John Hugh Doonan

List of Publications by Year
in descending order

113 papers	9,711 citations	44069 48 h-index	38395 95 g-index
119 all docs	119 docs citations	119 times ranked	10539 citing authors

#	Article	IF	Citations
1	Sequencing of Aspergillus nidulans and comparative analysis with A. fumigatus and A. oryzae. Nature, 2005, 438, 1105-1115.	27.8	1,250
2	The auxin signalling network translates dynamic input into robust patterning at the shoot apex. Molecular Systems Biology, 2011, 7, 508.	7.2	520
3	Crop Phenomics and High-Throughput Phenotyping: Past Decades, Current Challenges, and Future Perspectives. Molecular Plant, 2020, 13, 187-214.	8.3	423
4	A Genetic Framework for Grain Size and Shape Variation in Wheat Â. Plant Cell, 2010, 22, 1046-1056.	6.6	397
5	Silencing by plant Polycomb-group genes requires dispersed trimethylation of histone H3 at lysine 27. EMBO Journal, 2006, 25, 4638-4649.	7.8	396
6	The<i>Arabidopsis</i>RNA-Directed DNA Methylation Argonautes Functionally Diverge Based on Their Expression and Interaction with Target Loci Â. Plant Cell, 2010, 22, 321-334.	6.6	346
7	The bimG gene of Aspergillus nidulans, required for completion of anaphase, encodes a homolog of mammalian phosphoprotein phosphatase 1. Cell, 1989, 57, 987-996.	28.9	345
8	Spindle formation and chromatin condensation in cells blocked at interphase by mutation of a negative cell cycle control gene. Cell, 1988, 52, 241-251.	28.9	258
9	Plant cyclins: a unified nomenclature for plant A-, B- and D-type cyclins based on sequence organization. Plant Molecular Biology, 1996, 32, 1003-1018.	3.9	232
10	Aspergillus nidulans contains a single actin gene which has unique intron locations and encodes a Î³-actin. Gene, 1988, 70, 283-293.	2.2	223
11	EB1 reveals mobile microtubule nucleation sites in Arabidopsis. Nature Cell Biology, 2003, 5, 967-971.	10.3	217
12	High-throughput protein localization in Arabidopsis using Agrobacterium-mediated transient expression of GFP-ORF fusions. Plant Journal, 2004, 41, 162-174.	5.7	190
13	Plant-adapted green fluorescent protein is a versatile vital reporter for gene expression, protein localization and mitosis in the filamentous fungus,Aspergillus nidulans. Molecular Microbiology, 1998, 27, 121-130.	2.5	185
14	The Expression of D-Cyclin Genes Defines Distinct Developmental Zones in Snapdragon Apical Meristems and Is Locally Regulated by the Cycloidea Gene. Plant Physiology, 2000, 122, 1137-1148.	4.8	185
15	G2/M-Phaseâ€“Specific Transcription during the Plant Cell Cycle Is Mediated by c-Mybâ€“Like Transcription Factors. Plant Cell, 2001, 13, 1891-1905.	6.6	185
16	Brachypodium distachyon: making hay with a wild grass. Trends in Plant Science, 2008, 13, 172-177.	8.8	174
17	Regulation of the Pollen-Specific Actin-Depolymerizing Factor LlADF1. Plant Cell, 2002, 14, 2915-2927.	6.6	160
18	The maize retinoblastoma protein homologue ZmRb-1 is regulated during leaf development and displays conserved interactions with G1/S regulators and plant cyclin D (CycD) proteins. Plant Molecular Biology, 1998, 37, 155-169.	3.9	147

