Andrew J Fleming

List of Publications by Year
in descending order

58 papers	3,292 citations	109321 35 h-index	155660 55 g-index
64 all docs	64 docs citations	64 times ranked	3817 citing authors

#	Article	IF	Citations
1	From molecule to model, from environment to evolution: an integrated view of growth and development. Current Opinion in Plant Biology, 2010, 13, 1-4.	7.1	212
2	Regulatory Mechanism Controlling Stomatal Behavior Conserved across 400 Million Years of Land Plant Evolution. Current Biology, 2011, 21, 1025-1029.	3.9	180
3	Conditional Repression of AUXIN BINDING PROTEIN1 Reveals That It Coordinates Cell Division and Cell Expansion during Postembryonic Shoot Development in<i>Arabidopsis</i>and Tobacco. Plant Cell, 2008, 20, 2746-2762.	6.6	154
4	Origins and Evolution of Stomatal Development. Plant Physiology, 2017, 174, 624-638.	4.8	154
5	Reduced stomatal density in bread wheat leads to increased water-use efficiency. Journal of Experimental Botany, 2019, 70, 4737-4748.	4.8	144
6	Origin and function of stomata in the moss Physcomitrella patens. Nature Plants, 2016, 2, 16179.	9.3	138
7	Stomatal Function Requires Pectin De-methyl-esterification of the Guard Cell Wall. Current Biology, 2016, 26, 2899-2906.	3.9	131
8	Manipulation of leaf shape by modulation of cell division. Development (Cambridge), 2002, 129, 957-964.	2.5	93
9	Stomatal Opening Involves Polar, Not Radial, Stiffening Of Guard Cells. Current Biology, 2017, 27, 2974-2983.e2.	3.9	89
10	Expression pattern of a tobacco lipid transfer protein gene within the shoot apex.. Plant Journal, 1992, 2, 855-862.	5.7	87
11	Inducible Repression of Multiple Expansin Genes Leads to Growth Suppression during Leaf Development Â Â. Plant Physiology, 2012, 159, 1759-1770.	4.8	85
12	Gall formation in clubrootâ€infected Arabidopsis results from an increase in existing meristematic activities of the host but is not essential for the completion of the pathogen life cycle. Plant Journal, 2012, 71, 226-238.	5.7	78
13	The control of leaf development. New Phytologist, 2005, 166, 9-20.	7.3	75
14	Cell density and airspace patterning in the leaf can be manipulated to increase leaf photosynthetic capacity. Plant Journal, 2017, 92, 981-994.	5.7	74
15	Analysis of expansin-induced morphogenesis on the apical meristem of tomato. Planta, 1999, 208, 166-174.	3.2	72
16	A plant gene with homology to d-myo-inositol-3-phosphate synthase is rapidly and spatially up-regulated during an abscisic-acid-induced morphogenic response in Spirodela polyrrhiza. Plant Journal, 1993, 4, 279-293.	5.7	69
17	Expansins in the bryophyte Physcomitrella patens. Plant Molecular Biology, 2002, 50, 789-802.	3.9	65
18	Formation of primordia and phyllotaxy. Current Opinion in Plant Biology, 2005, 8, 53-58.	7.1	64

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19	Mesophyll porosity is modulated by the presence of functional stomata. Nature Communications, 2019, 10, 2825.	12.8	63
20	Zimmermann's telome theory of megaphyll leaf evolution: a molecular and cellular critique. Current Opinion in Plant Biology, 2007, 10, 4-12.	7.1	59
21	Definition of constitutive gene expression in plants: the translation initiation factor 4A gene as a model. Plant Molecular Biology, 1995, 29, 995-1004.	3.9	58
22	Induction of Differentiation in the Shoot Apical Meristem by Transient Overexpression of a Retinoblastoma-Related Protein. Plant Physiology, 2006, 141, 1338-1348.	4.8	58
23	<scp>leafprocessor</scp>: a new leaf phenotyping tool using contour bending energy and shape cluster analysis. New Phytologist, 2010, 187, 251-261.	7.3	58
24	An ancestral stomatal patterning module revealed in the non-vascular land plant <i>Physcomitrella patens</i>. Development (Cambridge), 2016, 143, 3306-14.	2.5	56
25	Models and Mechanisms of Stomatal Mechanics. Trends in Plant Science, 2018, 23, 822-832.	8.8	53
26	The co-ordination of cell division, differentiation and morphogenesis in the shoot apical meristem: a perspective. Journal of Experimental Botany, 2006, 57, 25-32.	4.8	52
27	Formation of the Stomatal Outer Cuticular Ledge Requires a Guard Cell Wall Proline-Rich Protein. Plant Physiology, 2017, 174, 689-699.	4.8	49
28	Genome-wide transcriptomic analysis of the sporophyte of the moss Physcomitrella patens. Journal of Experimental Botany, 2013, 64, 3567-3581.	4.8	48
29	Auxin influx importers modulate serration along the leaf margin. Plant Journal, 2015, 83, 705-718.	5.7	48
30	Investigating the microstructure of plant leaves in 3D with lab-based X-ray computed tomography. Plant Methods, 2018, 14, 99.	4.3	48
31	The mechanism of leaf morphogenesis. Planta, 2002, 216, 17-22.	3.2	45
32	Cell division pattern influences gene expression in the shoot apical meristem. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 5561-5566.	7.1	42
33	Phased Control of Expansin Activity during Leaf Development Identifies a Sensitivity Window for Expansin-Mediated Induction of Leaf Growth Â. Plant Physiology, 2009, 151, 1844-1854.	4.8	42
34	Conservation of <i><scp>M</scp>ale <scp>S</scp>terility 2</i> function during spore and pollen wall development supports an evolutionarily early recruitment of a core component in the sporopollenin biosynthetic pathway. New Phytologist, 2015, 205, 390-401.	7.3	42
35	The developmental relationship between stomata and mesophyll airspace. New Phytologist, 2020, 225, 1120-1126.	7.3	42
36	Differential expression of alpha- and beta-expansin genes in the elongating leaf of Festuca pratensis. Plant Molecular Biology, 2001, 46, 491-504.	3.9	41

