Frank Lw W Takken

List of Publications by Year
in descending order

82 papers	7,923 citations	47006 47 h-index	58581 82 g-index
85 all docs	85 docs citations	85 times ranked	6537 citing authors

#	Article	IF	Citations
1	Susceptibility Genes 101: How to Be a Good Host. Annual Review of Phytopathology, 2014, 52, 551-581.	7.8	458
2	The Tomato R Gene Products I-2 and Mi-1 Are Functional ATP Binding Proteins with ATPase Activity. Plant Cell, 2002, 14, 2929-2939.	6.6	369
3	Resistance proteins: molecular switches of plant defence. Current Opinion in Plant Biology, 2006, 9, 383-390.	7.1	360
4	Structureâ€“function analysis of the NB-ARC domain of plant disease resistance proteins. Journal of Experimental Botany, 2008, 59, 1383-1397.	4.8	358
5	Mutations in the NB-ARC Domain of I-2 That Impair ATP Hydrolysis Cause Autoactivation. Plant Physiology, 2006, 140, 1233-1245.	4.8	276
6	Coiled-Coil Domain-Dependent Homodimerization of Intracellular Barley Immune Receptors Defines a Minimal Functional Module for Triggering Cell Death. Cell Host and Microbe, 2011, 9, 187-199.	11.0	269
7	The effector protein Avr2 of the xylemâ€colonizing fungus <i>Fusarium oxysporum</i> activates the tomato resistance protein Iâ€2 intracellularly. Plant Journal, 2009, 58, 970-978.	5.7	267
8	How to build a pathogen detector: structural basis of NB-LRR function. Current Opinion in Plant Biology, 2012, 15, 375-384.	7.1	261
9	The arms race between tomato and <i>Fusarium oxysporum</i>. Molecular Plant Pathology, 2010, 11, 309-314.	4.2	246
10	MITEs in the promoters of effector genes allow prediction of novel virulence genes in Fusarium oxysporum. BMC Genomics, 2013, 14, 119.	2.8	233
11	Structure-Function Analysis of Barley NLR Immune Receptor MLA10 Reveals Its Cell Compartment Specific Activity in Cell Death and Disease Resistance. PLoS Pathogens, 2012, 8, e1002752.	4.7	219
12	Structure and Function of Resistance Proteins in Solanaceous Plants. Annual Review of Phytopathology, 2007, 45, 43-72.	7.8	209
13	A longevity assurance gene homolog of tomato mediates resistance to Alternaria alternata f. sp. lycopersici toxins and fumonisin B1. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 4961-4966.	7.1	201
14	STANDing strong, resistance proteins instigators of plant defence. Current Opinion in Plant Biology, 2009, 12, 427-436.	7.1	177
15	An NB-LRR protein required for HR signalling mediated by both extra- and intracellular resistance proteins. Plant Journal, 2007, 50, 14-28.	5.7	175
16	The F-Box Protein ACRE189/ACIF1 Regulates Cell Death and Defense Responses Activated during Pathogen Recognition in Tobacco and Tomato. Plant Cell, 2008, 20, 697-719.	6.6	154
17	Cladosporium fulvum overcomes Cf-2-mediated resistance by producing truncated AVR2 elicitor proteins. Molecular Microbiology, 2002, 45, 875-884.	2.5	153
18	To Nibble at Plant Resistance Proteins. Science, 2009, 324, 744-746.	12.6	149

