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	Altering arabinans increases Arabidopsis guard cell flexibility and stomatal opening. Current Biology, 2022, 32, 3170-3179.e4.	3.9	15
2	Ploidy influences wheat mesophyll cell geometry, packing and leaf function. Plant Direct, 2021, 5, e00314.	1.9	16
3	Cellular perspectives for improving mesophyll conductance. Plant Journal, 2020, 101, 845-857.	5.7	39
4	The developmental relationship between stomata and mesophyll airspace. New Phytologist, 2020, 225, 1120-1126.	7.3	42
5	Stomata and Sporophytes of the Model Moss Physcomitrium patens. Frontiers in Plant Science, 2020, 11, 643.	3.6	13
6	Mesophyll porosity is modulated by the presence of functional stomata. Nature Communications, 2019, 10, 2825.	12.8	63
7	Reduced stomatal density in bread wheat leads to increased water-use efficiency. Journal of Experimental Botany, 2019, 70, 4737-4748.	4.8	144
8	Investigating the microstructure of plant leaves in 3D with lab-based X-ray computed tomography. Plant Methods, 2018, 14, 99.	4.3	48
9	Models and Mechanisms of Stomatal Mechanics. Trends in Plant Science, 2018, 23, 822-832.	8.8	53
10	Formation of the Stomatal Outer Cuticular Ledge Requires a Guard Cell Wall Proline-Rich Protein. Plant Physiology, 2017, 174, 689-699.	4.8	49
11	Origins and Evolution of Stomatal Development. Plant Physiology, 2017, 174, 624-638.	4.8	154
12	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
13	Stomatal Opening Involves Polar, Not Radial, Stiffening Of Guard Cells. Current Biology, 2017, 27, 2974-2983.e2.	3.9	89
14	Shape Control: Cell Growth Hits the Mechanical Buffers. Current Biology, 2017, 27, R1231-R1233.	3.9	1
15	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
16	Stomatal Function Requires Pectin De-methyl-esterification of the Guard Cell Wall. Current Biology, 2016, 26, 2899-2906.	3.9	131
17	Origin and function of stomata in the moss Physcomitrella patens. Nature Plants, 2016, 2, 16179.	9.3	138
18	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

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19	Auxin influx importers modulate serration along the leaf margin. Plant Journal, 2015, 83, 705-718.	5.7	48
20	Sweet size control in tomato. Nature Genetics, 2015, 47, 698-699.	21.4	0
21	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
22	Variable expansin expression in Arabidopsis leads to different growth responses. Journal of Plant Physiology, 2014, 171, 329-339.	3.5	36
23	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
24	Genome-wide transcriptomic analysis of the sporophyte of the moss Physcomitrella patens. Journal of Experimental Botany, 2013, 64, 3567-3581.	4.8	48
25	Inducible Repression of Multiple Expansin Genes Leads to Growth Suppression during Leaf Development Â Â. Plant Physiology, 2012, 159, 1759-1770.	4.8	85
26	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
27	Targeted manipulation of leaf form via local growth repression. Plant Journal, 2011, 66, 941-952.	5.7	29
28	Regulatory Mechanism Controlling Stomatal Behavior Conserved across 400 Million Years of Land Plant Evolution. Current Biology, 2011, 21, 1025-1029.	3.9	180
29	Morphogenesis: Forcing the Tissue. Current Biology, 2011, 21, R840-R841.	3.9	2
30	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
31	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
32	<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
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	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
35	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
36	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

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37	Producing patterns in plants. New Phytologist, 2006, 170, 639-641.	7.3	5
38	Leaf Initiation: The Integration of Growth and Cell Division. Plant Molecular Biology, 2006, 60, 905-914.	3.9	11
39	The integration of cell proliferation and growth in leaf morphogenesis. Journal of Plant Research, 2006, 119, 31-36.	2.4	24
40	Plant signalling: the inexorable rise of auxin. Trends in Cell Biology, 2006, 16, 397-402.	7.9	34
41	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
42	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
43	The control of leaf development. New Phytologist, 2005, 166, 9-20.	7.3	75
44	Formation of primordia and phyllotaxy. Current Opinion in Plant Biology, 2005, 8, 53-58.	7.1	64
45	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
46	The mechanism of leaf morphogenesis. Planta, 2002, 216, 17-22.	3.2	45
47	Plant mathematics and Fibonacci's flowers. Nature, 2002, 418, 723-723.	27.8	16
48	Expansins in the bryophyte Physcomitrella patens. Plant Molecular Biology, 2002, 50, 789-802.	3.9	65
49	Manipulation of leaf shape by modulation of cell division. Development (Cambridge), 2002, 129, 957-964.	2.5	93
50	Manipulation of leaf shape by modulation of cell division. Development (Cambridge), 2002, 129, 957-64.	2.5	33
51	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
52	Analysis of expansin-induced morphogenesis on the apical meristem of tomato. Planta, 1999, 208, 166-174.	3.2	72
53	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
54	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

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55	Cytokinin induces the developmentally restricted synthesis of an extracellular protein in Physcomitrella patens. Plant Journal, 1994, 5, 21-31.	5.7	9
56	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
57	Expression pattern of a tobacco lipid transfer protein gene within the shoot apex.. Plant Journal, 1992, 2, 855-862.	5.7	87
58	Cell Cycle Control During Leaf Development. , 0, , 203-226.		2