Peter N Dodds

List of Publications by Year
in descending order

123 papers	18,057 citations	15504 65 h-index	16650 123 g-index
126 all docs	126 docs citations	126 times ranked	11791 citing authors

#	Article	IF	Citations
1	EffectorP 3.0: Prediction of Apoplastic and CytoplasmicÂEffectors in Fungi and Oomycetes. Molecular Plant-Microbe Interactions, 2022, 35, 146-156.	2.6	179
2	The stem rust effector protein AvrSr50 escapes Sr50 recognition by a substitution in a single surfaceâ€exposed residue. New Phytologist, 2022, 234, 592-606.	7.3	32
3	Seeing is believing: Exploiting advances in structural biology to understand and engineer plant immunity. Current Opinion in Plant Biology, 2022, 67, 102210.	7.1	35
4	A chromosome-level, fully phased genome assembly of the oat crown rust fungus <i>Puccinia coronata</i> f. sp. <i>avenae</i>: a resource to enable comparative genomics in the cereal rusts. G3: Genes, Genomes, Genetics, 2022, 12, .	1.8	12
5	Direct recognition of pathogen effectors by plant NLR immune receptors and downstream signalling. Essays in Biochemistry, 2022, 66, 471-483.	4.7	21
6	A five-transgene cassette confers broad-spectrum resistance to a fungal rust pathogen in wheat. Nature Biotechnology, 2021, 39, 561-566.	17.5	94
7	A recombined Sr26 and Sr61 disease resistance gene stack in wheat encodes unrelated NLR genes. Nature Communications, 2021, 12, 3378.	12.8	39
8	Genomics accelerated isolation of a new stem rust avirulence geneâ€“wheat resistance gene pair. Nature Plants, 2021, 7, 1220-1228.	9.3	67
9	Host Adaptation and Virulence in Heteroecious Rust Fungi. Annual Review of Phytopathology, 2021, 59, 403-422.	7.8	30
10	The stem rust fungus Puccinia graminis f. sp. tritici induces centromeric small RNAs during late infection that are associated with genome-wide DNA methylation. BMC Biology, 2021, 19, 203.	3.8	15
11	Induced proximity of a TIR signaling domain on a plant-mammalian NLR chimera activates defense in plants. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18832-18839.	7.1	82
12	How Target-Sequence Enrichment and Sequencing (TEnSeq) Pipelines Have Catalyzed Resistance Gene Cloning in the Wheat-Rust Pathosystem. Frontiers in Plant Science, 2020, 11, 678.	3.6	38
13	Evolution of virulence in rust fungi â€" multiple solutions to one problem. Current Opinion in Plant Biology, 2020, 56, 20-27.	7.1	54
14	Increased virulence of Puccinia coronata f. sp.avenae populations through allele frequency changes at multiple putative Avr loci. PLoS Genetics, 2020, 16, e1009291.	3.5	34
15	The Plant â€œResistosomeâ€: Structural Insights into Immune Signaling. Cell Host and Microbe, 2019, 26, 193-201.	11.0	76
16	Emergence of the Ug99 lineage of the wheat stem rust pathogen through somatic hybridisation. Nature Communications, 2019, 10, 5068.	12.8	121
17	NAD ⁺ cleavage activity by animal and plant TIR domains in cell death pathways. Science, 2019, 365, 793-799.	12.6	357
18	<i>De Novo</i> Genome Assembly and Comparative Genomics of the Barley Leaf Rust Pathogen <i>Puccinia hordei</i> Identifies Candidates for Three Avirulence Genes. G3: Genes, Genomes, Genetics, 2019, 9, 3263-3271.	1.8	25