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19	UVR8 in <i>Arabidopsis thaliana</i> regulates multiple aspects of cellular differentiation during leaf development in response to ultraviolet B radiation. New Phytologist, 2009, 183, 315-326.	7.3	138
20	Transcriptional repression by <scp>MYB</scp> 3R proteins regulates plant organ growth. EMBO Journal, 2015, 34, 1992-2007.	7.8	128
21	<i>Arabidopsis</i>POT1A interacts with TERT-V(I8), an N-terminal splicing variant of telomerase. Journal of Cell Science, 2007, 120, 3678-3687.	2.0	123
22	Glucoamylase::green fluorescent protein fusions to monitor protein secretion in Aspergillus niger. Microbiology (United Kingdom), 2000, 146, 415-426.	1.8	118
23	Microtubule-Associated AIR9 Recognizes the Cortical Division Site at Preprophase and Cell-Plate Insertion. Current Biology, 2006, 16, 1938-1943.	3.9	118
24	The ethanol switch: a tool for tissue-specific gene induction during plant development. Plant Journal, 2003, 36, 918-930.	5.7	115
25	Cell Cycle Regulation of Cyclin-Dependent Kinases in Tobacco Cultivar Bright Yellow-2 Cells. Plant Physiology, 2001, 126, 1214-1223.	4.8	114
26	Systematic Spatial Analysis of Gene Expression during Wheat Caryopsis Development. Plant Cell, 2005, 17, 2172-2185.	6.6	112
27	The Arabidopsis D-type Cyclins CycD2 and CycD3 Both Interact in Vivo with the PSTAIRE Cyclin-dependent Kinase Cdc2a but Are Differentially Controlled. Journal of Biological Chemistry, 2001, 276, 7041-7047.	3.4	100
28	CycD1, a Putative G1 Cyclin from Antirrhinum majus, Accelerates the Cell Cycle in Cultured Tobacco BY-2 Cells by Enhancing Both G1/S Entry and Progression through S and G2 Phases. Plant Cell, 2004, 16, 2364-2379.	6.6	93
29	Identification of a novel family of 70â€ƒkDa microtubule-associated proteins in Arabidopsis cells. Plant Journal, 2005, 42, 547-555.	5.7	92
30	CDKG1 protein kinase is essential for synapsis and male meiosis at high ambient temperature in <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2182-2187.	7.1	92
31	Plant organelle proteomics: Collaborating for optimal cell function. Mass Spectrometry Reviews, 2011, 30, 772-853.	5.4	89
32	ENDOSPERM DEFECTIVE1 Is a Novel Microtubule-Associated Protein Essential for Seed Development in<i>Arabidopsis</i>Â. Plant Cell, 2009, 21, 90-105.	6.6	80
33	AtMAP70-5, a divergent member of the MAP70 family of microtubule-associated proteins, is required for anisotropic cell growth in Arabidopsis. Journal of Cell Science, 2007, 120, 2241-2247.	2.0	73
34	Functional Evolution of Cyclin-Dependent Kinases. Molecular Biotechnology, 2009, 42, 14-29.	2.4	73
35	Non-destructive, high-content analysis of wheat grain traits using X-ray micro computed tomography. Plant Methods, 2017, 13, 76.	4.3	73
36	Cell-cycle modulation of MPM-2-specific spindle pole body phosphorylation inAspergillus nidulans. Cytoskeleton, 1988, 10, 432-437.	4.4	71

