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	Tef: a tiny grain with enormous potential. Trends in Plant Science, 2022, 27, 220-223.	8.8	11
2	Genetic architecture of variation in Arabidopsis thaliana rosettes. PLoS ONE, 2022, 17, e0263985.	2.5	0
3	Molecular and physiological responses to desiccation indicate the abscisic acid pathway is conserved in the peat moss, Sphagnum. Journal of Experimental Botany, 2022, 73, 4576-4591.	4.8	2
4	Total FLC transcript dynamics from divergent paralogue expression explains flowering diversity in Brassica napus. New Phytologist, 2021, 229, 3534-3548.	7.3	32
5	Deep Segmentation of Point Clouds of Wheat. Frontiers in Plant Science, 2021, 12, 608732.	3.6	21
6	Metabolomic Variation Aligns with Two Geographically Distinct Subpopulations of Brachypodium Distachyon before and after Drought Stress. Cells, 2021, 10, 683.	4.1	11
7	Allotetraploidization in Brachypodium May Have Led to the Dominance of One Parentâ€™s Metabolome in Germinating Seeds. Cells, 2021, 10, 828.	4.1	1
8	Ectopic expression of Triticum polonicum VRT-A2 underlies elongated glumes and grains in hexaploid wheat in a dosage-dependent manner. Plant Cell, 2021, 33, 2296-2319.	6.6	36
9	Direct and accurate feature extraction from 3D point clouds of plants using RANSAC. Computers and Electronics in Agriculture, 2021, 187, 106240.	7.7	25
10	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
11	Gradual polyploid genome evolution revealed by pan-genomic analysis of Brachypodium hybridum and its diploid progenitors. Nature Communications, 2020, 11, 3670.	12.8	67
12	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
13	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
14	DeepPod: a convolutional neural network based quantification of fruit number in Arabidopsis. GigaScience, 2020, 9, .	6.4	25
15	In Vitro Tissue Culture in Brachypodium: Applications and Challenges. International Journal of Molecular Sciences, 2020, 21, 1037.	4.1	9
16	CDKG1 Is Required for Meiotic and Somatic Recombination Intermediate Processing in Arabidopsis. Plant Cell, 2020, 32, 1308-1322.	6.6	11
17	Crop Phenomics and High-Throughput Phenotyping: Past Decades, Current Challenges, and Future Perspectives. Molecular Plant, 2020, 13, 187-214.	8.3	423
18	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

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19	Mechanical stimulation in <scp>Brachypodium distachyon</scp>: Implications for fitness, productivity, and cell wall properties. Plant, Cell and Environment, 2020, 43, 1314-1330.	5.7	20
20	Drought priming effects on alleviating the photosynthetic limitations of wheat cultivars (Triticum aestivum L.) with contrasting tolerance to abiotic stresses. Journal of Agronomy and Crop Science, 2020, 206, 651-664.	3.5	17
21	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
22	The cyclinâ€dependent kinase G group defines a thermoâ€sensitive alternative splicing circuit modulating the expression of Arabidopsis <scp>ATU</scp>2<scp>AF</scp>65A. Plant Journal, 2018, 94, 1010-1022.	5.7	56
23	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
24	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
25	Editorial: Phenomics. Frontiers in Plant Science, 2018, 9, 678.	3.6	7
26	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
27	Natural Variation in Brachypodium Links Vernalization and Flowering Time Loci as Major Flowering Determinants. Plant Physiology, 2017, 173, 256-268.	4.8	28
28	Non-destructive, high-content analysis of wheat grain traits using X-ray micro computed tomography. Plant Methods, 2017, 13, 76.	4.3	73
29	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
30	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
31	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
32	Automated estimation of tiller number in wheat by ribbon detection. Machine Vision and Applications, 2016, 27, 637-646.	2.7	13
33	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
34	Estimation of Branch Angle from 3D Point Cloud of Plants. , 2015, , .		7
35	Transcriptional repression by <scp>MYB</scp> 3R proteins regulates plant organ growth. EMBO Journal, 2015, 34, 1992-2007.	7.8	128
36	Automatic estimation of wheat grain morphometry from computed tomography data. Functional Plant Biology, 2015, 42, 452.	2.1	26

