James A H Murray

List of Publications by Year
in descending order

139 papers	13,205 citations	19657 61 h-index	24982 109 g-index
147 all docs	147 docs citations	147 times ranked	10535 citing authors

#	Article	IF	Citations
1	Cytokinin Activation of Arabidopsis Cell Division Through a D-Type Cyclin. Science, 1999, 283, 1541-1544.	12.6	731
2	THEPLANTCELLCYCLE. Annual Review of Plant Biology, 2003, 54, 235-264.	18.7	430
3	Global analysis of the core cell cycle regulators of Arabidopsis identifies novel genes, reveals multiple and highly specific profiles of expression and provides a coherent model for plant cell cycle control. Plant Journal, 2005, 41, 546-566.	5.7	430
4	Altered Cell Cycle Distribution, Hyperplasia, and Inhibited Differentiation in Arabidopsis Caused by the D-Type Cyclin CYCD3. Plant Cell, 2003, 15, 79-92.	6.6	412
5	Sugar Control of the Plant Cell Cycle: Differential Regulation of Arabidopsis D-Type Cyclin Gene Expression. Molecular and Cellular Biology, 2000, 20, 4513-4521.	2.3	387
6	Spatiotemporal regulation of cell-cycle genes by SHORTROOT links patterning and growth. Nature, 2010, 466, 128-132.	27.8	385
7	A family of cyclin D homologs from plants differentially controlled by growth regulators and containing the conserved retinoblastoma protein interaction motif.. Plant Cell, 1995, 7, 85-103.	6.6	372
8	Site-specific recombinases: tools for genome engineering. Trends in Genetics, 1993, 9, 413-421.	6.7	344
9	Arabidopsis CYCD3 D-type cyclins link cell proliferation and endocycles and are rate-limiting for cytokinin responses. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14537-14542.	7.1	333
10	Cyclin D control of growth rate in plants. Nature, 2000, 405, 575-579.	27.8	317
11	SynchronousArabidopsissuspension cultures for analysis of cell-cycle gene activity. Plant Journal, 2002, 30, 203-212.	5.7	314
12	Comprehensive Transcriptome Analysis of Auxin Responses in Arabidopsis. Molecular Plant, 2008, 1, 321-337.	8.3	308
13	A Bistable Circuit Involving SCARECROW-RETINOBLASTOMA Integrates Cues to Inform Asymmetric Stem Cell Division. Cell, 2012, 150, 1002-1015.	28.9	273
14	Standards for plant synthetic biology: a common syntax for exchange of <scp>DNA</scp> parts. New Phytologist, 2015, 208, 13-19.	7.3	263
15	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
16	Genome-wide gene expression in an Arabidopsis cell suspension. Plant Molecular Biology, 2003, 53, 423-442.	3.9	224
17	Cell Cycle-regulated Gene Expression inArabidopsis. Journal of Biological Chemistry, 2002, 277, 41987-42002.	3.4	222
18	Phytodetoxification of TNT by transgenic plants expressing a bacterial nitroreductase. Nature Biotechnology, 2001, 19, 1168-1172.	17.5	220

#	Article	IF	Citations
19	WOX5 Suppresses CYCLIN D Activity to Establish Quiescence at the Center of the Root Stem Cell Niche. Current Biology, 2014, 24, 1939-1944.	3.9	197
20	The D-Type Cyclin CYCD3;1 Is Limiting for the G1-to-S-Phase Transition in Arabidopsis. Plant Cell, 2006, 18, 893-906.	6.6	196
21	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
22	KNOX Gene Function in Plant Stem Cell Niches. Plant Molecular Biology, 2006, 60, 929-946.	3.9	179
23	Plant homologs of the Plasmodium falciparum chloroquine-resistance transporter, Pf CRT, are required for glutathione homeostasis and stress responses. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2331-2336.	7.1	164
