Ottoline Leyser

List of Publications by Year
in descending order

117 papers	20,891 citations	13099 68 h-index	22832 112 g-index
131 all docs	131 docs citations	131 times ranked	12339 citing authors

#	Article	IF	Citations
1	KAI2 regulates seedling development by mediating lightâ€induced remodelling of auxin transport. New Phytologist, 2022, 235, 126-140.	7.3	9
2	Callose accumulation in specific phloem cell types reduces axillary bud growth in <i>Arabidopsis thaliana</i>. New Phytologist, 2021, 231, 516-523.	7.3	8
3	An ABA-GA bistable switch can account for natural variation in the variability of Arabidopsis seed germination time. ELife, 2021, 10, .	6.0	23
4	A plantâ€™s diet, surviving in a variable nutrient environment. Science, 2020, 368, .	12.6	241
5	Natural variation in Arabidopsis shoot branching plasticity in response to nitrate supply affects fitness. PLoS Genetics, 2019, 15, e1008366.	3.5	29
6	Network trade-offs and homeostasis in Arabidopsis shoot architectures. PLoS Computational Biology, 2019, 15, e1007325.	3.2	1
7	Connective auxin transport contributes to strigolactone-mediated shoot branching control independent of the transcription factor BRC1. PLoS Genetics, 2019, 15, e1008023.	3.5	50
8	Auxin Signaling. Plant Physiology, 2018, 176, 465-479.	4.8	476
9	Structural plasticity of D3â€“D14 ubiquitin ligase in strigolactone signalling. Nature, 2018, 563, 652-656.	27.8	138
10	Cytokinin Targets Auxin Transport to Promote Shoot Branching. Plant Physiology, 2018, 177, 803-818.	4.8	131
11	<i>BRC1</i>expression regulates bud activation potential, but is not necessary or sufficient for bud growth inhibition in Arabidopsis. Development (Cambridge), 2017, 144, 1661-1673.	2.5	106
12	Cross-species functional diversity within the PIN auxin efflux protein family. ELife, 2017, 6, .	6.0	44
13	The pea branching RMS2 gene encodes the PsAFB4/5 auxin receptor and is involved in an auxin-strigolactone regulation loop. PLoS Genetics, 2017, 13, e1007089.	3.5	45
14	Strigolactone regulates shoot development through a core signalling pathway. Biology Open, 2016, 5, 1806-1820.	1.2	153
15	Developmental mechanisms underlying variable, invariant and plastic phenotypes. Annals of Botany, 2016, 117, 733-748.	2.9	44
16	SMAX1-LIKE7 signals from the nucleus to regulate shoot development in Arabidopsis via partially EAR motif-independent mechanisms. Plant Cell, 2016, 28, tpc.00286.2016.	6.6	117
17	Connective Auxin Transport in the Shoot Facilitates Communication between Shoot Apices. PLoS Biology, 2016, 14, e1002446.	5.6	133
18	The Tinkerbell (Tink) Mutation Identifies the Dual-Specificity MAPK Phosphatase INDOLE-3-BUTYRIC ACID-RESPONSE5 (IBR5) as a Novel Regulator of Organ Size in Arabidopsis. PLoS ONE, 2015, 10, e0131103.	2.5	30