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19	Flax rust infection transcriptomics reveals a transcriptional profile that may be indicative for rust Avr genes. PLoS ONE, 2019, 14, e0226106.	2.5	14
20	Structural and functional insights into the modulation of the activity of a flax cytokinin oxidase by flax rust effector AvrL567â€A. Molecular Plant Pathology, 2019, 20, 211-222.	4.2	15
21	A Near-Complete Haplotype-Phased Genome of the Dikaryotic Wheat Stripe Rust Fungus <i>Puccinia striiformis</i> f. sp. <i>tritici</i> Reveals High Interhaplotype Diversity. MBio, 2018, 9, .	4.1	112
22	Improved prediction of fungal effector proteins from secretomes with EffectorP 2.0. Molecular Plant Pathology, 2018, 19, 2094-2110.	4.2	350
23	<i>De Novo</i> Assembly and Phasing of Dikaryotic Genomes from Two Isolates of <i>Puccinia coronata</i> f. sp. <i>avenae</i> , the Causal Agent of Oat Crown Rust. MBio, 2018, 9, .	4.1	57
24	<scp>ApoplastP</scp>: prediction of effectors and plant proteins in the apoplast using machine learning. New Phytologist, 2018, 217, 1764-1778.	7.3	180
25	Crystal structure of the Melampsora lini effector AvrP reveals insights into a possible nuclear function and recognition by the flax disease resistance protein P. Molecular Plant Pathology, 2018, 19, 1196-1209.	4.2	24
26	Plant NLR Origins Traced Back to Green Algae. Trends in Plant Science, 2018, 23, 651-654.	8.8	11
27	Production of small cysteineâ€rich effector proteins in <i>Escherichia coli</i> for structural and functional studies. Molecular Plant Pathology, 2017, 18, 141-151.	4.2	32
28	Multiple functional self-association interfaces in plant TIR domains. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2046-E2052.	7.1	103
29	What Do We Know About NOD-Like Receptors in Plant Immunity?. Annual Review of Phytopathology, 2017, 55, 205-229.	7.8	106
30	LOCALIZER: subcellular localization prediction of both plant and effector proteins in the plant cell. Scientific Reports, 2017, 7, 44598.	3.3	340
31	Dancing with the Stars: An Asterid NLR Family. Trends in Plant Science, 2017, 22, 1003-1005.	8.8	4
32	Loss of <i>AvrSr50</i> by somatic exchange in stem rust leads to virulence for <i>Sr50</i> resistance in wheat. Science, 2017, 358, 1607-1610.	12.6	206
33	Computational Methods for Predicting Effectors in Rust Pathogens. Methods in Molecular Biology, 2017, 1659, 73-83.	0.9	19
34	An overview of genetic rust resistance: From broad to specific mechanisms. PLoS Pathogens, 2017, 13, e1006380.	4.7	81
35	Genome analysis and avirulence gene cloning using a high-density RADseq linkage map of the flax rust fungus, Melampsora lini. BMC Genomics, 2016, 17, 667.	2.8	59
36	Changing the Game: Using Integrative Genomics to Probe Virulence Mechanisms of the Stem Rust Pathogen Puccinia graminis f. sp. tritici. Frontiers in Plant Science, 2016, 7, 205.	3.6	45

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37	Starving the enemy. Science, 2016, 354, 1377-1378.	12.6	27
38	Cytosolic activation of cell death and stem rust resistance by cereal MLA-family CCâ€“NLR proteins. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10204-10209.	7.1	97
39	The CC domain structure from the wheat stem rust resistance protein Sr33 challenges paradigms for dimerization in plant NLR proteins. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12856-12861.	7.1	105
40	E<scp>ffector</scp>P: predicting fungal effector proteins from secretomes using machine learning. New Phytologist, 2016, 210, 743-761.	7.3	438
41	Comparative Analysis of the Flax Immune Receptors L6 and L7 Suggests an Equilibrium-Based Switch Activation Model. Plant Cell, 2016, 28, 146-159.	6.6	110
42	The wheat Sr50 gene reveals rich diversity at a cereal disease resistance locus. Nature Plants, 2015, 1, 15186.	9.3	209
43	Advances and Challenges in Computational Prediction of Effectors from Plant Pathogenic Fungi. PLoS Pathogens, 2015, 11, e1004806.	4.7	197
44	A recently evolved hexose transporter variant confers resistance to multiple pathogens in wheat. Nature Genetics, 2015, 47, 1494-1498.	21.4	575
45	Epidemiological and Evolutionary Outcomes in Gene-for-Gene and Matching Allele Models. Frontiers in Plant Science, 2015, 6, 1084.	3.6	62
46	Genomic Analysis of Xanthomonas translucens Pathogenic on Wheat and Barley Reveals Cross-Kingdom Gene Transfer Events and Diverse Protein Delivery Systems. PLoS ONE, 2014, 9, e84995.	2.5	39
47	A Bacterial Type III Secretion-Based Delivery System for Functional Assays of Fungal Effectors in Cereals. Methods in Molecular Biology, 2014, 1127, 277-290.	0.9	15
48	The Ins and Outs of Rust Haustoria. PLoS Pathogens, 2014, 10, e1004329.	4.7	90
49	The past, present and future of breeding rust resistant wheat. Frontiers in Plant Science, 2014, 5, 641.	3.6	453
50	Diversifying selection in the wheat stem rust fungus acts predominantly on pathogen-associated gene families and reveals candidate effectors. Frontiers in Plant Science, 2014, 5, 372.	3.6	45
51	A novel conserved mechanism for plant NLR protein pairs: the Ã¢â,¬Å"integrated decoyÃ¢â,¬Â•hypothesis. Frontiers in Plant Science, 2014, 5, 606.	3.6	324
52	The genome sequence and effector complement of the flax rust pathogen Melampsora lini. Frontiers in Plant Science, 2014, 5, 98.	3.6	126
53	Structural Basis for Assembly and Function of a Heterodimeric Plant Immune Receptor. Science, 2014, 344, 299-303.	12.6	300
54	A Bacterial Type III Secretion Assay for Delivery of Fungal Effector Proteins into Wheat. Molecular Plant-Microbe Interactions, 2014, 27, 255-264.	2.6	111