24	D-type cyclins activate division in the root apex to promote seed germination in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 15694-15699.	7.1	152
25	Regulation of Cell Proliferation in the Stomatal Lineage by theArabidopsisMYB FOUR LIPS via Direct Targeting of Core Cell Cycle Genes. Plant Cell, 2010, 22, 2306-2321.	6.6	152
26	Multiple Genes Encoding the Conserved CCAAT-Box Transcription Factor Complex Are Expressed in Arabidopsis. Plant Physiology, 1998, 117, 1015-1022.	4.8	150
27	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
28	Triggering the cell cycle in plants. Trends in Cell Biology, 2000, 10, 245-250.	7.9	139
29	Parameters affecting lithium acetate-mediated transformation of Saccharomyces cerevisiae and development of a rapid and simplified procedure. Current Genetics, 1993, 24, 455-459.	1.7	136
30	Cell-size dependent progression of the cell cycle creates homeostasis and flexibility of plant cell size. Nature Communications, 2017, 8, 15060.	12.8	133
31	Distinct Cyclin D Genes Show Mitotic Accumulation or Constant Levels of Transcripts in Tobacco Bright Yellow-2 Cells1. Plant Physiology, 1999, 119, 343-352.	4.8	126
32	The AUXIN BINDING PROTEIN 1 Is Required for Differential Auxin Responses Mediating Root Growth. PLoS ONE, 2009, 4, e6648.	2.5	124
33	Cell cycle controls and the development of plant form. Current Opinion in Plant Biology, 2001, 4, 44-49.	7.1	121
34	Modulation of Cyclin Transcript Levels in Cultured Cells of Arabidopsis thaliana. Plant Physiology, 1996, 112, 1023-1033.	4.8	120
35	The ethanol switch: a tool for tissue-specific gene induction during plant development. Plant Journal, 2003, 36, 918-930.	5.7	115
36	Cell Cycle Regulation of Cyclin-Dependent Kinases in Tobacco Cultivar Bright Yellow-2 Cells. Plant Physiology, 2001, 126, 1214-1223.	4.8	114

#	Article	IF	Citations
37	Improved thermostability of the North American firefly luciferase: saturation mutagenesis at position 354. Biochemical Journal, 1996, 319, 343-350.	3.7	113
38	DNA damage triggers disruption of telomeric silencing and Mec1p-dependent relocation of Sir3p. Current Biology, 1999, 9, 963-S1.	3.9	113
39	Distinct Light-Initiated Gene Expression and Cell Cycle Programs in the Shoot Apex and Cotyledons ofArabidopsisÂ. Plant Cell, 2008, 20, 947-968.	6.6	113
40	GMO detection using a bioluminescent real time reporter (BART) of loop mediated isothermal amplification (LAMP) suitable for field use. BMC Biotechnology, 2012, 12, 15.	3.3	113
41	Reduced False Positives and Improved Reporting of Loop-Mediated Isothermal Amplification using Quenched Fluorescent Primers. Scientific Reports, 2019, 9, 7400.	3.3	113
42	Plant Dâ€“type cyclins and the control of G1 progression. Philosophical Transactions of the Royal Society B: Biological Sciences, 2002, 357, 749-760.	4.0	111
43	The Arabidopsis D-Type Cyclin CYCD2;1 and the Inhibitor ICK2/KRP2 Modulate Auxin-Induced Lateral Root Formation. Plant Cell, 2011, 23, 641-660.	6.6	111
44	Systems Analysis of Shoot Apical Meristem Growth and Development: Integrating Hormonal and Mechanical Signaling. Plant Cell, 2012, 24, 3907-3919.	6.6	109
45	The KNOX gene SHOOT MERISTEMLESS is required for the development of reproductive meristematic tissues in Arabidopsis. Plant Journal, 2007, 50, 767-781.	5.7	107
46	Genome mining identifies cepacin as a plant-protective metabolite of the biopesticidal bacterium Burkholderia ambifaria. Nature Microbiology, 2019, 4, 996-1005.	13.3	106
