal of Botany, 2001, 79, 231-237.	1.1	35
48	A Distinct Role of Pectate Lyases in the Formation of Feeding Structures Induced by Cyst and Root-Knot Nematodes. Molecular Plant-Microbe Interactions, 2014, 27, 901-912.	2.6	33
49	Heterodera schachtii Tyrosinase-like protein - a novel nematode effector modulating plant hormone homeostasis. Scientific Reports, 2017, 7, 6874.	3.3	33
50	Identification of Two <i>Meloidogyne hapla</i> Genes and an Investigation of Their Roles in the Plant-Nematode Interaction. Molecular Plant-Microbe Interactions, 2017, 30, 101-112.	2.6	32
51	Engineered Rhodobacter capsulatus as a Phototrophic Platform Organism for the Synthesis of Plant Sesquiterpenoids. Frontiers in Microbiology, 2019, 10, 1998.	3.5	31
52	Two tomato Î±-expansins show distinct spatial and temporal expression patterns during development of nematode-induced syncytia. Physiologia Plantarum, 2008, 132, 370-383.	5.2	30
53	Reâ€targeting of a plant defense protease by a cyst nematode effector. Plant Journal, 2019, 98, 1000-1014.	5.7	30
54	Females andÂmales ofÂroot-parasitic cyst nematodes induce different symplasmic connections between theirÂsyncytial feeding cells andÂtheÂphloem inÂArabidopsisÂthaliana. Plant Physiology and Biochemistry, 2006, 44, 430-433.	5.8	29

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55	How do nematodes get their sweets? Solute supply to sedentary plant-parasitic nematodes. Nematology, 2007, 9, 451-458.	0.6	29
56	Identification of reference genes for qRT-PCR studies of gene expression in giant cells and syncytia induced in Arabidopsis thaliana by Meloidogyne incognita and Heterodera schachtii. Nematology, 2007, 9, 317-323.	0.6	29
57	The application of Arabidopsis thaliana in studying tripartite interactions among plants, beneficial fungal endophytes and biotrophic plant-parasitic nematodes. Planta, 2015, 241, 1015-1025.	3.2	28
58	Beta-Cryptoxanthin Inhibits Lipopolysaccharide-Induced Osteoclast Differentiation and Bone Resorption via the Suppression of Inhibitor of NF-Î°B Kinase Activity. Nutrients, 2019, 11, 368.	4.1	28
59	An Arabidopsis ATPase gene involved in nematodeâ€induced syncytium development and abiotic stress responses. Plant Journal, 2013, 74, 852-866.	5.7	27
60	Identification and characterization of a putative protein disulfide isomerase (HsPDI) as an alleged effector of Heterodera schachtii. Scientific Reports, 2017, 7, 13536.	3.3	27
61	Isolation of a gene from Arabidopsis thaliana related to nematode feeding structures. Gene, 1999, 239, 163-172.	2.2	25
62	An improved procedure for isolation of high-quality RNA from nematode-infected Arabidopsis roots through laser capture microdissection. Plant Methods, 2016, 12, 25.	4.3	25
63	Novel Prodiginine Derivatives Demonstrate Bioactivities on Plants, Nematodes, and Fungi. Frontiers in Plant Science, 2020, 11, 579807.	3.6	22
64	Arabidopsis thaliana as a new model host for plant-parasitic nematodes. Plant Journal, 1991, 1, 245-254.	5.7	22
65	Physiology of Nematode Feeding and Feeding Sites. Developments in Plant Pathology, 1997, , 107-119.	0.1	21
66	In vivo observations of the arbuscular mycorrhizal fungus Glomus mosseae in roots by confocal laser scanning microscopy. Mycological Research, 1999, 103, 311-314.	2.5	20
67	Promoter analysis of pyk20, a gene from Arabidopsis thaliana. Plant Science, 2000, 157, 245-255.	3.6	20
68	Metabolism in Nematode Feeding Sites. Advances in Botanical Research, 2015, 73, 119-138.	1.1	20
69	Effects of <i>O</i>â€methylated (â^’)â€epigallocatechin gallate (<scp>EGCG</scp>) on <scp>LPS</scp>â€induced osteoclastogenesis, bone resorption, and alveolar bone loss in mice. FEBS Open Bio, 2017, 7, 1972-1981.	2.3	19
