Mark Estelle

List of Publications by Year
in descending order

131 papers	33,648 citations	3731 89 h-index	13771 129 g-index
140 all docs	140 docs citations	140 times ranked	19806 citing authors

#	Article	IF	Citations
1	The F-box protein TIR1 is an auxin receptor. Nature, 2005, 435, 441-445.	27.8	1,821
2	A Plant miRNA Contributes to Antibacterial Resistance by Repressing Auxin Signaling. Science, 2006, 312, 436-439.	12.6	1,762
3	The Physcomitrella Genome Reveals Evolutionary Insights into the Conquest of Land by Plants. Science, 2008, 319, 64-69.	12.6	1,712
4	Mechanism of auxin perception by the TIR1 ubiquitin ligase. Nature, 2007, 446, 640-645.	27.8	1,367
5	Auxin regulates SCFTIR1-dependent degradation of AUX/IAA proteins. Nature, 2001, 414, 271-276.	27.8	1,205
6	Plant Development Is Regulated by a Family of Auxin Receptor F Box Proteins. Developmental Cell, 2005, 9, 109-119.	7.0	865
7	Recent advances and emerging trends in plant hormone signalling. Nature, 2009, 459, 1071-1078.	27.8	805
8	The Selaginella Genome Identifies Genetic Changes Associated with the Evolution of Vascular Plants. Science, 2011, 332, 960-963.	12.6	794
9	Plant hormones are versatile chemical regulators of plant growth. Nature Chemical Biology, 2009, 5, 301-307.	8.0	686
10	Growth and development of the axr1 mutants of Arabidopsis.. Plant Cell, 1990, 2, 1071-1080.	6.6	659
11	Mechanism of Auxin-Regulated Gene Expression in Plants. Annual Review of Genetics, 2009, 43, 265-285.	7.6	602
12	The TIR1 protein of Arabidopsis functions in auxin response and is related to human SKP2 and yeastâ€‰Grr1p. Genes and Development, 1998, 12, 198-207.	5.9	582
13	High temperature promotes auxin-mediated hypocotyl elongation in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 7197-7202.	7.1	567
14	Auxin Receptors and Plant Development: A New Signaling Paradigm. Annual Review of Cell and Developmental Biology, 2008, 24, 55-80.	9.4	547
15	Arabidopsis auxin-resistance gene AXR1 encodes a protein related to ubiquitin-activating enzyme E1. Nature, 1993, 364, 161-164.	27.8	523
16	The auxin signalling network translates dynamic input into robust patterning at the shoot apex. Molecular Systems Biology, 2011, 7, 508.	7.2	520
17	The Ubiquitin-Proteasome Pathway and Plant Development. Plant Cell, 2004, 16, 3181-3195.	6.6	508
18	A combinatorial TIR1/AFBâ€“Aux/IAA co-receptor system for differential sensing of auxin. Nature Chemical Biology, 2012, 8, 477-485.	8.0	490

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19	Auxin and ethylene promote root hair elongation inArabidopsis. Plant Journal, 1998, 16, 553-560.	5.7	472
20	Phosphate Availability Alters Lateral Root Development inArabidopsisby Modulating Auxin Sensitivity via a Mechanism Involving the TIR1 Auxin Receptor. Plant Cell, 2009, 20, 3258-3272.	6.6	471
21	Sites and Regulation of Auxin Biosynthesis in Arabidopsis Roots. Plant Cell, 2005, 17, 1090-1104.	6.6	466
22	Identification of an SCF ubiquitin-ligase complex required for auxin response in Arabidopsis thaliana. Genes and Development, 1999, 13, 1678-1691.	5.9	454
23	Interactions of the COP9 Signalosome with the E3 Ubiquitin Ligase SCFTIR1 in Mediating Auxin Response. Science, 2001, 292, 1379-1382.	12.6	451
24	AXR2 Encodes a Member of the Aux/IAA Protein Family. Plant Physiology, 2000, 123, 563-574.	4.8	432
25	A dominant mutation inArabidopsis confers resistance to auxin, ethylene and abscisic acid. Molecular Genetics and Genomics, 1990, 222, 377-383.	2.4	414
26	Complex regulation of the TIR1/AFB family of auxin receptors. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22540-22545.	7.1	403
27	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
28	Changes in Auxin Response from Mutations in an AUX/IAA Gene. Science, 1998, 279, 1371-1373.	12.6	377
29	SCF^{TIR1/AFB}-Based Auxin Perception: Mechanism and Role in Plant Growth and Development. Plant Cell, 2015, 27, 9-19.	6.6	360
30	The ubiquitinâ€proteasome system regulates plant hormone signaling. Plant Journal, 2010, 61, 1029-1040.	5.7	340
31	Auxin binding protein 1 (ABP1) is not required for either auxin signaling or Arabidopsis development. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2275-2280.	7.1	314
32	The aux1 Mutation of Arabidopsis Confers Both Auxin and Ethylene Resistance. Plant Physiology, 1990, 94, 1462-1466.	4.8	305
33	Plant Development: Regulation by Protein Degradation. Science, 2002, 297, 793-797.	12.6	305
34	Nitric oxide influences auxin signaling through Sâ€nitrosylation of the Arabidopsis TRANSPORT INHIBITOR RESPONSE 1 auxin receptor. Plant Journal, 2012, 70, 492-500.	5.7	305
35	Root gravitropism is regulated by a transient lateral auxin gradient controlled by a tipping-point mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4668-4673.	7.1	304
36	Reduced naphthylphthalamic acid binding in the tir3 mutant of Arabidopsis is associated with a reduction in polar auxin transport and diverse morphological defects.. Plant Cell, 1997, 9, 745-757.	6.6	303

