John L Bowman

List of Publications by Year
in descending order

144 papers	27,037 citations	8159 76 h-index	10424 139 g-index
158 all docs	158 docs citations	158 times ranked	14770 citing authors

#	Article	IF	Citations
1	Early flower development in Arabidopsis.. Plant Cell, 1990, 2, 755-767.	3.1	1,979
2	The protein encoded by the Arabidopsis homeotic gene agamous resembles transcription factors. Nature, 1990, 346, 35-39.	13.7	1,643
3	Genes directing flower development in Arabidopsis.. Plant Cell, 1989, 1, 37-52.	3.1	1,200
4	Criteria for Annotation of Plant MicroRNAs. Plant Cell, 2008, 20, 3186-3190.	3.1	1,158
5	Role of PHABULOSA and PHAVOLUTA in determining radial patterning in shoots. Nature, 2001, 411, 709-713.	13.7	995
6	Radial Patterning of Arabidopsis Shoots by Class III HD-ZIP and KANADI Genes. Current Biology, 2003, 13, 1768-1774.	1.8	990
7	Insights into Land Plant Evolution Garnered from the Marchantia polymorpha Genome. Cell, 2017, 171, 287-304.e15.	13.5	973
8	SHATTERPROOF MADS-box genes control seed dispersal in Arabidopsis. Nature, 2000, 404, 766-770.	13.7	858
9	The Selaginella Genome Identifies Genetic Changes Associated with the Evolution of Vascular Plants. Science, 2011, 332, 960-963.	6.0	794
10	Cell signalling by microRNA165/6 directs gene dose-dependent root cell fate. Nature, 2010, 465, 316-321.	13.7	739
11	Negative regulation of the Arabidopsis homeotic gene AGAMOUS by the APETALA2 product. Cell, 1991, 65, 991-1002.	13.5	655
12	Establishment of polarity in lateral organs of plants. Current Biology, 2001, 11, 1251-1260.	1.8	620
13	Control of flower development in <i>Arabidopsis thaliana</i> by <i>APETALA1</i> and interacting genes. Development (Cambridge), 1993, 119, 721-743.	1.2	608
14	Genetic interactions among floral homeotic genes of Arabidopsis. Development (Cambridge), 1991, 112, 1-20.	1.2	467
15	Evolution of plant microRNAs and their targets. Trends in Plant Science, 2008, 13, 343-349.	4.3	426
16	Ancient microRNA target sequences in plants. Nature, 2004, 428, 485-486.	13.7	370
17	Asymmetric leaf development and blade expansion in Arabidopsisare mediated by KANADI and YABBY activities. Development (Cambridge), 2004, 131, 2997-3006.	1.2	365
18	Distinct Mechanisms Promote Polarity Establishment in Carpels of Arabidopsis. Cell, 1999, 99, 199-209.	13.5	359

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19	Expression of the Arabidopsis floral homeotic gene AGAMOUS is restricted to specific cell types late in flower development.. Plant Cell, 1991, 3, 749-758.	3.1	324
20	The flowering hormone florigen functions as a general systemic regulator of growth and termination. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8392-8397.	3.3	301
21	Members of the YABBY gene family specify abaxial cell fate in Arabidopsis. Development (Cambridge), 1999, 126, 4117-28.	1.2	299
22	The Ancestral Developmental Tool Kit of Land Plants. International Journal of Plant Sciences, 2007, 168, 1-35.	0.6	273
23	Photoperiodic control of seasonal growth is mediated by ABA acting on cell-cell communication. Science, 2018, 360, 212-215.	6.0	272
24	Establishment of polarity in angiosperm lateral organs. Trends in Genetics, 2002, 18, 134-141.	2.9	267
25	Differentiating Arabidopsis Shoots from Leaves by Combined YABBY Activities Â. Plant Cell, 2010, 22, 2113-2130.	3.1	265
26	Auxin-Dependent Patterning and Gamete Specification in the <i>Arabidopsis</i> Female Gametophyte. Science, 2009, 324, 1684-1689.	6.0	252