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19	A Developmental Framework for Graft Formation and Vascular Reconnection in Arabidopsis thaliana. Current Biology, 2015, 25, 1306-1318.	3.9	218
20	Cytokinin is required for escape but not release from auxin mediated apical dominance. Plant Journal, 2015, 82, 874-886.	5.7	136
21	SMAX1-LIKE/D53 Family Members Enable Distinct MAX2-Dependent Responses to Strigolactones and Karrikins in Arabidopsis. Plant Cell, 2015, 27, 3143-3159.	6.6	339
22	Three ancient hormonal cues co-ordinate shoot branching in a moss. ELife, 2015, 4, .	6.0	84
23	Natural variation of rice strigolactone biosynthesis is associated with the deletion of two <i>MAX1</i> orthologs. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2379-2384.	7.1	138
24	Auxin and Strigolactone Signaling Are Required for Modulation of Arabidopsis Shoot Branching by Nitrogen Supply Â Â. Plant Physiology, 2014, 166, 384-395.	4.8	112
25	Ottoline Leyser: The beauty of plant genetics. Journal of Cell Biology, 2014, 204, 284-285.	5.2	1
26	Moving beyond the GM Debate. PLoS Biology, 2014, 12, e1001887.	5.6	18
27	Paralogous Radiations of PIN Proteins with Multiple Origins of Noncanonical PIN Structure. Molecular Biology and Evolution, 2014, 31, 2042-2060.	8.9	111
28	Functional screening of willow alleles in A rabidopsis combined with QTL mapping in willow (S alix) identifies S x MAX 4 as a coppicing response gene. Plant Biotechnology Journal, 2014, 12, 480-491.	8.3	13
29	Canalization: what the flux?. Trends in Genetics, 2014, 30, 41-48.	6.7	99
30	Strigolactones and the control of plant development: lessons from shoot branching. Plant Journal, 2014, 79, 607-622.	5.7	203
31	Rice cytochrome P450 MAX1 homologs catalyze distinct steps in strigolactone biosynthesis. Nature Chemical Biology, 2014, 10, 1028-1033.	8.0	340
32	The Auxin Question: A Philosophical Overview. , 2014, , 3-19.		14
33	Strigolactone signalling: standing on the shoulders of DWARFs. Current Opinion in Plant Biology, 2014, 22, 7-13.	7.1	98
34	Grafting in Arabidopsis. Methods in Molecular Biology, 2014, 1062, 155-163.	0.9	8
35	Using Arabidopsis to Study Shoot Branching in Biomass Willow Â Â Â. Plant Physiology, 2013, 162, 800-811.	4.8	22
36	Strigolactone Can Promote or Inhibit Shoot Branching by Triggering Rapid Depletion of the Auxin Efflux Protein PIN1 from the Plasma Membrane. PLoS Biology, 2013, 11, e1001474.	5.6	345

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37	A Role for<i>MORE AXILLARY GROWTH1</i>(<i>MAX1</i>) in Evolutionary Diversity in Strigolactone Signaling Upstream of<i>MAX2</i>Â Â Â Â. Plant Physiology, 2013, 161, 1885-1902.	4.8	89
38	Developmental Plasticity in Plants. Cold Spring Harbor Symposia on Quantitative Biology, 2012, 77, 63-73.	1.1	50
39	Mutation of the cytosolic ribosomal protein-encoding RPS10B gene affects shoot meristematic function in Arabidopsis. BMC Plant Biology, 2012, 12, 160.	3.6	25
40	Ottoline Leyser. Current Biology, 2012, 22, R253-R255.	3.9	0
41	A computational model of auxin and pH dynamics in a single plant cell. Journal of Theoretical Biology, 2012, 296, 84-94.	1.7	32
42	<i>FHY3</i> promotes shoot branching and stress tolerance in Arabidopsis in an <i>AXR1</i>â€dependent manner. Plant Journal, 2012, 71, 907-920.	5.7	64
43	Signal integration in the control of shoot branching. Nature Reviews Molecular Cell Biology, 2011, 12, 211-221.	37.0	647
44	Auxin, Self-Organisation, and the Colonial Nature of Plants. Current Biology, 2011, 21, R331-R337.	3.9	83
45	Strigolactones Are Transported through the Xylem and Play a Key Role in Shoot Architectural Response to Phosphate Deficiency in Nonarbuscular Mycorrhizal Host Arabidopsis Â Â Â. Plant Physiology, 2011, 155, 974-987.	4.8	417
46	Auxin, cytokinin and the control of shoot branching. Annals of Botany, 2011, 107, 1203-1212.	2.9	404
47	Computer simulation: The imaginary friend of auxin transport biology. BioEssays, 2010, 32, 828-835.	2.5	23
48	Cell wall composition contributes to the control of transpiration efficiency in Arabidopsis thaliana. Plant Journal, 2010, 64, 679-686.	5.7	57
49	The Power of Auxin in Plants: Figure 1.. Plant Physiology, 2010, 154, 501-505.	4.8	73
50	SLOW MOTION Is Required for Within-Plant Auxin Homeostasis and Normal Timing of Lateral Organ Initiation at the Shoot Meristem in<i>Arabidopsis</i>Â Â. Plant Cell, 2010, 22, 335-348.	6.6	43
51	Strigolactone regulation of shoot branching in chrysanthemum (Dendranthema grandiflorum). Journal of Experimental Botany, 2010, 61, 3069-3078.	4.8	115
52	Strigolactones enhance competition between shoot branches by dampening auxin transport. Development (Cambridge), 2010, 137, 2905-2913.	2.5	318
53	Auxin and strigolactones in shoot branching: intimately connected?. Biochemical Society Transactions, 2010, 38, 717-722.	3.4	19
54	Shootward and rootward: peak terminology for plant polarity. Trends in Plant Science, 2010, 15, 593-594.	8.8	39