47	Comprehensive gene expression atlas for the Arabidopsis MAP kinase signalling pathways. New Phytologist, 2008, 179, 643-662.	7.3	105
48	FLP recombinase in transgenic plants: constitutive activity in stably transformed tobacco and generation of marked cell clones in Arabidopsis. Plant Journal, 1995, 8, 637-652.	5.7	103
49	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
50	Arabidopsis E2F1 binds a sequence present in the promoter of S-phase-regulated gene AtCDC6 and is a member of a multigene family with differential activities. Plant Molecular Biology, 2001, 47, 555-568.	3.9	98
51	Degradation of the cyclinâ€dependent kinase inhibitor KRP1 is regulated by two different ubiquitin E3 ligases. Plant Journal, 2008, 53, 705-716.	5.7	97
52	AINTEGUMENTA and the D-type cyclin CYCD3;1 regulate root secondary growth and respond to cytokinins. Biology Open, 2015, 4, 1229-1236.	1.2	89
53	Plasmid Vectors Carrying the Replication Origin of Filamentous Single-Stranded Phages. , 1987, , 135-154.		87
54	MAPK Phosphatase AP2C3 Induces Ectopic Proliferation of Epidermal Cells Leading to Stomata Development in Arabidopsis. PLoS ONE, 2010, 5, e15357.	2.5	84

#	Article	IF	Citations
55	The role and regulation of D-type cyclins in the plant cell cycle. , 2000, 43, 621-633.		83
56	The plant cell cycle. Current Opinion in Plant Biology, 1999, 2, 440-446.	7.1	77
57	The developmental context of cell-cycle control in plants. Seminars in Cell and Developmental Biology, 2005, 16, 385-396.	5.0	77
58	The <scp>A</scp>rabidopsis homeobox gene <scp>SHOOT MERISTEMLESS</scp> has cellular and meristemâ€organisational roles with differential requirements for cytokinin and <scp>CYCD3</scp> activity. Plant Journal, 2013, 75, 53-66.	5.7	77
59	Functional analysis of the yeast plasmid partition locus STB. EMBO Journal, 1986, 5, 3391-3399.	7.8	73
60	The D-type cyclin CYCD4;1 modulates lateral root density in Arabidopsis by affecting the basal meristem region. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22528-22533.	7.1	73
61	Novel Bioluminescent Quantitative Detection of Nucleic Acid Amplification in Real-Time. PLoS ONE, 2010, 5, e14155.	2.5	73
62	Mutagenesis of solvent-exposed amino acids in Photinus pyralis luciferase improves thermostability and pH-tolerance. Biochemical Journal, 2006, 397, 305-312.	3.7	68
63	Differential stability ofArabidopsisD-type cyclins: CYCD3;1 is a highly unstable protein degraded by a proteasome-dependent mechanism. Plant Journal, 2004, 38, 616-625.	5.7	65
64	Arabidopsis thaliana Chromosome 4 Replicates in Two Phases That Correlate with Chromatin State. PLoS Genetics, 2010, 6, e1000982.	3.5	65
65	Isolation of Intact DNA and RNA from Plant Tissues. Analytical Biochemistry, 1994, 218, 474-476.	2.4	63
66	The plant cell cycle in context. Journal of Experimental Botany, 2014, 65, 2557-2562.	4.8	63
67	RSC2 , Encoding a Component of the RSC Nucleosome Remodeling Complex, Is Essential for 2Î¼m Plasmid Maintenance in Saccharomyces cerevisiae. Molecular and Cellular Biology, 2002, 22, 4218-4229.	2.3	62
68	Development of a thermostable firefly luciferase. Analytica Chimica Acta, 2002, 457, 115-123.	5.4	62
69	The AtRbx1 Protein Is Part of Plant SCF Complexes, and Its Down-regulation Causes Severe Growth and Developmental Defects. Journal of Biological Chemistry, 2002, 277, 50069-50080.	3.4	59