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55	The <scp>NB</scp>â€‹<scp>LRR</scp> proteins <scp>RGA</scp>4 and <scp>RGA</scp>5 interact functionally and physically to confer disease resistance. EMBO Journal, 2014, 33, 1941-1959.	7.8	310
56	Comparative genomics of Australian isolates of the wheat stem rust pathogen Puccinia graminis f. sp. tritici reveals extensive polymorphism in candidate effector genes. Frontiers in Plant Science, 2014, 5, 759.	3.6	98
57	The Gene <i>Sr33,</i> an Ortholog of Barley <i>Mla</i> Genes, Encodes Resistance to Wheat Stem Rust Race Ug99. Science, 2013, 341, 786-788.	12.6	370
58	Crystallization and preliminary X-ray diffraction analyses of the TIR domains of three TIRâ€"NBâ€"LRR proteins that are involved in disease resistance in<i>Arabidopsis thaliana</i>. Acta Crystallographica Section F: Structural Biology Communications, 2013, 69, 1275-1280.	0.7	5
59	Structures of the flax-rust effector AvrM reveal insights into the molecular basis of plant-cell entry and effector-triggered immunity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17594-17599.	7.1	75
60	Crystallization and preliminary X-ray diffraction analysis of the flax cytokinin oxidase LuCKX1.1. Acta Crystallographica Section F: Structural Biology Communications, 2013, 69, 1094-1096.	0.7	2
61	Strategies for Wheat Stripe Rust Pathogenicity Identified by Transcriptome Sequencing. PLoS ONE, 2013, 8, e67150.	2.5	110
62	Intramolecular Interaction Influences Binding of the Flax L5 and L6 Resistance Proteins to their AvrL567 Ligands. PLoS Pathogens, 2012, 8, e1003004.	4.7	93
63	N-Terminal Motifs in Some Plant Disease Resistance Proteins Function in Membrane Attachment and Contribute to Disease Resistance. Molecular Plant-Microbe Interactions, 2012, 25, 379-392.	2.6	62
64	Challenges and progress towards understanding the role of effectors in plantâ€"fungal interactions. Current Opinion in Plant Biology, 2012, 15, 477-482.	7.1	166
65	Rapid genetic change underpins antagonistic coevolution in a natural hostâ€pathogen metapopulation. Ecology Letters, 2012, 15, 425-435.	6.4	189
66	Plant Infection by Biotrophic Fungal and Oomycete Pathogens. Signaling and Communication in Plants, 2012, , 183-212.	0.7	7
67	Obligate biotrophy features unraveled by the genomic analysis of rust fungi. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9166-9171.	7.1	640
68	Showdown at the RXLR motif: Serious differences of opinion in how effector proteins from filamentous eukaryotic pathogens enter plant cells. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14381-14382.	7.1	76
69	Structural and Functional Analysis of a Plant Resistance Protein TIR Domain Reveals Interfaces for Self-Association, Signaling, and Autoregulation. Cell Host and Microbe, 2011, 9, 200-211.	11.0	301
70	An Autoactive Mutant of the M Flax Rust Resistance Protein Has a Preference for Binding ATP, Whereas Wild-Type M Protein Binds ADP. Molecular Plant-Microbe Interactions, 2011, 24, 897-906.	2.6	141
71	The role of effectors of biotrophic and hemibiotrophic fungi in infection. Cellular Microbiology, 2011, 13, 1849-1857.	2.1	234
72	Variation in potential effector genes distinguishing Australian and nonâ€Australian isolates of the cotton wilt pathogen <i>Fusarium oxysporum</i> f.sp. <i>vasinfectum</i>. Plant Pathology, 2011, 60, 232-243.	2.4	78