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55	Control of bud activation by an auxin transport switch. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17431-17436.	7.1	319
56	The control of shoot branching: an example of plant information processing. Plant, Cell and Environment, 2009, 32, 694-703.	5.7	218
57	Auxin transport through non-hair cells sustains root-hair development. Nature Cell Biology, 2009, 11, 78-84.	10.3	212
58	Interactions between Auxin and Strigolactone in Shoot Branching Control. Plant Physiology, 2009, 151, 400-412.	4.8	358
59	Pattern formation and developmental mechanisms. Current Opinion in Genetics and Development, 2008, 18, 285-286.	3.3	0
60	Strigolactones and Shoot Branching: A New Trick for a Young Dog. Developmental Cell, 2008, 15, 337-338.	7.0	28
61	Interactions between Axillary Branches of Arabidopsis. Molecular Plant, 2008, 1, 388-400.	8.3	50
62	Hormonal control of shoot branching. Journal of Experimental Botany, 2007, 59, 67-74.	4.8	282
63	MAX2 participates in an SCF complex which acts locally at the node to suppress shoot branching. Plant Journal, 2007, 50, 80-94.	5.7	384
64	pax1-1 partially suppresses gain-of-function mutations in Arabidopsis AXR3/IAA17. BMC Plant Biology, 2007, 7, 20.	3.6	14
65	Novel phytohormones involved in long-range signaling. Current Opinion in Plant Biology, 2007, 10, 473-476.	7.1	50
66	Something on the Side: Axillary Meristems and Plant Development. Plant Molecular Biology, 2006, 60, 843-854.	3.9	98
67	Response to Prof Tomescu. Plant Molecular Biology, 2006, 62, 483-483.	3.9	0
68	The Arabidopsis MAX Pathway Controls Shoot Branching by Regulating Auxin Transport. Current Biology, 2006, 16, 553-563.	3.9	424
69	The Identification of Genes Involved in the Stomatal Response to Reduced Atmospheric Relative Humidity. Current Biology, 2006, 16, 882-887.	3.9	171
70	Dynamic Integration of Auxin Transport and Signalling. Current Biology, 2006, 16, R424-R433.	3.9	248
71	Grafting. , 2006, 323, 39-44.		13
72	PLANT SCIENCE: Auxin Transport, but in Which Direction?. Science, 2006, 312, 858-860.	12.6	38

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73	Hormonally controlled expression of the Arabidopsis MAX4 shoot branching regulatory gene. Plant Journal, 2005, 44, 569-580.	5.7	126
74	Root gravitropism requires lateral root cap and epidermal cells for transport and response to a mobile auxin signal. Nature Cell Biology, 2005, 7, 1057-1065.	10.3	514
75	The Arabidopsis F-box protein TIR1 is an auxin receptor. Nature, 2005, 435, 446-451.	27.8	1,525
76	Plant Development: Auxin in Loops. Current Biology, 2005, 15, R208-R210.	3.9	75
77	Identification of cis-Elements That Regulate Gene Expression during Initiation of Axillary Bud Outgrowth in Arabidopsis. Plant Physiology, 2005, 138, 757-766.	4.8	163
78	Characterization of Terfestatin A, a New Specific Inhibitor for Auxin Signaling. Plant Physiology, 2005, 139, 779-789.	4.8	60
79	The fall and rise of apical dominance. Current Opinion in Genetics and Development, 2005, 15, 468-471.	3.3	110
80	Auxin Distribution and Plant Pattern Formation: How Many Angels Can Dance on the Point of PIN?. Cell, 2005, 121, 819-822.	28.9	126
81	MAX1 Encodes a Cytochrome P450 Family Member that Acts Downstream of MAX3/4 to Produce a Carotenoid-Derived Branch-Inhibiting Hormone. Developmental Cell, 2005, 8, 443-449.	7.0	481
82	SHOOT BRANCHING. Annual Review of Plant Biology, 2005, 56, 353-374.	18.7	307
83	Auxin-induced SCFTIR1-Aux/IAA interaction involves stable modification of the SCFTIR1 complex. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12381-12386.	7.1	176
84	Shoot branching. Current Opinion in Plant Biology, 2004, 7, 73-78.	7.1	109
85	MAX3/CCD7 Is a Carotenoid Cleavage Dioxygenase Required for the Synthesis of a Novel Plant Signaling Molecule. Current Biology, 2004, 14, 1232-1238.	3.9	525
86	An axis of auxin. Nature, 2003, 426, 132-135.	27.8	19
87	Regulation of shoot branching by auxin. Trends in Plant Science, 2003, 8, 541-545.	8.8	211
88	SCF-Mediated Proteolysis and Negative Regulation in Ethylene Signaling. Cell, 2003, 115, 647-648.	28.9	14
89	The Arabidopsis <i>MALE MEIOCYTE DEATH1</i> Gene Encodes a PHD-Finger Protein That Is Required for Male Meiosis. Plant Cell, 2003, 15, 1281-1295.	6.6	168
90	Auxin Acts in Xylem-Associated or Medullary Cells to Mediate Apical Dominance. Plant Cell, 2003, 15, 495-507.	6.6	187