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37	Arabidopsis 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
38	CDKG1 protein kinase is essential for synapsis and male meiosis at high ambient temperature in Arabidopsis thaliana. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2182-2187.	7.1	92
39	Kinesins Have a Dual Function in Organizing Microtubules during Both Tip Growth and Cytokinesis in Physcomitrella patens. Plant Cell, 2014, 26, 1256-1266.	6.6	56
40	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
41	Accurate Multi-View Stereo 3D Reconstruction for Cost-Effective Plant Phenotyping. Lecture Notes in Computer Science, 2014, , 349-356.	1.3	17
42	Gene dosage effect of WEE1 on growth and morphogenesis from arabidopsis hypocotyl explants. Annals of Botany, 2012, 110, 1631-1639.	2.9	10
43	T-DNA mutagenesis in Brachypodium distachyon. Journal of Experimental Botany, 2012, 63, 567-576.	4.8	51
44	The auxin signalling network translates dynamic input into robust patterning at the shoot apex. Molecular Systems Biology, 2011, 7, 508.	7.2	520
45	A Tâ€Ð DNA mutation in the RNA helicase eIF4A confers a doseâ€dependent dwarfing phenotype in Brachypodium distachyon. Plant Journal, 2011, 66, 929-940.	5.7	25
46	Plant organelle proteomics: Collaborating for optimal cell function. Mass Spectrometry Reviews, 2011, 30, 772-853.	5.4	89
47	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
48	Interaction of a 14-3-3 protein with the plant microtubule-associated protein EDE1. Annals of Botany, 2011, 107, 1103-1109.	2.9	20
49	Cyclin dependent protein kinases and stress responses in plants. Plant Signaling and Behavior, 2011, 6, 204-209.	2.4	67
50	Endosperm development in Brachypodium distachyon. Journal of Experimental Botany, 2011, 62, 735-748.	4.8	68
51	Polyploidyâ€associated genomic instability in Arabidopsis thaliana. Genesis, 2010, 48, 254-263.	1.6	22
52	Polyploidy-Associated Genomic Instability inArabidopsis thaliana. Genesis, 2010, 48, spcone-spcone.	1.6	21
53	Cyclin-dependent kinase activity retains the shoot apical meristem cells in an undifferentiated state. Plant Journal, 2010, 64, no-no.	5.7	26
54	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

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55	Walls around tumours â€" why plants do not develop cancer. Nature Reviews Cancer, 2010, 10, 794-802.	28.4	67
56	TheArabidopsisRNA-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
57	A Genetic Framework for Grain Size and Shape Variation in Wheat Â. Plant Cell, 2010, 22, 1046-1056.	6.6	397
58	Functional Evolution of Cyclin-Dependent Kinases. Molecular Biotechnology, 2009, 42, 14-29.	2.4	73
59	Selective recruitment of proteins to 5â€² cap complexes during the growth cycle in Arabidopsis. Plant Journal, 2009, 59, 400-412.	5.7	53
60	UVR8 in Arabidopsis thaliana regulates multiple aspects of cellular differentiation during leaf development in response to ultraviolet B radiation. New Phytologist, 2009, 183, 315-326.	7.3	138
61	In situ Analysis of Gene Expression in Plants. Methods in Molecular Biology, 2009, 513, 229-242.	0.9	5
62	ENDOSPERM DEFECTIVE1 Is a Novel Microtubule-Associated Protein Essential for Seed Development inArabidopsisÂ. Plant Cell, 2009, 21, 90-105.	6.6	80
63	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
64	Brachypodium distachyon: making hay with a wild grass. Trends in Plant Science, 2008, 13, 172-177.	8.8	174
65	Proximalâ€"distal patterns of transcription factor gene expression during Arabidopsis root development. Journal of Experimental Botany, 2008, 59, 235-245.	4.8	9
66	Arabidopsis Reactome: A Foundation Knowledgebase for Plant Systems Biology. Plant Cell, 2008, 20, 1426-1436.	6.6	52
67	ArabidopsisPOT1A interacts with TERT-V(I8), an N-terminal splicing variant of telomerase. Journal of Cell Science, 2007, 120, 3678-3687.	2.0	123
68	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
69	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
70	Silencing by plant Polycomb-group genes requires dispersed trimethylation of histone H3 at lysine 27. EMBO Journal, 2006, 25, 4638-4649.	7.8	396
71	Expression of Cell Cycle Genes in Shoot Apical Meristems. Plant Molecular Biology, 2006, 60, 947-961.	3.9	14
72	Microtubule-Associated AIR9 Recognizes the Cortical Division Site at Preprophase and Cell-Plate Insertion. Current Biology, 2006, 16, 1938-1943.	3.9	118