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73	Coâ€evolutionary interactions between host resistance and pathogen effector genes in flax rust disease. Molecular Plant Pathology, 2011, 12, 93-102.	4.2	106
74	Spatial variation in disease resistance: from molecules to metapopulations. Journal of Ecology, 2011, 99, 96-112.	4.0	162
75	New insights in plant immunity signaling activation. Current Opinion in Plant Biology, 2011, 14, 512-518.	7.1	114
76	Crystallization, X-ray diffraction analysis and preliminary structure determination of the TIR domain from the flax resistance protein L6. Acta Crystallographica Section F: Structural Biology Communications, 2011, 67, 237-240.	0.7	3
77	Crystallization and X-ray diffraction analysis of the C-terminal domain of the flax rust effector protein AvrM. Acta Crystallographica Section F: Structural Biology Communications, 2011, 67, 1603-1607.	0.7	4
78	Constructing Haustorium-Specific cDNA Libraries from Rust Fungi. Methods in Molecular Biology, 2011, 712, 79-87.	0.9	5
79	TECHNICAL ADVANCE: Transformation of the flax rust fungus, Melampsora lini: selection via silencing of an avirulence gene. Plant Journal, 2010, 61, 364-369.	5.7	75
80	Effectors of biotrophic fungal plant pathogens. Functional Plant Biology, 2010, 37, 913.	2.1	17
81	The AvrM Effector from Flax Rust Has a Structured C-Terminal Domain and Interacts Directly with the M Resistance Protein. Molecular Plant-Microbe Interactions, 2010, 23, 49-57.	2.6	113
82	Relationships between rust resistance genes at the <i>M</i> locus in flax. Molecular Plant Pathology, 2010, 11, 19-32.	4.2	39
83	Plant immunity: towards an integrated view of plantâ€"pathogen interactions. Nature Reviews Genetics, 2010, 11, 539-548.	16.3	2,790
84	Internalization of Flax Rust Avirulence Proteins into Flax and Tobacco Cells Can Occur in the Absence of the Pathogen. Plant Cell, 2010, 22, 2017-2032.	6.6	185
85	Genome Evolution in Plant Pathogens. Science, 2010, 330, 1486-1487.	12.6	43
86	The interaction of avirulence and resistance gene products in flax rust disease â€" providing advances in rust research^{â€}. Canadian Journal of Plant Pathology, 2010, 32, 11-19.	1.4	4
87	Lipid binding activities of flax rust AvrM and AvrL567 effectors. Plant Signaling and Behavior, 2010, 5, 1272-1275.	2.4	59
88	Diversity and Evolution of Effector Loci in Natural Populations of the Plant Pathogen Melampsora lini. Molecular Biology and Evolution, 2009, 26, 2499-2513.	8.9	130
89	Terrific Protein Traffic: The Mystery of Effector Protein Delivery by Filamentous Plant Pathogens. Science, 2009, 324, 748-750.	12.6	156
90	Positive selection in AvrP4 avirulence gene homologues across the genus Melampsora. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 2913-2922.	2.6	33