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37	The axr4 auxin-resistant mutants of Arabidopsis thaliana define a gene important for root gravitropism and lateral root initiation. Plant Journal, 1995, 7, 211-220.	5.7	293
38	Modification of yeast Cdc53p by the ubiquitin-related protein Rub1p affects function of the SCFCdc4Âcomplex. Genes and Development, 1998, 12, 914-926.	5.9	291
39	Mechanisms of auxin signaling. Development (Cambridge), 2016, 143, 3226-3229.	2.5	274
40	Auxin Transport Is Required for Hypocotyl Elongation in Light-Grown but Not Dark-Grown Arabidopsis1. Plant Physiology, 1998, 116, 455-462.	4.8	270
41	BIG: a calossin-like protein required for polar auxin transport in Arabidopsis. Genes and Development, 2001, 15, 1985-1997.	5.9	250
42	Protein interaction analysis of SCF ubiquitin E3 ligase subunits fromArabidopsis. Plant Journal, 2003, 34, 753-767.	5.7	230
43	Auxin signaling and regulated protein degradation. Trends in Plant Science, 2004, 9, 302-308.	8.8	226
44	AXR1-ECR1â€“Dependent Conjugation of RUB1 to the Arabidopsis Cullin AtCUL1 Is Required for Auxin Response. Plant Cell, 2002, 14, 421-433.	6.6	221
45	Diversity and specificity: auxin perception and signaling through the TIR1/AFB pathway. Current Opinion in Plant Biology, 2014, 21, 51-58.	7.1	219
46	The Ubiquitin-Related Protein RUB1 and Auxin Response in Arabidopsis. Science, 1998, 280, 1760-1763.	12.6	214
47	HSP90 regulates temperature-dependent seedling growth in Arabidopsis by stabilizing the auxin co-receptor F-box protein TIR1. Nature Communications, 2016, 7, 10269.	12.8	210
48	The axr6 mutants of Arabidopsis thaliana define a gene involved in auxin response and early development. Development (Cambridge), 2000, 127, 23-32.	2.5	206
49	The IAA1 protein is encoded by AXR5 and is a substrate of SCFTIR1. Plant Journal, 2004, 40, 772-782.	5.7	201
50	Gibberellins accumulate in the elongating endodermal cells of Arabidopsis root. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4834-4839.	7.1	194
51	Auxin-regulated chromatin switch directs acquisition of flower primordium founder fate. ELife, 2015, 4, e09269.	6.0	187
52	The axr2-1 mutation of Arabidopsis thaliana is a gain-of-function mutation that disrupts an early step in auxin response.. Genetics, 1994, 138, 1239-1249.	2.9	187
53	TheTRANSPORT INHIBITOR RESPONSE2Gene Is Required for Auxin Synthesis and Diverse Aspects of Plant Development. Plant Physiology, 2009, 151, 168-179.	4.8	185
54	The Arabidopsis NPF3 protein is a GA transporter. Nature Communications, 2016, 7, 11486.	12.8	177