27	The YABBY gene family and abaxial cell fate. Current Opinion in Plant Biology, 2000, 3, 17-22.	3.5	249
28	Manipulation of flower structure in transgenic tobacco. Cell, 1992, 71, 133-143.	13.5	244
29	YABBY Polarity Genes Mediate the Repression of KNOX Homeobox Genes in Arabidopsis. Plant Cell, 2002, 14, 2761-2770.	3.1	229
30	Genes Directing Flower Development in Arabidopsis. Plant Cell, 1989, 1, 37.	3.1	228
31	CRABS CLAW, a gene that regulates carpel and nectary development in Arabidopsis, encodes a novel protein with zinc finger and helix-loop-helix domains. Development (Cambridge), 1999, 126, 2387-96.	1.2	225
32	Formation and maintenance of the shoot apical meristem. Trends in Plant Science, 2000, 5, 110-115.	4.3	217
33	Green Genesâ€"Comparative Genomics of the Green Branch of Life. Cell, 2007, 129, 229-234.	13.5	209
34	KANADI and Class III HD-Zip Gene Families Regulate Embryo Patterning and Modulate Auxin Flow during Embryogenesis in Arabidopsis. Plant Cell, 2007, 19, 495-508.	3.1	201
35	A Simple Auxin Transcriptional Response System Regulates Multiple Morphogenetic Processes in the Liverwort Marchantia polymorpha. PLoS Genetics, 2015, 11, e1005207.	1.5	200
36	Mechanisms that control knox gene expression in the Arabidopsis shoot. Development (Cambridge), 2000, 127, 5523-32.	1.2	186

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37	Interplay of auxin, KANADI and Class III HD-ZIP transcription factors in vascular tissue formation. Development (Cambridge), 2010, 137, 975-984.	1.2	179
38	Recruitment of CRABS CLAW to promote nectary development within the eudicot clade. Development (Cambridge), 2005, 132, 5021-5032.	1.2	169
39	A Surveillance System Regulates Selective Entry of RNA into the Shoot Apex. Plant Cell, 2002, 14, 1497-1508.	3.1	162
40	Chromatin Organization in Early Land Plants Reveals an Ancestral Association between H3K27me3, Transposons, and Constitutive Heterochromatin. Current Biology, 2020, 30, 573-588.e7.	1.8	160
41	Auxin-Mediated Transcriptional System with a Minimal Set of Components Is Critical for Morphogenesis through the Life Cycle in Marchantia polymorpha. PLoS Genetics, 2015, 11, e1005084.	1.5	157
42	ABERRANT TESTA SHAPE encodes a KANADI family member, linking polarity determination to separation and growth of Arabidopsis ovule integuments. Plant Journal, 2006, 46, 522-531.	2.8	154
43	The Arabidopsis thaliana SNF2 homolog AtBRM controls shoot development and flowering. Development (Cambridge), 2004, 131, 4965-4975.	1.2	152
44	4 Molecular Genetics of Gynoecium Development in Arabidopsis. Current Topics in Developmental Biology, 1999, 45, 155-205.	1.0	150
45	Activation of CRABS CLAW in the Nectaries and Carpels of Arabidopsis. Plant Cell, 2005, 17, 25-36.	3.1	147
46	The ABC model of flower development: then and now. Development (Cambridge), 2012, 139, 4095-4098.	1.2	147
47	Roles for Class III HD-Zip and KANADI Genes in Arabidopsis Root Development. Plant Physiology, 2004, 135, 2261-2270.	2.3	146
48	Signals Derived from<i>YABBY</i>Gene Activities in Organ Primordia Regulate Growth and Partitioning of<i>Arabidopsis</i>Shoot Apical Meristems. Plant Cell, 2008, 20, 1217-1230.	3.1	143
49	Turning floral organs into leaves, leaves into floral organs. Current Opinion in Genetics and Development, 2001, 11, 449-456.	1.5	139
50	Active suppression of a leaf meristem orchestrates determinate leaf growth. ELife, 2016, 5, .	2.8	139