70	Activity profiling reveals changes in the diversity and activity of proteins in Arabidopsis roots in response to nematode infection. Plant Physiology and Biochemistry, 2015, 97, 36-43.	5.8	18
71	Identification and characterisation of resistance to the cereal cyst nematode Heterodera filipjevi in winter wheat. Nematology, 2016, 18, 377-402.	0.6	17
72	Host factors influence the sex of nematodes parasitizing roots of <scp><i>Arabidopsis thaliana</i></scp>. Plant, Cell and Environment, 2020, 43, 1160-1174.	5.7	17

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73	Mode of action of fluopyram in plant-parasitic nematodes. Scientific Reports, 2022, 12, .	3.3	17
74	Lutein, a carotenoid, suppresses osteoclastic bone resorption and stimulates bone formation in cultures. Bioscience, Biotechnology and Biochemistry, 2017, 81, 302-306.	1.3	16
75	Transcriptomic Analysis of Resistant and Susceptible Responses in a New Model Root-Knot Nematode Infection System Using Solanum torvum and Meloidogyne arenaria. Frontiers in Plant Science, 2021, 12, 680151.	3.6	16
76	Dissecting the Genetic Complexity of Fusarium Crown Rot Resistance in Wheat. Scientific Reports, 2020, 10, 3200.	3.3	15
77	Heterologous Production of Î²-Caryophyllene and Evaluation of Its Activity against Plant Pathogenic Fungi. Microorganisms, 2021, 9, 168.	3.6	15
78	Isolation of regulatory DNA regions related to differentiation of nematode feeding structures inArabidopsis thaliana. Physiological and Molecular Plant Pathology, 1998, 53, 177-193.	2.5	14
79	The <i>Arabidopsis thaliana</i> Sucrose Transporter Gene <i>AtSUC4</i> is Expressed in <i>Meloidogyne incognita</i>â€‘induced Root Galls. Journal of Phytopathology, 2009, 157, 256-261.	1.0	14
80	Lutein Enhances Bone Mass by Stimulating Bone Formation and Suppressing Bone Resorption in Growing Mice. Biological and Pharmaceutical Bulletin, 2017, 40, 716-721.	1.4	14
81	Effects of Polymethoxyflavonoids on Bone Loss Induced by Estrogen Deficiency and by LPS-Dependent Inflammation in Mice. Pharmaceuticals, 2018, 11, 7.	3.8	14
82	Low Molecular-Weight Curdlan, (1â†’3)-Î²-Glucan Suppresses TLR2-Induced RANKL-Dependent Bone Resorption. Biological and Pharmaceutical Bulletin, 2018, 41, 1282-1285.	1.4	13
83	The effector GpRbpâ€‘1 of <i>Globodera pallida</i> targets a nuclear HECT E3 ubiquitin ligase to modulate gene expression in the host. Molecular Plant Pathology, 2020, 21, 66-82.	4.2	13
84	Water and Nutrient Transport in Nematode Feeding Sites. , 2011, , 423-439.		13
85	Inhibition of acetyl-CoA carboxylase by spirotetramat causes growth arrest and lipid depletion in nematodes. Scientific Reports, 2020, 10, 12710.	3.3	12
86	Plasmodiophora brassicae -induced expression of pyk20, an Arabidopsis thaliana gene with glutamine-rich domain. Physiological and Molecular Plant Pathology, 2000, 56, 79-84.	2.5	11
87	Expansins are among plant cell wall modifying agents specifically expressed during development of nematode-induced syncytia. Plant Signaling and Behavior, 2008, 3, 969-971.	2.4	11
88	Genome-wide association study uncovers a novel QTL allele of AtS40-3 that affects the sex ratio of cyst nematodes in Arabidopsis. Journal of Experimental Botany, 2018, 69, 1805-1814.	4.8	11
89	African Nightshade and African Spinach Decrease Root-Knot Nematode and Potato Cyst Nematode Soil Infestation in Kenya. Plant Disease, 2019, 103, 1621-1630.	1.4	11
90	The Plant Sesquiterpene Nootkatone Efficiently Reduces Heterodera schachtii Parasitism by Activating Plant Defense. International Journal of Molecular Sciences, 2020, 21, 9627.	4.1	11

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91	Bacillus firmus I-1582 promotes plant growth and impairs infection and development of the cyst nematode Heterodera schachtii over two generations. Scientific Reports, 2021, 11, 14114.	3.3	11