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91	Recent progress in discovery and functional analysis of effector proteins of fungal and oomycete plant pathogens. Current Opinion in Plant Biology, 2009, 12, 399-405.	7.1	148
92	Effectors of biotrophic fungi and oomycetes: pathogenicity factors and triggers of host resistance. New Phytologist, 2009, 183, 993-1000.	7.3	153
93	In the trenches of plant pathogen recognition: Role of NB-LRR proteins. Seminars in Cell and Developmental Biology, 2009, 20, 1017-1024.	5.0	52
94	Recognition events and hostâ€“pathogen co-evolution in gene-for-gene resistance to flax rust. Functional Plant Biology, 2009, 36, 395.	2.1	49
95	Crystal Structures of Flax Rust Avirulence Proteins AvrL567-A and -D Reveal Details of the Structural Basis for Flax Disease Resistance Specificity. Plant Cell, 2007, 19, 2898-2912.	6.6	143
96	The role of secreted proteins in diseases of plants caused by rust, powdery mildew and smut fungi. Current Opinion in Microbiology, 2007, 10, 326-331.	5.1	77
97	Flax Rust Resistance Gene Specificity is Based on Direct Resistance-Avirulence Protein Interactions. Annual Review of Phytopathology, 2007, 45, 289-306.	7.8	186
98	Wheat rust resistance research at CSIRO. Australian Journal of Agricultural Research, 2007, 58, 507.	1.5	13
99	Avirulence proteins of rust fungi: penetrating the host - haustorium barrier. Australian Journal of Agricultural Research, 2007, 58, 512.	1.5	4
100	The use of Co2+for crystallization and structure determination, using a conventional monochromatic X-ray source, of flax rust avirulence protein. Acta Crystallographica Section F: Structural Biology Communications, 2007, 63, 209-213.	0.7	14
101	Purification of the M flax-rust resistance protein expressed in Pichia pastoris. Plant Journal, 2007, 50, 1107-1117.	5.7	10
102	Further analysis of gene-for-gene disease resistance specificity in flax. Molecular Plant Pathology, 2007, 8, 103-109.	4.2	34
103	Rust of flax and linseed caused by Melampsora lini. Molecular Plant Pathology, 2007, 8, 349-364.	4.2	49
104	Avirulence proteins from haustoria-forming pathogens. FEMS Microbiology Letters, 2007, 269, 181-188.	1.8	99
105	The problem of how fungal and oomycete avirulence proteins enter plant cells. Trends in Plant Science, 2006, 11, 61-63.	8.8	116
106	Direct protein interaction underlies gene-for-gene specificity and coevolution of the flax resistance genes and flax rust avirulence genes. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8888-8893.	7.1	695
107	Autoactive Alleles of the Flax L6 Rust Resistance Gene Induce Non-Race-Specific Rust Resistance Associated with the Hypersensitive Response. Molecular Plant-Microbe Interactions, 2005, 18, 570-582.	2.6	110
108	Haustorially Expressed Secreted Proteins from Flax Rust Are Highly Enriched for Avirulence Elicitors. Plant Cell, 2005, 18, 243-256.	6.6	399

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109	The Melampsora lini AvrL567 Avirulence Genes Are Expressed in Haustoria and Their Products Are Recognized inside Plant Cells. Plant Cell, 2004, 16, 755-768.	6.6	365
110	Plant Pathology: Monitoring a Pathogen-Targeted Host Protein. Current Biology, 2003, 13, R400-R402.	3.9	14
111	New pollen-specific receptor kinases identified in tomato, maize and Arabidopsis: the tomato kinases show overlapping but distinct localization patterns on pollen tubes. Plant Molecular Biology, 2002, 50, 1-16.	3.9	65
112	Contrasting modes of evolution acting on the complex N locus for rust resistance in flax. Plant Journal, 2001, 27, 439-453.	5.7	83
113	Characterisation of a Î²-tubulin gene from Melampsora lini and comparison of fungal Î²-tubulin genes. Mycological Research, 2001, 105, 818-826.	2.5	40
114	Six Amino Acid Changes Confined to the Leucine-Rich Repeat Î²-Strand/Î²-Turn Motif Determine the Difference between the P and P2 Rust Resistance Specificities in Flax. Plant Cell, 2001, 13, 163-178.	6.6	216
115	Structure, function and evolution of plant disease resistance genes. Current Opinion in Plant Biology, 2000, 3, 278-284.	7.1	514
116	A genetic map of the Nicotiana alata S locus that includes three pollen-expressed genes. Theoretical and Applied Genetics, 2000, 100, 956-964.	3.6	28
117	Regions outside of the Leucine-Rich Repeats of Flax Rust Resistance Proteins Play a Role in Specificity Determination. Plant Cell, 2000, 12, 1367-1377.	6.6	180
118	The generation of plant disease resistance gene specificities. Trends in Plant Science, 2000, 5, 373-379.	8.8	149
119	Identification of Regions in Alleles of the Flax Rust Resistance Gene L That Determine Differences in Gene-for-Gene Specificity. Plant Cell, 1999, 11, 495-506.	6.6	463
120	Pollen-expressed S-RNases are not involved in self-incompatibility in Lycopersicon peruvianum. Sexual Plant Reproduction, 1999, 12, 76-87.	2.2	27
121	A Molecular Perspective on Pollination in Flowering Plants. Cell, 1996, 85, 141-144.	28.9	62
122	Molecular characterisation of an S-like RNase of Nicotiana alata that is induced by phosphate starvation. Plant Molecular Biology, 1996, 31, 227-238.	3.9	82
123	Cloning and Nucleotide Sequence of the S7-RNase from Nicotiana alata Link and Otto. Plant Physiology, 1995, 108, 427-428.	4.8	7