51	Auxin Produced by the Indole-3-Pyruvic Acid Pathway Regulates Development and Gemmae Dormancy in the Liverwort <i>Marchantia polymorpha</i>. Plant Cell, 2015, 27, 1650-1669.	3.1	138
52	Antagonistic Roles for KNOX1 and KNOX2 Genes in Patterning the Land Plant Body Plan Following an Ancient Gene Duplication. PLoS Genetics, 2015, 11, e1004980.	1.5	137
53	A genetic and molecular model for flower development in <i>Arabidopsis thaliana</i>. Development (Cambridge), 1991, 113, 157-167.	1.2	136
54	Evolution of Class III Homeodomainâ€"Leucine Zipper Genes in Streptophytes. Genetics, 2006, 173, 373-388.	1.2	133

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55	KNOX2 Genes Regulate the Haploid-to-Diploid Morphological Transition in Land Plants. Science, 2013, 339, 1067-1070.	6.0	132
56	Evolutionary conservation of angiosperm flower development at the molecular and genetic levels. Journal of Biosciences, 1997, 22, 515-527.	0.5	128
57	The Evolution of Flavonoid Biosynthesis: A Bryophyte Perspective. Frontiers in Plant Science, 2020, 11, 7.	1.7	126
58	Chloroplast DNA phylogeny and biogeography of Lepidium (Brassicaceae). American Journal of Botany, 2001, 88, 2051-2063.	0.8	122
59	Molecular evidence for bicontinental hybridogenous genomic constitution in <i>Lepidium</i> sensu stricto (Brassicaceae) species from Australia and New Zealand. American Journal of Botany, 2004, 91, 254-261.	0.8	122
60	SUPERMAN, a regulator of floral homeotic genes in Arabidopsis. Development (Cambridge), 1992, 114, 599-615.	1.2	118
61	Arabidopsis Homologs of the<i>Petunia</i>Â<i>HAIRY MERISTEM</i>Gene Are Required for Maintenance of Shoot and Root Indeterminacy Â Â Â. Plant Physiology, 2011, 155, 735-750.	2.3	116
62	The<i>NGATHA</i>Distal Organ Development Genes Are Essential for Style Specification in<i>Arabidopsis</i>Â. Plant Cell, 2009, 21, 1373-1393.	3.1	115
63	REBELOTE, SQUINT, and ULTRAPETALA1 Function Redundantly in the Temporal Regulation of Floral Meristem Termination in Arabidopsis thaliana Â. Plant Cell, 2008, 20, 901-919.	3.1	112
64	Patterning and Polarity in Seed Plant Shoots. Annual Review of Plant Biology, 2008, 59, 67-88.	8.6	109
65	Marchantia MpRKD Regulates the Gametophyte-Sporophyte Transition by Keeping Egg Cells Quiescent in the Absence of Fertilization. Current Biology, 2016, 26, 1782-1789.	1.8	104
66	Evolution in the Cycles of Life. Annual Review of Genetics, 2016, 50, 133-154.	3.2	99
67	Field Guide to Plant Model Systems. Cell, 2016, 167, 325-339.	13.5	99
68	Distinct Developmental Mechanisms Reflect the Independent Origins of Leaves in Vascular Plants. Current Biology, 2006, 16, 1911-1917.	1.8	98
69	Genetic analysis of the liverwort <i>Marchantia polymorpha</i> reveals that R2R3<scp>MYB</scp> activation of flavonoid production in response to abiotic stress is an ancient character in land plants. New Phytologist, 2018, 218, 554-566.	3.5	98
70	UVR8â€mediated induction of flavonoid biosynthesis for UVB tolerance is conserved between the liverwort <i>Marchantia polymorpha</i> and flowering plants. Plant Journal, 2018, 96, 503-517.	2.8	93
71	Efficient and Inducible Use of Artificial MicroRNAs in<i>Marchantia polymorpha</i>. Plant and Cell Physiology, 2016, 57, 281-290.	1.5	91
72	Gene expression patterns in seed plant shoot meristems and leaves: homoplasy or homology?. Journal of Plant Research, 2010, 123, 43-55.	1.2	90