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55	Function of the ubiquitinâ€“proteasome pathway in auxin response. Trends in Biochemical Sciences, 2000, 25, 133-138.	7.5	174
56	AXR4 Is Required for Localization of the Auxin Influx Facilitator AUX1. Science, 2006, 312, 1218-1220.	12.6	165
57	The Arabidopsis SUPPRESSOR OF AUXIN RESISTANCE Proteins Are Nucleoporins with an Important Role in Hormone Signaling and Development. Plant Cell, 2006, 18, 1590-1603.	6.6	164
58	The Arabidopsis cullin AtCUL1 is modified by the ubiquitin-related protein RUB1. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 15342-15347.	7.1	162
59	Ubiquitin-Mediated Control of Plant Hormone Signaling. Plant Physiology, 2012, 160, 47-55.	4.8	162
60	The AXR1 and AUX1 genes of Arabidopsis function in separate auxin-response pathways. Plant Journal, 1995, 8, 561-569.	5.7	157
61	Auxin Action in a Cell-Free System. Current Biology, 2003, 13, 1418-1422.	3.9	155
62	Auxin-sensitive Aux/IAA proteins mediate drought tolerance in Arabidopsis by regulating glucosinolate levels. Nature Communications, 2019, 10, 4021.	12.8	155
63	Null Mutation ofAtCUL1Causes Arrest in Early Embryogenesis inArabidopsis. Molecular Biology of the Cell, 2002, 13, 1916-1928.	2.1	153
64	Transgene-mediated auxin overproduction in Arabidopsis: hypocotyl elongation phenotype and interactions with the hy6-1 hypocotyl elongation and axr1 auxin-resistant mutants. Plant Molecular Biology, 1995, 27, 1071-1083.	3.9	151
65	A map of cell typeâ€specific auxin responses. Molecular Systems Biology, 2013, 9, 688.	7.2	150
66	Auxin Perception--Structural Insights. Cold Spring Harbor Perspectives in Biology, 2010, 2, a005546-a005546.	5.5	148
67	Plant Stress Tolerance Requires Auxin-Sensitive Aux/IAA Transcriptional Repressors. Current Biology, 2017, 27, 437-444.	3.9	148
68	Role of the Arabidopsis RING-H2 Protein RBX1 in RUB Modification and SCF Function. Plant Cell, 2002, 14, 2137-2144.	6.6	146
69	Constitutive auxin response in Physcomitrella reveals complex interactions between Aux/IAA and ARF proteins. ELife, 2016, 5, .	6.0	144
70	Cullins 3a and 3b Assemble with Members of the Broad Complex/Tramtrack/Bric-a-Brac (BTB) Protein Family to Form Essential Ubiquitin-Protein Ligases (E3s) in Arabidopsis*. Journal of Biological Chemistry, 2005, 280, 18810-18821.	3.4	142
71	Physcomitrella patens Auxin-Resistant Mutants Affect Conserved Elements of an Auxin-Signaling Pathway. Current Biology, 2010, 20, 1907-1912.	3.9	142
72	Distinct Characteristics of Indole-3-Acetic Acid and Phenylacetic Acid, Two Common Auxins in Plants. Plant and Cell Physiology, 2015, 56, 1641-1654.	3.1	142

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73	Arabidopsis AXR6 encodes CUL1 implicating SCF E3 ligases in auxin regulation of embryogenesis. EMBO Journal, 2003, 22, 3314-3325.	7.8	141
74	The RUB/Nedd8 conjugation pathway is required for early development in Arabidopsis. EMBO Journal, 2003, 22, 1762-1770.	7.8	135
75	Auxin receptors: a new role for F-box proteins. Current Opinion in Cell Biology, 2006, 18, 152-156.	5.4	135
76	Regulation of Auxin Homeostasis and Gradients in Arabidopsis Roots through the Formation of the Indole-3-Acetic Acid Catabolite 2-Oxindole-3-Acetic Acid. Plant Cell, 2013, 25, 3858-3870.	6.6	131
77	Hypocotyl Transcriptome Reveals Auxin Regulation of Growth-Promoting Genes through GA-Dependent and -Independent Pathways. PLoS ONE, 2012, 7, e36210.	2.5	127
78	MiR393 Regulation of Auxin Signaling and Redox-Related Components during Acclimation to Salinity in Arabidopsis. PLoS ONE, 2014, 9, e107678.	2.5	127
79	The role of regulated protein degradation in auxin response. Plant Molecular Biology, 2002, 49, 401-408.	3.9	119
80	Arabidopsis AtCUL3a and AtCUL3b Form Complexes with Members of the BTB/POZ-MATH Protein Family. Plant Physiology, 2005, 137, 83-93.	4.8	116
81	Genetic approaches to auxin action. Plant, Cell and Environment, 1994, 17, 525-540.	5.7	115
82	Genetic analysis of the Arabidopsis TIR1/AFB auxin receptors reveals both overlapping and specialized functions. ELife, 2020, 9, .	6.0	115
83	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
84	F-box proteins and protein degradation: an emerging theme in cellular regulation. , 2000, 44, 123-128.		109
85	microRNA regulation of fruit growth. Nature Plants, 2015, 1, 15036.	9.3	108
86	The axr6 mutants of Arabidopsis thaliana define a gene involved in auxin response and early development. Development (Cambridge), 2000, 127, 23-32.	2.5	107
87	The Impact of Arabidopsis on Human Health: Diversifying Our Portfolio. Cell, 2008, 133, 939-943.	28.9	101
88	New auxin analogs with growth-promoting effects in intact plants reveal a chemical strategy to improve hormone delivery. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15190-15195.	7.1	100
89	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
90	Proteases and cellular regulation in plants. Current Opinion in Plant Biology, 2001, 4, 254-260.	7.1	93