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19	<i>Arabidopsis</i> Small Ubiquitin-Like Modifier Paralogs Have Distinct Functions in Development and Defense Â Â. Plant Cell, 2010, 22, 1998-2016.	6.6	140
20	The <i>Fusarium oxysporum</i> Effector Six6 Contributes to Virulence and Suppresses I-2-Mediated Cell Death. Molecular Plant-Microbe Interactions, 2014, 27, 336-348.	2.6	139
21	A functional cloning strategy, based on a binary PVX-expression vector, to isolate HR-inducing cDNAs of plant pathogens. Plant Journal, 2000, 24, 275-283.	5.7	130
22	Heat shock protein 90 and its co-chaperone protein phosphatase 5 interact with distinct regions of the tomato I-2 disease resistance protein. Plant Journal, 2005, 43, 284-298.	5.7	130
23	Biocontrol by Fusarium oxysporum Using Endophyte-Mediated Resistance. Frontiers in Plant Science, 2020, 11, 37.	3.6	125
24	The Use of Agroinfiltration for Transient Expression of Plant Resistance and Fungal Effector Proteins in Nicotiana benthamiana Leaves. Methods in Molecular Biology, 2012, 835, 61-74.	0.9	121
25	The <i><scp>AVR</scp>2â€“<scp>SIX</scp>5</i> gene pair is required to activate <i>Iâ€2</i>â€mediated immunity in tomato. New Phytologist, 2015, 208, 507-518.	7.3	113
26	cDNA-AFLP Combined with Functional Analysis Reveals Novel Genes Involved in the Hypersensitive Response. Molecular Plant-Microbe Interactions, 2006, 19, 567-576.	2.6	107
27	Plant Resistance Genes: Their Structure, Function and Evolution. European Journal of Plant Pathology, 2000, 106, 699-713.	1.7	102
28	Does chromatin remodeling mark systemic acquired resistance?. Trends in Plant Science, 2009, 14, 286-294.	8.8	96
29	The effector repertoire of Fusarium oxysporum determines the tomato xylem proteome composition following infection. Frontiers in Plant Science, 2015, 6, 967.	3.6	95
30	How Phytohormones Shape Interactions between Plants and the Soil-Borne Fungus Fusarium oxysporum. Frontiers in Plant Science, 2016, 7, 170.	3.6	94
31	The Fusarium oxysporum Avr2-Six5 Effector Pair Alters Plasmodesmatal Exclusion Selectivity to Facilitate Cell-to-Cell Movement of Avr2. Molecular Plant, 2018, 11, 691-705.	8.3	94
32	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
33	The receptorâ€like kinase <i>SlSERK1</i> is required for <i>Miâ€1â€</i>mediated resistance to potato aphids in tomato. Plant Journal, 2011, 67, 459-471.	5.7	82
34	Methyl salicylate production in tomato affects biotic interactions. Plant Journal, 2010, 62, 124-134.	5.7	77
35	A one-step method to convert vectors into binary vectors suited for Agrobacterium-mediated transformation. Current Genetics, 2004, 45, 242-248.	1.7	76
36	Attenuation of Cf-Mediated Defense Responses at Elevated Temperatures Correlates With a Decrease in Elicitor-Binding Sites. Molecular Plant-Microbe Interactions, 2002, 15, 1040-1049.	2.6	75