70	D-type cyclins control cell division and developmental rate during Arabidopsis seed development. Journal of Experimental Botany, 2012, 63, 3571-3586.	4.8	56
71	Arabidopsis transcript profiling on Affymetrix GeneChip arrays. Plant Molecular Biology, 2003, 53, 457-465.	3.9	55
72	Retinoblastoma proteins in plants. , 1999, 41, 295-299.		54

#	Article	IF	Citations
73	Lineage and stage-specific expressed CYCD7;1 coordinates the single symmetric division that creates stomatal guard cells. Development (Cambridge), 2018, 145, .	2.5	53
74	Genomic Organization and Evolutionary Conservation of Plant D-Type Cyclins. Plant Physiology, 2007, 145, 1558-1576.	4.8	52
75	Enhanced Transformation of TNT by Tobacco Plants Expressing a Bacterial Nitroreductase. International Journal of Phytoremediation, 2007, 9, 385-401.	3.1	52
76	Transcriptional activation of tobacco E2F is repressed by co-transfection with the retinoblastoma-related protein: cyclin D expression overcomes this repressor activity. Plant Molecular Biology, 2005, 57, 83-100.	3.9	50
77	Dissecting regulatory pathways of G1/S control in Arabidopsis: common and distinct targets of CYCD3;1, E2Fa and E2Fc. Plant Molecular Biology, 2009, 71, 345-365.	3.9	50
78	Glutathione Transport: A New Role for PfCRT in Chloroquine Resistance. Antioxidants and Redox Signaling, 2013, 19, 683-695.	5.4	50
79	Cryopreservation of transformed and wild-typeArabidopsisand tobacco cell suspension cultures. Plant Journal, 2004, 37, 635-644.	5.7	47
80	Coordination of meristem and boundary functions by transcription factors in the SHOOT MERISTEMLESS regulatory network. Development (Cambridge), 2018, 145, .	2.5	41
81	STM sustains stem cell function in theArabidopsisshoot apical meristem and controlsKNOXgene expression independently of the transcriptional repressor AS1. Plant Signaling and Behavior, 2014, 9, e28934.	2.4	40
82	The Arabidopsis CDK inhibitor ICK3/KRP5 is rate limiting for primary root growth and promotes growth through cell elongation and endoreduplication. Journal of Experimental Botany, 2013, 64, 1-13.	4.8	39
83	DEFECTIVE KERNEL 1 promotes and maintains plant epidermal differentiation. Development (Cambridge), 2015, 142, 1978-1983.	2.5	36
84	Unexpected divergence and molecular coevolution in yeast plasmids. Journal of Molecular Biology, 1988, 200, 601-607.	4.2	33
85	Optimised LAMP allows single copy detection of 35Sp and NOSt in transgenic maize using Bioluminescent Assay in Real Time (BART). Scientific Reports, 2018, 8, 17590.	3.3	33
86	Micro Review Bending the rules: the 2? plasmid of yeast. Molecular Microbiology, 1987, 1, 1-4.	2.5	31
87	Somatic and germinal inheritance of an FLP-mediated deletion in transgenic tobacco. Journal of Experimental Botany, 1999, 50, 1447-1456.	4.8	29
88	Ectopic expression of Arabidopsis CYCD2 and CYCD3 in tobacco has distinct effects on the structural organization of the shoot apical meristem. Journal of Experimental Botany, 2004, 56, 123-34.	4.8	29
89	A model for Arabidopsis class-1 KNOX gene function. Plant Signaling and Behavior, 2008, 3, 257-259.	2.4	29
90	AINTEGUMENTA and the D-type cyclin CYCD3;1 independently contribute to petal size control in Arabidopsis: evidence for organ size compensation being an emergent rather than a determined property. Journal of Experimental Botany, 2015, 66, 3991-4000.	4.8	29

#	Article	IF	Citations
91	Genome-wide chromatin mapping with size resolution reveals a dynamic sub-nucleosomal landscape in Arabidopsis. PLoS Genetics, 2017, 13, e1006988.	3.5	29