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73	The role of MAP65-1 in microtubule bundling during Zinnia tracheary element formation. Journal of Cell Science, 2006, 119, 753-758.	2.0	55
74	The Plant Cell Cycle: An Overview. , 2005, 296, 031-050.		2
75	Identification of a novel family of 70â€ƒkDa microtubule-associated proteins in Arabidopsis cells. Plant Journal, 2005, 42, 547-555.	5.7	92
76	Modulated targeting of GFP-AtMAP65-1 to central spindle microtubules during division. Plant Journal, 2005, 43, 469-478.	5.7	59
77	Sequencing of Aspergillus nidulans and comparative analysis with A. fumigatus and A. oryzae. Nature, 2005, 438, 1105-1115.	27.8	1,250
78	Systematic Spatial Analysis of Gene Expression during Wheat Caryopsis Development. Plant Cell, 2005, 17, 2172-2185.	6.6	112
79	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
80	A streamlined method for systematic, high resolution in situ analysis of mRNA distribution in plants. Plant Methods, 2005, 1, 8.	4.3	21
81	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
82	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
83	The pot1+ homologue in Aspergillus nidulans is required for ordering mitotic events. Journal of Cell Science, 2004, 117, 199-209.	2.0	19
84	High-throughput protein localization in Arabidopsis using Agrobacterium-mediated transient expression of GFP-ORF fusions. Plant Journal, 2004, 41, 162-174.	5.7	190
85	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
86	In vivo interaction between CDKA and eIF4A: a possible mechanism linking translation and cell proliferation. FEBS Letters, 2004, 556, 91-94.	2.8	28
87	The ethanol switch: a tool for tissue-specific gene induction during plant development. Plant Journal, 2003, 36, 918-930.	5.7	115
88	EB1 reveals mobile microtubule nucleation sites in Arabidopsis. Nature Cell Biology, 2003, 5, 967-971.	10.3	217
89	Developmental control of the cell cycle. Cell Biology International, 2003, 27, 283-285.	3.0	4
90	Regulation of the Pollen-Specific Actin-Depolymerizing Factor LlADF1. Plant Cell, 2002, 14, 2915-2927.	6.6	160

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91	A type 2A protein phosphatase gene from Aspergillus nidulans is involved in hyphal morphogenesis. Current Genetics, 2001, 39, 25-34.	1.7	15
92	Cell Cycle Regulation of Cyclin-Dependent Kinases in Tobacco Cultivar Bright Yellow-2 Cells. Plant Physiology, 2001, 126, 1214-1223.	4.8	114
93	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
94	Cellular basis of shoot apical meristem development. International Review of Cytology, 2001, 208, 161-206.	6.2	33
95	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
96	Glucoamylase::green fluorescent protein fusions to monitor protein secretion in Aspergillus niger. Microbiology (United Kingdom), 2000, 146, 415-426.	1.8	118
97	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
98	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
99	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
100	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
101	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
102	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
103	Identification and localisation of a nucleoporin-like protein component of the plant nuclear matrix. Planta, 1992, 187, 414-20.	3.2	17
104	Cycling plant cells. Plant Journal, 1991, 1, 129-132.	5.7	14
105	Two Î±-tubulin genes of Aspergillus nidulans encode divergent proteins. Molecular Genetics and Genomics, 1991, 225, 129-141.	2.4	43
106	The genetic analysis of mitosis inAspergillus nidulans. BioEssays, 1989, 10, 196-201.	2.5	21
107	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
108	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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109	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
110	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
111	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
112	Microtubule cycle inChlamydomonas reinhardtii: An Immunofluorescence study. Cytoskeleton, 1987, 7, 381-392.	4.4	41
113	TheArabidopsis Localizome: Subcellular Protein Localization and Interactions inARABIDOPSIS. , 0, , 61-81.		0