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37	Endosperm development in Brachypodium distachyon. Journal of Experimental Botany, 2011, 62, 735-748.	4.8	68
38	Walls around tumours â€" why plants do not develop cancer. Nature Reviews Cancer, 2010, 10, 794-802.	28.4	67
39	Cyclin dependent protein kinases and stress responses in plants. Plant Signaling and Behavior, 2011, 6, 204-209.	2.4	67
40	Gradual polyploid genome evolution revealed by pan-genomic analysis of Brachypodium hybridum and its diploid progenitors. Nature Communications, 2020, 11, 3670.	12.8	67
41	<i>Arabidopsis</i> KCBP interacts with AIR9 but stays in the cortical division zone throughout mitosis via its MyTH4-FERM domain. Journal of Cell Science, 2015, 128, 2033-2046.	2.0	66
42	Modulated targeting of GFP-AtMAP65-1 to central spindle microtubules during division. Plant Journal, 2005, 43, 469-478.	5.7	59
43	Endopolyploidy as a potential alternative adaptive strategy for Arabidopsis leaf size variation in response to UV-B. Journal of Experimental Botany, 2014, 65, 2757-2766.	4.8	59
44	Pre-prophase band of microtubules, absent from tip-growing moss filaments, arises in leafy shoots during transition to intercalary growth. Cytoskeleton, 1987, 7, 138-153.	4.4	58
45	Kinesins Have a Dual Function in Organizing Microtubules during Both Tip Growth and Cytokinesis in <i>Physcomitrella patens</i>. Plant Cell, 2014, 26, 1256-1266.	6.6	56
46	The cyclinâ€dependent kinase G group defines a thermoâ€sensitive alternative splicing circuit modulating the expression of Arabidopsis <i><scp>ATU</scp>2<scp>AF</scp>65A</i>. Plant Journal, 2018, 94, 1010-1022.	5.7	56
47	The role of MAP65-1 in microtubule bundling during Zinnia tracheary element formation. Journal of Cell Science, 2006, 119, 753-758.	2.0	55
48	Selective recruitment of proteins to 5â€² cap complexes during the growth cycle in Arabidopsis. Plant Journal, 2009, 59, 400-412.	5.7	53
49	Linking Dynamic Phenotyping with Metabolite Analysis to Study Natural Variation in Drought Responses of Brachypodium distachyon. Frontiers in Plant Science, 2016, 7, 1751.	3.6	53
50	Arabidopsis Reactome: A Foundation Knowledgebase for Plant Systems Biology. Plant Cell, 2008, 20, 1426-1436.	6.6	52
51	T-DNA mutagenesis in Brachypodium distachyon. Journal of Experimental Botany, 2012, 63, 567-576.	4.8	51
52	Two Î±-tubulin genes of Aspergillus nidulans encode divergent proteins. Molecular Genetics and Genomics, 1991, 225, 129-141.	2.4	43
53	Microtubule cycle inChlamydomonas reinhardtii: An Immunofluorescence study. Cytoskeleton, 1987, 7, 381-392.	4.4	41
54	The <scp>RNA</scp> helicase, <scp>eIF</scp>4Aâ€1, is required for ovule development and cell size homeostasis in Arabidopsis. Plant Journal, 2015, 84, 989-1004.	5.7	38

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55	Thermo-Sensitive Alternative Splicing of FLOWERING LOCUS M Is Modulated by Cyclin-Dependent Kinase G2. Frontiers in Plant Science, 2020, 10, 1680.	3.6	38
56	A cyclin-dependent protein kinase, CDKC2, colocalizes with and modulates the distribution of spliceosomal components in Arabidopsis. Plant Journal, 2008, 54, 220-235.	5.7	36
57	Determining Phenological Patterns Associated with the Onset of Senescence in a Wheat MAGIC Mapping Population. Frontiers in Plant Science, 2016, 7, 1540.	3.6	36
58	The Mitotic Function of Augmin Is Dependent on Its Microtubule-Associated Protein Subunit EDE1 in Arabidopsis thaliana. Current Biology, 2017, 27, 3891-3897.e4.	3.9	36
59	Ectopic expression of <i>Triticum polonicum VRT-A2</i> underlies elongated glumes and grains in hexaploid wheat in a dosage-dependent manner. Plant Cell, 2021, 33, 2296-2319.	6.6	36
60	Cellular basis of shoot apical meristem development. International Review of Cytology, 2001, 208, 161-206.	6.2	33
61	Total <i>FLC</i> transcript dynamics from divergent paralogue expression explains flowering diversity in <i>Brassica napus</i>. New Phytologist, 2021, 229, 3534-3548.	7.3	32
62	Arabidopsis T-DNA insertional lines for CDC25 are hypersensitive to hydroxyurea but not to zeocin or salt stress. Annals of Botany, 2011, 107, 1183-1192.	2.9	30
63	AtTRB1, a telomeric DNA-binding protein from Arabidopsis, is concentrated in the nucleolus and shows highly dynamic association with chromatin. Plant Journal, 2010, 61, 637-649.	5.7	29
64	In vivo interaction between CDKA and eIF4A: a possible mechanism linking translation and cell proliferation. FEBS Letters, 2004, 556, 91-94.	2.8	28
65	Natural Variation in <i>Brachypodium</i> Links Vernalization and Flowering Time Loci as Major Flowering Determinants. Plant Physiology, 2017, 173, 256-268.	4.8	28
66	The alc-GR System. A Modified alc Gene Switch Designed for Use in Plant Tissue Culture. Plant Physiology, 2005, 138, 1259-1267.	4.8	27
67	Cyclin-dependent kinase activity retains the shoot apical meristem cells in an undifferentiated state. Plant Journal, 2010, 64, no-no.	5.7	26
68	Automatic estimation of wheat grain morphometry from computed tomography data. Functional Plant Biology, 2015, 42, 452.	2.1	26
69	A Tâ€DNA mutation in the RNA helicase eIF4A confers a doseâ€dependent dwarfing phenotype in <i>Brachypodium distachyon</i>. Plant Journal, 2011, 66, 929-940.	5.7	25
70	eIF4A RNA Helicase Associates with Cyclin-Dependent Protein Kinase A in Proliferating Cells and Is Modulated by Phosphorylation. Plant Physiology, 2016, 172, 128-140.	4.8	25
71	The histone acetyltransferase GCN5 and the transcriptional coactivator ADA2b affect leaf development and trichome morphogenesis in Arabidopsis. Planta, 2018, 248, 613-628.	3.2	25
72	DeepPod: a convolutional neural network based quantification of fruit number in Arabidopsis. GigaScience, 2020, 9, .	6.4	25