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73	Evolution of the YABBY gene family in seed plants. Evolution & Development, 2016, 18, 116-126.	1.1	87
74	The Arabidopsis nectary is an ABC-independent floral structure. Development (Cambridge), 2001, 128, 4657-4667.	1.2	85
75	Freezing and desiccation tolerance in the moss Physcomitrella patens: An in situ Fourier transform infrared spectroscopic study. Biochimica Et Biophysica Acta - General Subjects, 2006, 1760, 1226-1234.	1.1	84
76	Walkabout on the long branches of plant evolution. Current Opinion in Plant Biology, 2013, 16, 70-77.	3.5	84
77	Class C <scp>ARF</scp>s evolved before the origin of land plants and antagonize differentiation and developmental transitions in <i>Marchantia polymorpha</i>. New Phytologist, 2018, 218, 1612-1630.	3.5	81
78	A Brief History of<i>Marchantia</i>from Greece to Genomics. Plant and Cell Physiology, 2016, 57, 210-229.	1.5	74
79	A Genetic Screen for Impaired Systemic RNAi Highlights the Crucial Role of DICER-LIKE 2. Plant Physiology, 2017, 175, 1424-1437.	2.3	72
80	Microbial-type terpene synthase genes occur widely in nonseed land plants, but not in seed plants. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12328-12333.	3.3	70
81	Identification of miRNAs and Their Targets in the Liverwort<i>Marchantia polymorpha</i>by Integrating RNA-Seq and Degradome Analyses. Plant and Cell Physiology, 2016, 57, 339-358.	1.5	70
82	Allopolyploidization and evolution of species with reduced floral structures in Lepidium L. (Brassicaceae). Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 16835-16840.	3.3	68
83	Profiling and Characterization of Small RNAs in the Liverwort,<i>Marchantia polymorpha</i>, Belonging to the First Diverged Land Plants. Plant and Cell Physiology, 2016, 57, 359-372.	1.5	68
84	An Evolutionarily Conserved Abscisic Acid Signaling Pathway Regulates Dormancy in the Liverwort Marchantia polymorpha. Current Biology, 2018, 28, 3691-3699.e3.	1.8	68
85	Extensive epigenetic reprogramming during the life cycle of Marchantia polymorpha. Genome Biology, 2018, 19, 9.	3.8	64
86	Promoter Bashing, microRNAs, and Knox Genes. New Insights, Regulators, and Targets-of-Regulation in the Establishment of Lateral Organ Polarity in Arabidopsis. Plant Physiology, 2004, 135, 685-694.	2.3	63
87	Cellulose Synthesis â€“ Central Components and Their Evolutionary Relationships. Trends in Plant Science, 2019, 24, 402-412.	4.3	62
88	Genome-Wide Identification of KANADI1 Target Genes. PLoS ONE, 2013, 8, e77341.	1.1	61
89	The Naming of Names: Guidelines for Gene Nomenclature in<i>Marchantia</i>. Plant and Cell Physiology, 2016, 57, 257-261.	1.5	60
90	A <i>cis</i> â€acting bidirectional transcription switch controls sexual dimorphism in the liverwort. EMBO Journal, 2019, 38, .	3.5	59

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91	Class III HD-Zip gene regulation, the golden fleece of ARGONAUTE activity?. BioEssays, 2004, 26, 938-942.	1.2	58
92	Terpenoid Secondary Metabolites in Bryophytes: Chemical Diversity, Biosynthesis and Biological Functions. Critical Reviews in Plant Sciences, 2018, 37, 210-231.	2.7	57
93	Evolutionary Changes in Floral Structure withinLepidiumL. (Brassicaceae). International Journal of Plant Sciences, 1999, 160, 917-929.	0.6	56
94	Control of proliferation in the haploid meristem by CLE peptide signaling in Marchantia polymorpha. PLoS Genetics, 2019, 15, e1007997.	1.5	55