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37	Cellular perspectives for improving mesophyll conductance. Plant Journal, 2020, 101, 845-857.	5.7	39
38	Restoration of <i>DWF4</i> expression to the leaf margin of a <i>dwf4</i> mutant is sufficient to restore leaf shape but not size: the role of the margin in leaf development. Plant Journal, 2007, 52, 1094-1104.	5.7	37
39	Fluorescent imaging of GUS activity and RT-PCR analysis of gene expression in the shoot apical meristem. Plant Journal, 1996, 10, 745-754.	5.7	36
40	Variable expansin expression in Arabidopsis leads to different growth responses. Journal of Plant Physiology, 2014, 171, 329-339.	3.5	36
41	Plant signalling: the inexorable rise of auxin. Trends in Cell Biology, 2006, 16, 397-402.	7.9	34
42	Manipulation of leaf shape by modulation of cell division. Development (Cambridge), 2002, 129, 957-64.	2.5	33
43	Targeted manipulation of leaf form via local growth repression. Plant Journal, 2011, 66, 941-952.	5.7	29
44	Increased leaf mesophyll porosity following transient retinoblastomaâ€related protein silencing is revealed by microcomputed tomography imaging and leads to a systemâ€level physiological response to the altered cell division pattern. Plant Journal, 2013, 76, 914-929.	5.7	28
45	The integration of cell proliferation and growth in leaf morphogenesis. Journal of Plant Research, 2006, 119, 31-36.	2.4	24
46	A Shift toward Smaller Cell Size via Manipulation of Cell Cycle Gene Expression Acts to Smoothen Arabidopsis Leaf Shape Â. Plant Physiology, 2011, 156, 2196-2206.	4.8	20
47	Combined Chlorophyll Fluorescence and Transcriptomic Analysis Identifies the P3/P4 Transition as a Key Stage in Rice Leaf Photosynthetic Development. Plant Physiology, 2016, 170, 1655-1674.	4.8	18
48	Plant mathematics and Fibonacci's flowers. Nature, 2002, 418, 723-723.	27.8	16
49	Ploidy influences wheat mesophyll cell geometry, packing and leaf function. Plant Direct, 2021, 5, e00314.	1.9	16
50	Altering arabinans increases Arabidopsis guard cell flexibility and stomatal opening. Current Biology, 2022, 32, 3170-3179.e4.	3.9	15
51	Stomata and Sporophytes of the Model Moss Physcomitrium patens. Frontiers in Plant Science, 2020, 11, 643.	3.6	13
52	Leaf Initiation: The Integration of Growth and Cell Division. Plant Molecular Biology, 2006, 60, 905-914.	3.9	11
53	Cytokinin induces the developmentally restricted synthesis of an extracellular protein in Physcomitrella patens. Plant Journal, 1994, 5, 21-31.	5.7	9
54	Producing patterns in plants. New Phytologist, 2006, 170, 639-641.	7.3	5

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55	Cell Cycle Control During Leaf Development. , 0, , 203-226.		2
56	Morphogenesis: Forcing the Tissue. Current Biology, 2011, 21, R840-R841.	3.9	2
57	Shape Control: Cell Growth Hits the Mechanical Buffers. Current Biology, 2017, 27, R1231-R1233.	3.9	1
58	Sweet size control in tomato. Nature Genetics, 2015, 47, 698-699.	21.4	0