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73	Direct and accurate feature extraction from 3D point clouds of plants using RANSAC. Computers and Electronics in Agriculture, 2021, 187, 106240.	7.7	25
74	Polyploidyâ€associated genomic instability in <i>Arabidopsis thaliana</i>. Genesis, 2010, 48, 254-263.	1.6	22
75	The genetic analysis of mitosis inAspergillus nidulans. BioEssays, 1989, 10, 196-201.	2.5	21
76	A streamlined method for systematic, high resolution in situ analysis of mRNA distribution in plants. Plant Methods, 2005, 1, 8.	4.3	21
77	Polyploidy-Associated Genomic Instability inArabidopsis thaliana. Genesis, 2010, 48, spcone-spcone.	1.6	21
78	Deep Segmentation of Point Clouds of Wheat. Frontiers in Plant Science, 2021, 12, 608732.	3.6	21
79	Interaction of a 14-3-3 protein with the plant microtubule-associated protein EDE1. Annals of Botany, 2011, 107, 1103-1109.	2.9	20
80	Mechanical stimulation in <scp><i>Brachypodium distachyon</i></scp>: Implications for fitness, productivity, and cell wall properties. Plant, Cell and Environment, 2020, 43, 1314-1330.	5.7	20
81	The pot1+ homologue in Aspergillus nidulans is required for ordering mitotic events. Journal of Cell Science, 2004, 117, 199-209.	2.0	19
82	Î¼ CT trait analysis reveals morphometric differences between domesticated temperate small grain cereals and their wild relatives. Plant Journal, 2019, 99, 98-111.	5.7	19
83	Identification and localisation of a nucleoporin-like protein component of the plant nuclear matrix. Planta, 1992, 187, 414-20.	3.2	17
84	Drought priming effects on alleviating the photosynthetic limitations of wheat cultivars (<i>Triticum aestivum</i> L.) with contrasting tolerance to abiotic stresses. Journal of Agronomy and Crop Science, 2020, 206, 651-664.	3.5	17
85	Accurate Multi-View Stereo 3D Reconstruction for Cost-Effective Plant Phenotyping. Lecture Notes in Computer Science, 2014, , 349-356.	1.3	17
86	A type 2A protein phosphatase gene from Aspergillus nidulans is involved in hyphal morphogenesis. Current Genetics, 2001, 39, 25-34.	1.7	15
87	Transition of G1 to early S phase may be required for zinnia mesophyll cells to trans-differentiate to tracheary elements. Planta, 2004, 220, 172-176.	3.2	15
88	Cycling plant cells. Plant Journal, 1991, 1, 129-132.	5.7	14
89	Expression of Cell Cycle Genes in Shoot Apical Meristems. Plant Molecular Biology, 2006, 60, 947-961.	3.9	14
90	Genetic and Methylome Variation in Turkish Brachypodium Distachyon Accessions Differentiate Two Geographically Distinct Subpopulations. International Journal of Molecular Sciences, 2020, 21, 6700.	4.1	14