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91	MAX4 and RMS1 are orthologous dioxygenase-like genes that regulate shoot branching in Arabidopsis and pea. Genes and Development, 2003, 17, 1469-1474.	5.9	550
92	AXR3 and SHY2 interact to regulate root hair development. Development (Cambridge), 2003, 130, 5769-5777.	2.5	149
93	Root system architecture determines fitness in anArabidopsismutant in competition for immobile phosphate ions but not for nitrate ions. Proceedings of the Royal Society B: Biological Sciences, 2002, 269, 2017-2022.	2.6	101
94	MOLECULARGENETICS OFAUXINSIGNALING. Annual Review of Plant Biology, 2002, 53, 377-398.	18.7	206
95	GARNet, the Genomic Arabidopsis Resource Network. Trends in Plant Science, 2002, 7, 145-147.	8.8	10
96	Nitrate and phosphate availability and distribution have different effects on root system architecture ofArabidopsis. Plant Journal, 2002, 29, 751-760.	5.7	573
97	Micrografting techniques for testing long-distance signalling inArabidopsis. Plant Journal, 2002, 32, 255-262.	5.7	334
98	Rapid Degradation of Auxin/Indoleacetic Acid Proteins Requires Conserved Amino Acids of Domain II and Is Proteasome Dependent. Plant Cell, 2001, 13, 2349.	6.6	3
99	Auxin regulates SCFTIR1-dependent degradation of AUX/IAA proteins. Nature, 2001, 414, 271-276.	27.8	1,205
100	Auxin. Current Biology, 2001, 11, R728.	3.9	4
101	Auxin signalling: the beginning, the middle and the end. Current Opinion in Plant Biology, 2001, 4, 382-386.	7.1	65
102	Rapid Degradation of Auxin/Indoleacetic Acid Proteins Requires Conserved Amino Acids of Domain II and Is Proteasome Dependent. Plant Cell, 2001, 13, 2349-2360.	6.6	260
103	Degradation of Aux/IAA proteins is essential for normal auxin signalling. Plant Journal, 2000, 21, 553-562.	5.7	254
104	The hormonal regulation of axillary bud growth in Arabidopsis. Plant Journal, 2000, 24, 159-169.	5.7	253
105	Hormonal Interactions in the Control of Arabidopsis Hypocotyl Elongation. Plant Physiology, 2000, 124, 553-562.	4.8	177
106	Mutagenesis. , 2000, 141, 133-144.		2
107	Functional Genomics at the Arabidopsis Meeting. Yeast, 2000, 1, 235-237.	1.7	0
108	Plant hormones: Ins and outs of auxin transport. Current Biology, 1999, 9, R8-R10.	3.9	22

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109	An Auxin-Dependent Distal Organizer of Pattern and Polarity in the Arabidopsis Root. Cell, 1999, 99, 463-472.	28.9	1,233
110	A molecular basis for auxin action. Seminars in Cell and Developmental Biology, 1999, 10, 131-137.	5.0	28
111	Auxin signalling: Protein stability as a versatile control target. Current Biology, 1998, 8, R305-R307.	3.9	25
112	Roots are branching out in patches. Trends in Plant Science, 1998, 3, 203-204.	8.8	78
113	Changes in Auxin Response from Mutations in an AUX/IAA Gene. Science, 1998, 279, 1371-1373.	12.6	377
114	Auxin: Lessons from a mutant weed. Physiologia Plantarum, 1997, 100, 407-414.	5.2	3
115	Auxin: Lessons from a mutant weed. Physiologia Plantarum, 1997, 100, 407-414.	5.2	53
116	Mutations in the AXR3 gene of Arabidopsis result in altered auxin response including ectopic expression from the SAUR-AC1 promoter. Plant Journal, 1996, 10, 403-413.	5.7	392
117	Promoter methylation and progressive transgene inactivation inArabidopsis. Plant Molecular Biology, 1992, 20, 103-112.	3.9	139