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37	Involvement of salicylic acid, ethylene and jasmonic acid signalling pathways in the susceptibility of tomato to <i>Fusarium oxysporum</i>. Molecular Plant Pathology, 2017, 18, 1024-1035.	4.2	73
38	A second gene at the tomato Cf-4 locus confers resistance to Cladosporium fulvum through recognition of a novel avirulence determinant. Plant Journal, 1999, 20, 279-288.	5.7	73
39	Structureâ€“function analysis of the <i>Fusarium oxysporum</i> Avr2 effector allows uncoupling of its immuneâ€suppressing activity from recognition. New Phytologist, 2017, 216, 897-914.	7.3	72
40	Endophyte-Mediated Resistance in Tomato to Fusarium oxysporum Is Independent of ET, JA, and SA. Frontiers in Plant Science, 2019, 10, 979.	3.6	70
41	Identification andDs-tagged isolation of a new gene at theCf-4locus of tomato involved in disease resistance toCladosporium fulvumrace 5. Plant Journal, 1998, 14, 401-411.	5.7	69
42	Transcomplementation, but not Physical Association of the CC-NB-ARC and LRR Domains of Tomato R Protein Mi-1.2 is Altered by Mutations in the ARC2 Subdomain. Molecular Plant, 2008, 1, 401-410.	8.3	67
43	Xylem Sap Proteomics Reveals Distinct Differences Between R Gene- and Endophyte-Mediated Resistance Against Fusarium Wilt Disease in Tomato. Frontiers in Microbiology, 2018, 9, 2977.	3.5	63
44	Update on the domain architectures of NLRs and R proteins. Biochemical and Biophysical Research Communications, 2006, 339, 459-462.	2.1	62
45	Resistance proteins: scouts of the plant innate immune system. European Journal of Plant Pathology, 2008, 121, 243-255.	1.7	61
46	A nuclear localization for Avr2 from Fusarium oxysporum is required to activate the tomato resistance protein I-2. Frontiers in Plant Science, 2013, 4, 94.	3.6	61
47	The small heat shock protein 20 RSI2 interacts with and is required for stability and function of tomato resistance protein Iâ€2. Plant Journal, 2010, 63, 563-572.	5.7	52
48	The tomato xylem sap protein XSP10 is required for full susceptibility to Fusarium wilt disease. Journal of Experimental Botany, 2011, 62, 963-973.	4.8	52
49	Genome-wide functional analyses of plant coiledâ€“coil NLR-type pathogen receptors reveal essential roles of their N-terminal domain in oligomerization, networking, and immunity. PLoS Biology, 2018, 16, e2005821.	5.6	52
50	The potential of effectorâ€target genes in breeding for plant innate immunity. Microbial Biotechnology, 2013, 6, 223-229.	4.2	49
51	The intracellular immune receptor Rx1 regulates the DNA-binding activity of a Golden2-like transcription factor. Journal of Biological Chemistry, 2018, 293, 3218-3233.	3.4	44
52	SUMO-, MAPK-, and resistance protein-signaling converge at transcription complexes that regulate plant innate immunity. Plant Signaling and Behavior, 2010, 5, 1597-1601.	2.4	41
53	Dual Regulatory Roles of the Extended N Terminus for Activation of the Tomato Mi-1.2 Resistance Protein. Molecular Plant-Microbe Interactions, 2012, 25, 1045-1057.	2.6	41
54	Fusarium oxysporum colonizes the stem of resistant tomato plants, the extent varying with the R-gene present. European Journal of Plant Pathology, 2019, 154, 55-65.	1.7	41