95	Induction of Multichotomous Branching by CLAVATA Peptide in Marchantia polymorpha. Current Biology, 2020, 30, 3833-3840.e4.	1.8	54
96	Activity Range of Arabidopsis Small RNAs Derived from Different Biogenesis Pathways Â. Plant Physiology, 2008, 147, 58-62.	2.3	51
97	Expression of the Arabidopsis Floral Homeotic Gene AGAMOUS Is Restricted to Specific Cell Types Late in Flower Development. Plant Cell, 1991, 3, 749.	3.1	49
98	Molecular Diversity of Terpene Synthases in the Liverwort Marchantia polymorpha. Plant Cell, 2016, 28, tpc.00062.2016.	3.1	48
99	Oil Body Formation in Marchantia polymorpha Is Controlled by MpC1HDZ and Serves as a Defense against Arthropod Herbivores. Current Biology, 2020, 30, 2815-2828.e8.	1.8	48
100	Class III HD-Zip activity coordinates leaf development in Physcomitrella patens. Developmental Biology, 2016, 419, 184-197.	0.9	47
101	Marchantia liverworts as a proxy to plantsâ€™ basal microbiomes. Scientific Reports, 2018, 8, 12712.	1.6	46
102	Ethylene-independent functions of the ethylene precursor ACC in Marchantia polymorpha. Nature Plants, 2020, 6, 1335-1344.	4.7	46
103	<i>Marchantia</i>: Past, Present and Future. Plant and Cell Physiology, 2016, 57, 205-209.	1.5	45
104	Axial patterning in leaves and other lateral organs. Current Opinion in Genetics and Development, 2000, 10, 399-404.	1.5	44
105	Something ancient and something neofunctionalizedâ€"evolution of land plant hormone signaling pathways. Current Opinion in Plant Biology, 2019, 47, 64-72.	3.5	44
106	The Arabidopsis nectary is an ABC-independent floral structure. Development (Cambridge), 2001, 128, 4657-67.	1.2	42
107	Co-expression and Transcriptome Analysis of Marchantia polymorpha Transcription Factors Supports Class C ARFs as Independent Actors of an Ancient Auxin Regulatory Module. Frontiers in Plant Science, 2018, 9, 1345.	1.7	41
108	A Role of TDIF Peptide Signaling in Vascular Cell Differentiation is Conserved Among Euphyllophytes. Frontiers in Plant Science, 2015, 6, 1048.	1.7	38

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109	Identification of the sex-determining factor in the liverwort Marchantia polymorpha reveals unique evolution of sex chromosomes in a haploid system. Current Biology, 2021, 31, 5522-5532.e7.	1.8	36
110	Plant genetics: a decade of integration. Nature Genetics, 2003, 33, 294-304.	9.4	35
111	Gamete expression of TALE class HD genes activates the diploid sporophyte program in Marchantia polymorpha. ELife, 2021, 10, .	2.8	35
112	Patterns of Petal and Stamen Reduction in Australian Species of Lepidium L. (Brassicaceae). International Journal of Plant Sciences, 1998, 159, 65-74.	0.6	32
113	Evolution and co-option of developmental regulatory networks in early land plants. Current Topics in Developmental Biology, 2019, 131, 35-53.	1.0	32
114	Evolution of the Class IV HD-Zip Gene Family in Streptophytes. Molecular Biology and Evolution, 2013, 30, 2347-2365.	3.5	31
115	Evolutionary history of <scp>HOMEODOMAIN LEUCINE ZIPPER</scp> transcription factors during plant transition to land. New Phytologist, 2018, 219, 408-421.	3.5	31
116	Vectors for plant transformation and cosmid libraries. Gene, 1992, 117, 161-167.	1.0	30
117	Multiple Protein Regions Contribute to Differential Activities of YABBY Proteins inReproductive Development. Plant Physiology, 2005, 137, 651-662.	2.3	29
118	Flower Development: Open Questions and Future Directions. Methods in Molecular Biology, 2014, 1110, 103-124.	0.4	26