92	The Role of MPK6 as Mediator of Ethylene/Jasmonic Acid Signaling in Serendipita indica-Colonized Arabidopsis Roots. Plant Molecular Biology Reporter, 2018, 36, 284-294.	1.8	9
93	Signatures of adaptation to a monocot host in the plantâ€parasitic cyst nematode Heterodera sacchari. Plant Journal, 2020, 103, 1263-1274.	5.7	9
94	Plant parasitic cyst nematodes redirect host indole metabolism via NADPH oxidaseâ€mediated ROS to promote infection. New Phytologist, 2021, 232, 318-331.	7.3	9
95	Arabidopsis Thaliana and Heterodera Schachtii: A Versatile Model to Characterize the Interaction Between Host Plants and Cyst Nematodes. , 1994, , 171-180.		8
96	Glutathione contributes to plant defence against parasitic cyst nematodes. Molecular Plant Pathology, 2022, 23, 1048-1059.	4.2	8
97	Amino acid permease 6 modulates host response to cyst nematodes in wheat and Arabidopsis. Nematology, 2018, 20, 737-750.	0.6	7
98	Transcriptome and Parasitome Analysis of Beet Cyst Nematode Heterodera schachtii. Scientific Reports, 2020, 10, 3315.	3.3	7
99	Sublethal fluazaindolizine doses inhibit development of the cyst nematode <scp><i>Heterodera schachtii</i></scp> during sedentary parasitism. Pest Management Science, 2021, 77, 3571-3580.	3.4	7
100	Expanding Nematode-Induced Syncytia. Plant Signaling and Behavior, 2006, 1, 223-224.	2.4	6
101	Arginine metabolism of Arabidopsis thaliana is modulated by Heterodera schachtii infection. Nematology, 2015, 17, 1027-1043.	0.6	5
102	Effects of exogenous amino acid applications on the plant-parasitic nematode Heterodera schachtii. Nematology, 2018, 20, 713-727.	0.6	5
103	Identification of a putative cation transporter gene from sugar beet (Beta vulgaris L.) by DDRT-PCR closely linked to the beet cyst nematode resistance gene Hs1pro-1. Plant Science, 2003, 165, 777-784.	3.6	4
104	Quantification of tomato expansins in nematode feeding sites of cyst and root-knot nematodes. Journal of Plant Diseases and Protection, 2008, 115, 263-272.	2.9	4
105	Activation of geminivirus Vâ€sense promoters in roots is restricted to nematode feeding sites. Molecular Plant Pathology, 2010, 11, 409-417.	4.2	4
106	Arabidopsis tonoplast intrinsic protein and vacuolar H+-adenosinetriphosphatase reflect vacuole dynamics during development of syncytia induced by the beet cyst nematode Heterodera schachtii. Protoplasma, 2019, 256, 419-429.	2.1	4
107	A new endophytic fungus CJAN1179 isolated from the Cholistan desert promotes lateral root growth in Arabidopsis and produces IAA through tryptophan-dependent pathway. Archives of Microbiology, 2022, 204, 181.	2.2	4
108	Starch as a sugar reservoir for nematode-induced syncytia. Plant Signaling and Behavior, 2008, 3, 961-962.	2.4	3

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109	In vitro life cycle of Heterodera sacchari on Pluronic gel. Nematology, 2019, 21, 573-579.	0.6	2
110	Heterodera schachtii glutathione peroxidase (HsGPx) is a parasitism protein. Journal of Plant Diseases and Protection, 2020, 127, 111-118.	2.9	2
111	Regulatory Sequences of Arabidopsis Drive Reporter Gene Expression in Nematode Feeding Structures. Plant Cell, 1997, 9, 2119.	6.6	1
112	Concerted Efforts To Develop Handles For Plant Parasitic Nematode Control. Developments in Plant Genetics and Breeding, 2000, 6, 159-167.	0.6	0
113	Report on the 43rd Annual Meeting of the DPG-Working Group Nematology. Journal of Plant Diseases and Protection, 2015, 122, 189-193.	2.9	0
114	Analyzing Cytokinin Responses During Plant-Nematode Interactions. Methods in Molecular Biology, 2017, 1569, 151-158.	0.9	0