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55	The powdery mildew-resistant Arabidopsis mlo2 mlo6 mlo12 triple mutant displays altered infection phenotypes with diverse types of phytopathogens. Scientific Reports, 2017, 7, 9319.	3.3	40
56	The Arabidopsis leucineâ€rich repeat receptorâ€like kinase MIK2 is a crucial component of early immune responses to a fungalâ€derived elicitor. New Phytologist, 2021, 229, 3453-3466.	7.3	38
57	The Potato Nucleotide-binding Leucine-rich Repeat (NLR) Immune Receptor Rx1 Is a Pathogen-dependent DNA-deforming Protein. Journal of Biological Chemistry, 2015, 290, 24945-24960.	3.4	36
58	The rootâ€invading pathogen <i>Fusarium oxysporum</i> targets patternâ€triggered immunity using both cytoplasmic and apoplastic effectors. New Phytologist, 2020, 227, 1479-1492.	7.3	35
59	A second gene at the tomato Cf-4 locus confers resistance to Cladosporium fulvum through recognition of a novel avirulence determinant. Plant Journal, 1999, 20, 279-288.	5.7	33
60	Specific recognition of AVR4 and AVR9 results in distinct patterns of hypersensitive cell death in tomato, but similar patterns of defence-related gene expression. Molecular Plant Pathology, 2001, 2, 77-86.	4.2	32
61	Uptake of the Fusarium Effector Avr2 by Tomato Is Not a Cell Autonomous Event. Frontiers in Plant Science, 2016, 7, 1915.	3.6	32
62	Genetic and physical analysis of a YAC contig spanning the fungal disease resistance locus Asc of tomato (Lycopersicon esculentum). Molecular Genetics and Genomics, 1999, 261, 50-57.	2.4	28
63	The molecular basis of co-evolution between Cladosporium fulvum and tomato. Antonie Van Leeuwenhoek, 2002, 81, 409-412.	1.7	22
64	The Tomato Nucleotide-binding Leucine-rich Repeat Immune Receptor I-2 Couples DNA-binding to Nucleotide-binding Domain Nucleotide Exchange. Journal of Biological Chemistry, 2016, 291, 1137-1147.	3.4	17
65	Number of Candidate Effector Genes in Accessory Genomes Differentiates Pathogenic From Endophytic Fusarium oxysporum Strains. Frontiers in Plant Science, 2021, 12, 761740.	3.6	17
66	The Conformation of a Plasma Membrane-Localized Somatic Embryogenesis Receptor Kinase Complex Is Altered by a Potato Aphid-Derived Effector. Plant Physiology, 2016, 171, 2211-2222.	4.8	16
67	Diminished Pathogen and Enhanced Endophyte Colonization upon CoInoculation of Endophytic and Pathogenic Fusarium Strains. Microorganisms, 2020, 8, 544.	3.6	15
68	Patternâ€triggered immunity restricts host colonization by endophytic fusaria, but does not affect endophyteâ€mediated resistance. Molecular Plant Pathology, 2021, 22, 204-215.	4.2	14
69	Activation of immune receptor Rx1 triggers distinct immune responses culminating in cell death after 4Âhours. Molecular Plant Pathology, 2019, 20, 575-588.	4.2	13
70	A DNA-Binding Bromodomain-Containing Protein Interacts with and Reduces Rx1-Mediated Immune Response to Potato Virus X. Plant Communications, 2020, 1, 100086.	7.7	10
71	Protection to Tomato Wilt Disease Conferred by the Nonpathogen <i>Fusarium oxysporum</i> Fo47 is More Effective Than that Conferred by Avirulent Strains. Phytopathology, 2021, 111, 253-257.	2.2	10
72	Proteinâ€"protein interactions as a proxy to monitor conformational changes and activation states of the tomato resistance protein I-2. Journal of Experimental Botany, 2012, 63, 3047-3060.	4.8	9

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73	Perturbation of nuclearâ€“cytosolic shuttling of Rx1 compromises extreme resistance and translational arrest of potato virus X transcripts. Plant Journal, 2021, 106, 468-479.	5.7	9
74	Editorial: Evolution and Functional Mechanisms of Plant Disease Resistance. Frontiers in Genetics, 2020, 11, 593240.	2.3	8
75	Unlike Many Disease Resistances, Rx1-Mediated Immunity to Potato Virus X Is Not Compromised at Elevated Temperatures. Frontiers in Genetics, 2020, 11, 417.	2.3	8
76	The Intracellularly Acting Effector Foa3 Suppresses Defense Responses When Infiltrated Into the Apoplast. Frontiers in Plant Science, 2022, 13, .	3.6	5
77	An Outlook on the Localisation and Structure-Function Relationships of R Proteins in Solanum. Potato Research, 2009, 52, 229-235.	2.7	3
78	Plant Autoimmunity: When Good Things Go Bad. Current Biology, 2017, 27, R361-R363.	3.9	3
79	From laboratory to field: applying the Fo47 biocontrol strain in potato fields. European Journal of Plant Pathology, 2020, 158, 645-654.	1.7	3
80	Transcript accumulation in a trifold interaction gives insight into mechanisms of biocontrol. New Phytologist, 2019, 224, 547-549.	7.3	2
81	Visualization and Quantification of Cell-to-cell Movement of Proteins in Nicotiana benthamiana. Bio-protocol, 2018, 8, e3114.	0.4	2
82	Resistance proteins: scouts of the plant innate immune system. , 2007, , 243-255.		1