119	The KNOXI Transcription Factor SHOOT MERISTEMLESS Regulates Floral Fate in Arabidopsis. Plant Cell, 2018, 30, 1309-1321.	3.1	23
120	Molecules and morphology: comparative developmental genetics of the Brassicaceae. Plant Systematics and Evolution, 2006, 259, 199-215.	0.3	20
121	Micro<scp>RNA</scp>s in <i>Marchantia polymorpha</i>. New Phytologist, 2018, 220, 409-416.	3.5	20
122	Transcriptional and Morpho-Physiological Responses of Marchantia polymorpha upon Phosphate Starvation. International Journal of Molecular Sciences, 2020, 21, 8354.	1.8	17
123	Chloroplast DNA phylogeny and biogeography of Lepidium (Brassicaceae). American Journal of Botany, 2001, 88, 2051-63.	0.8	17
124	The liverwort Marchantia polymorpha, a model for all ages. Current Topics in Developmental Biology, 2022, 147, 1-32.	1.0	17
125	Marchantia. Current Biology, 2016, 26, R186-R187.	1.8	16
126	Stomata: Active Portals for Flourishing on Land. Current Biology, 2011, 21, R540-R541.	1.8	14

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127	Origin of a novel regulatory module by duplication and degeneration of an ancient plant transcription factor. Molecular Phylogenetics and Evolution, 2014, 81, 159-173.	1.2	14
128	Rates and patterns of molecular evolution in bryophyte genomes, with focus on complex thalloid liverworts, Marchantiopsida. Molecular Phylogenetics and Evolution, 2021, 165, 107295.	1.2	12
129	Stress, senescence and specialised metabolites in bryophytes. Journal of Experimental Botany, 2022, , .	2.4	11
130	<i>CLASS-II KNOX</i> genes coordinate spatial and temporal ripening in tomato. Plant Physiology, 2022, 190, 657-668.	2.3	11
131	Genetic control of pattern formation during flower development in Arabidopsis. Symposia of the Society for Experimental Biology, 1991, 45, 89-115.	0.0	10
132	KANADI promotes thallus differentiation and FRâ€induced gametangiophore formation in the liverwort <i>Marchantia</i>. New Phytologist, 2022, 234, 1377-1393.	3.5	10
133	Manipulating floral organ identity. Current Biology, 1993, 3, 90-93.	1.8	9
134	Comparative Analysis of the Conserved Functions of Arabidopsis DRL1 and Yeast KTI12. Molecules and Cells, 2015, 38, 243-250.	1.0	9
135	On the Evolutionary Origins of Land Plant Auxin Biology. Cold Spring Harbor Perspectives in Biology, 2021, 13, a040048.	2.3	8
136	MicroRNAs Guide Asymmetric DNA Modifications Guiding Asymmetric Organs. Developmental Cell, 2004, 7, 629-630.	3.1	7
137	MicroRNAs: Micro-managing the Plant Genome. , 0, , 244-278.		3
138	DEFECTIVE EMBRYO AND MERISTEMS genes are required for cell division and gamete viability in Arabidopsis. PLoS Genetics, 2021, 17, e1009561.	1.5	3
139	3D Body Evolution: Adding a New Dimension to Colonize the Land. Current Biology, 2018, 28, R838-R840.	1.8	2
140	My favourite flowering image. Journal of Experimental Botany, 2013, 64, 5779-5782.	2.4	1
141	Phosphate Starvation Triggers Transcriptional Changes in the Biosynthesis and Signaling Pathways of Phytohormones in Marchantia polymorphaÂ. Biology and Life Sciences Forum, 2021, 4, 89.	0.6	1
142	From cell to organism across space and time. Current Opinion in Plant Biology, 2013, 16, 542-544.	3.5	0
143	Evolution of the Metabolic Network Leading to Ascorbate Synthesis and Degradation Using Marchantia polymorpha as a Model System. , 2017, , 417-430.		0
144	The nature of nurture: the conserved role of tapetalâ€like cells in sporogenesis between mosses and angiosperms. New Phytologist, 2022, , .	3.5	0