92	Control of plant growth and development through manipulation of cell-cycle genes. Current Opinion in Biotechnology, 2000, 11, 138-145.	6.6	28
93	Control of division and differentiation of plant stem cells and their derivatives. Seminars in Cell and Developmental Biology, 2009, 20, 1134-1142.	5.0	27
94	DNA PLASMID TRANSMISSION IN YEAST IS ASSOCIATED WITH SPECIFIC SUB-NUCLEAR LOCALISATION DURING CELL DIVISION. Cell Biology International, 2002, 26, 393-405.	3.0	24
95	Synchronization, Transformation, and Cryopreservation of Suspension-Cultured Cells. , 2006, 323, 45-62.		24
96	Isolation, characterization and expression of cyclin and cyclin-dependent kinase genes in Jerusalem artichoke (Helianthus tuberosus L.). Journal of Experimental Botany, 2003, 54, 303-308.	4.8	23
97	Convergent synthesis and optical properties of near-infrared emitting bioluminescent infra-luciferins. RSC Advances, 2017, 7, 3975-3982.	3.6	23
98	Plant cell division: the beginning of START. Plant Molecular Biology, 1994, 26, 1-3.	3.9	22
99	Controlled induction of GUS marked clonal sectors in Arabidopsis. Journal of Experimental Botany, 2000, 51, 853-863.	4.8	22
100	Activation of <scp>CYCD</scp>7;1 in the central cell and early endosperm overcomes cellâ€cycle arrest in the Arabidopsis female gametophyte, and promotes early endosperm and embryo development. Plant Journal, 2015, 84, 41-55.	5.7	21
101	Lack of specificity associated with using molecular beacons in loop mediated amplification assays. BMC Biotechnology, 2019, 19, 55.	3.3	19
102	Double or Nothing? Cell Division and Cell Size Control. Trends in Plant Science, 2019, 24, 1083-1093.	8.8	19
103	Multiple cloning sites carrying loxP and FRT recognition sites for the Cre and Flp site-specific recombinases. Gene, 1995, 166, 173-174.	2.2	18
104	Cell Cycle Regulated D3-type Cyclins form Active Complexes with Plant-specific B-type Cyclin-dependent Kinase in vitro. Plant Molecular Biology, 2006, 61, 311-327.	3.9	18
105	Full Dynamic Range Quantification using Loop-mediated Amplification (LAMP) by Combining Analysis of Amplification Timing and Variance between Replicates at Low Copy Number. Scientific Reports, 2020, 10, 916.	3.3	18
106	Discovery of the Pseudomonas Polyyne Protegencin by a Phylogeny-Guided Study of Polyyne Biosynthetic Gene Cluster Diversity. MBio, 2021, 12, e0071521.	4.1	16
107	A novel and highly divergent Arabidopsis cyclin isolated by complementation in budding yeast. Biochimica Et Biophysica Acta - Molecular Cell Research, 2001, 1539, 1-6.	4.1	14
108	Re-induction of the cell cycle in the Arabidopsis post-embryonic root meristem is ABA-insensitive, GA-dependent and repressed by KRP6. Scientific Reports, 2016, 6, 23586.	3.3	14

#	Article	IF	Citations
109	Bioluminescent detection of isothermal DNA amplification in microfluidic generated droplets and artificial cells. Scientific Reports, 2020, 10, 21886.	3.3	14
110	Mosaic analysis ofGL2 gene expression and cell layer autonomy during the specification ofArabidopsis leaf trichomes. Genesis, 2000, 28, 68-74.	1.6	13
111	HCC ligation: rapid and specific DNA construction with blunt ended DNA fragments. Nucleic Acids Research, 1986, 14, 10118-10118.	14.5	12
112	The retinoblastoma protein is in plants!. Trends in Plant Science, 1997, 2, 82-84.	8.8	12
113	The Plant Cyclins. , 0, , 31-61.		12