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91	Automated estimation of tiller number in wheat by ribbon detection. Machine Vision and Applications, 2016, 27, 637-646.	2.7	13
92	CHPA, a Cysteine- and Histidine-Rich-Domain-Containing Protein, Contributes to Maintenance of the Diploid State in Aspergillus nidulans. Eukaryotic Cell, 2004, 3, 984-991.	3.4	11
93	Coupling the GAL4 UAS system with alcR for versatile cell type-specific chemically inducible gene expression in Arabidopsis. Plant Biotechnology Journal, 2007, 5, 465-476.	8.3	11
94	CDKG1 Is Required for Meiotic and Somatic Recombination Intermediate Processing in Arabidopsis. Plant Cell, 2020, 32, 1308-1322.	6.6	11
95	Metabolomic Variation Aligns with Two Geographically Distinct Subpopulations of Brachypodium Distachyon before and after Drought Stress. Cells, 2021, 10, 683.	4.1	11
96	Tef: a tiny grain with enormous potential. Trends in Plant Science, 2022, 27, 220-223.	8.8	11
97	Gene dosage effect of WEE1 on growth and morphogenesis from arabidopsis hypocotyl explants. Annals of Botany, 2012, 110, 1631-1639.	2.9	10
98	Cell Wall Epitopes and Endoploidy as Reporters of Embryogenic Potential in Brachypodium Distachyon Callus Culture. International Journal of Molecular Sciences, 2018, 19, 3811.	4.1	10
99	Proximalâ€“distal patterns of transcription factor gene expression during Arabidopsis root development. Journal of Experimental Botany, 2008, 59, 235-245.	4.8	9
100	A CRISPR/Cas9-Based Mutagenesis Protocol for Brachypodium distachyon and Its Allopolyploid Relative, Brachypodium hybridum. Frontiers in Plant Science, 2020, 11, 614.	3.6	9
101	In Vitro Tissue Culture in Brachypodium: Applications and Challenges. International Journal of Molecular Sciences, 2020, 21, 1037.	4.1	9
102	Estimation of Branch Angle from 3D Point Cloud of Plants. , 2015, , .		7
103	Editorial: Phenomics. Frontiers in Plant Science, 2018, 9, 678.	3.6	7
104	A Functional Kinase Is Necessary for Cyclin-Dependent Kinase G1 (CDKG1) to Maintain Fertility at High Ambient Temperature in Arabidopsis. Frontiers in Plant Science, 2020, 11, 586870.	3.6	6
105	In situ Analysis of Gene Expression in Plants. Methods in Molecular Biology, 2009, 513, 229-242.	0.9	5
106	Cloning and characterization of the unusual cyclin gene from an amphidiploid of Nicotiana glauca-Nicotiana langsdorffii hybrid. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1999, 1489, 399-404.	2.4	4
107	Developmental control of the cell cycle. Cell Biology International, 2003, 27, 283-285.	3.0	4
108	The Aspergillus nidulans hfa mutations affect genomic stability and cause diverse defects in cell cycle progression and cellular morphogenesis. Mycological Research, 2000, 104, 1439-1448.	2.5	2

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109	The Plant Cell Cycle: An Overview. , 2005, 296, 031-050.		2
110	Molecular and physiological responses to desiccation indicate the abscisic acid pathway is conserved in the peat moss, <i>Sphagnum</i>. Journal of Experimental Botany, 2022, 73, 4576-4591.	4.8	2
111	Allotetraploidization in Brachypodium May Have Led to the Dominance of One Parentâ€™s Metabolome in Germinating Seeds. Cells, 2021, 10, 828.	4.1	1
112	TheArabidopsis Localizome: Subcellular Protein Localization and Interactions inARABIDOPSIS. , 0, , 61-81.		0
113	Genetic architecture of variation in Arabidopsis thaliana rosettes. PLoS ONE, 2022, 17, e0263985.	2.5	0