114	The Next Generation of Training for Arabidopsis Researchers: Bioinformatics and Quantitative Biology. Plant Physiology, 2017, 175, 1499-1509.	4.8	11
115	A rapid and inexpensive method for isolation of shuttle vector DNA from yeast for the transformation ofE.coli. Nucleic Acids Research, 1992, 20, 5852-5852.	14.5	10
116	Synthesis of 6-Hydroxybenzothiazole-2-carboxylic Acid. Synthesis, 2001, 2001, 1780-1783.	2.3	10
117	The Evolving Concept of the Meristem. Plant Molecular Biology, 2006, 60, V-VII.	3.9	9
118	A greenprint for growth: signalling the pattern of proliferation. Current Opinion in Plant Biology, 2006, 9, 490-495.	7.1	9
119	Genomic Assemblies of Members of Burkholderia and Related Genera as a Resource for Natural Product Discovery. Microbiology Resource Announcements, 2020, 9, .	0.6	9
120	An Escherichia coli system for assay of Flp site-specific recombination on substrate plasmids. Gene, 1996, 180, 225-227.	2.2	8
121	Phytotracker, an information management system for easy recording and tracking of plants, seeds and plasmids. Plant Methods, 2012, 8, 43.	4.3	8
122	Somatic and germinal inheritance of an FLP-mediated deletion in transgenic tobacco. Journal of Experimental Botany, 1999, 50, 1447-1456.	4.8	7
123	Seed size plasticity in response to embryonic lethality conferred by ectopic CYCD activation is dependent on plant architecture. Plant Signaling and Behavior, 2016, 11, e1192741.	2.4	6
124	Î”Flucs: Brighter Photinus pyralis firefly luciferases identified by surveying consecutive single amino acid deletion mutations in a thermostable variant. Biotechnology and Bioengineering, 2018, 115, 50-59.	3.3	6
125	To Divide and to Rule; Regulating Cell Division in Roots During Post-embryonic Growth. Progress in Botany Fortschritte Der Botanik, 2012, , 57-80.	0.3	5
126	Arabidopsis Thaliana Automatic Cell File Detection and Cell Length Estimation. Lecture Notes in Computer Science, 2011, , 1-11.	1.3	5

#	Article	IF	Citations
127	Controlled induction of GUS marked clonal sectors in Arabidopsis. Journal of Experimental Botany, 2000, 51, 853-863.	4.8	2
128	The role and regulation of D-type cyclins in the plant cell cycle. , 2000, , 77-89.		2
129	Plant D-type cyclins: structure, roles and functions. SEB Experimental Biology Series, 2008, 59, 1-28.	0.1	2
130	A Family of Cyclin D Homologs from Plants Differentially Controlled by Growth Regulators and Containing the Conserved Retinoblastoma Protein Interaction Motif. Plant Cell, 1995, 7, 85.	6.6	1
131	BART-NAAT â€" A NOVEL BIOLUMINESCENT ASSAY FOR REAL-TIME NUCLEIC ACID AMPLIFICATION. , 2005, , .		0
132	A novel family of thiol transporters from plants. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2007, 146, S266.	1.8	0
133	Regulatory processes underscoring the light control of shoot meristem activity and leaf initiation. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2009, 153, S205.	1.8	0
134	Segmentation of Meristem Cells by an Automated Optimization Algorithm. Applied Sciences (Switzerland), 2020, 10, 8523.	2.5	0
135	A SINGLEâ€"STEP BIOLUMINESCENT ENDPOINT ASSAY FOR NUCLEIC ACID AMPLIFICATION TECHNOLOGIES. , 2005, , .		0
136	BIOLUMINESCENT DETECTION OF RNA HYDROLYSIS PROBES IN DNA TESTING. , 2005, , .		0
137	Proteomic Analysis of CDKâ€€Cyclin Complexes. FASEB Journal, 2006, 20, .	0.5	0
138	BART: SMART BIOCHEMISTRY, BRIGHT BIOLUMINESCENCE, LOW-COST HARDWARE. , 2008, , .		0
139	BART APPLICATIONS IN MEDICAL AND FOOD DIAGNOSTICS. , 2008, , .		0