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91	Function of the ubiquitinâ€“proteosome pathway in auxin response. Trends in Plant Science, 1999, 4, 107-112.	8.8	92
92	The Arabidopsis Auxin Receptor F-Box Proteins AFB4 and AFB5 Are Required for Response to the Synthetic Auxin Picloram. G3: Genes, Genomes, Genetics, 2016, 6, 1383-1390.	1.8	89
93	Point mutations in Arabidopsis Cullin1 reveal its essential role in jasmonate response. Plant Journal, 2005, 42, 514-524.	5.7	88
94	Effects of the axr2 mutation of Arabidopsis on cell shape in hypocotyl and inflorescence. Planta, 1992, 188, 271-278.	3.2	85
95	Untethering the TIR1 auxin receptor from the SCF complex increases its stability and inhibits auxin response. Nature Plants, 2015, 1, .	9.3	80
96	The SAR1 gene of Arabidopsis acts downstream of the AXR1 gene in auxin response. Development (Cambridge), 1997, 124, 1583-1591.	2.5	79
97	Regulation of cullin-based ubiquitin ligases by the Nedd8/RUB ubiquitin-like proteins. Seminars in Cell and Developmental Biology, 2004, 15, 221-229.	5.0	78
98	FLYING SAUCER1 Is a Transmembrane RING E3 Ubiquitin Ligase That Regulates the Degree of Pectin Methylesterification in Arabidopsis Seed Mucilage. Plant Cell, 2013, 25, 944-959.	6.6	76
99	A New CULLIN 1 Mutant Has Altered Responses to Hormones and Light in Arabidopsis. Plant Physiology, 2007, 143, 684-696.	4.8	74
100	Polar Auxin Transport: New Support for an Old Model. Plant Cell, 1998, 10, 1775-1778.	6.6	73
101	ENTIRE and GOBLET promote leaflet development in tomato by modulating auxin response. Plant Journal, 2012, 70, 903-915.	5.7	72
102	Molecular mechanisms of auxin action. Current Opinion in Plant Biology, 1998, 1, 434-439.	7.1	68
103	AXL and AXR1 have redundant functions in RUB conjugation and growth and development in Arabidopsis. Plant Journal, 2007, 52, 114-123.	5.7	65
104	The plant hormone auxin: Insight in sight. BioEssays, 1992, 14, 439-444.	2.5	59
105	Mutations in the TIR1 Auxin Receptor That Increase Affinity for Auxin/Indole-3-Acetic Acid Proteins Result in Auxin Hypersensitivity Â Â. Plant Physiology, 2013, 162, 295-303.	4.8	57
106	The role of regulated protein degradation in auxin response. Plant Molecular Biology, 2002, 49, 401-9.	3.9	54
107	Regulation of SCFTIR1/AFBs E3 ligase assembly by S-nitrosylation of ArabidopsisÂSKP1-like1 impacts on auxin signaling. Redox Biology, 2018, 18, 200-210.	9.0	48
108	Dual Role of Auxin in Regulating Plant Defense and Bacterial Virulence Gene Expression During Pseudomonas syringae PtoDC3000 Pathogenesis. Molecular Plant-Microbe Interactions, 2020, 33, 1059-1071.	2.6	48

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109	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
110	The cyclophilin DIAGEOTROPICA has a conserved role in auxin signaling. Development (Cambridge), 2012, 139, 1115-1124.	2.5	44
111	Lysine Residues Are Not Required for Proteasome-Mediated Proteolysis of the Auxin/Indole Acidic Acid Protein IAA1. Plant Physiology, 2015, 168, 708-720.	4.8	39
112	Auxin perception: in the <scp>IAA</scp> of the beholder. Physiologia Plantarum, 2014, 151, 52-61.	5.2	38
113	A novel Ca2+-binding protein that can rapidly transduce auxin responses during root growth. PLoS Biology, 2019, 17, e3000085.	5.6	35
114	Diverse Allyl Glucosinolate Catabolites Independently Influence Root Growth and Development. Plant Physiology, 2020, 183, 1376-1390.	4.8	34
115	Embryonic lethality of Arabidopsis abp1-1 is caused by deletion of the adjacent BSM gene. Nature Plants, 2015, 1, .	9.3	33
116	CUL3 E3 ligases in plant development and environmental response. Nature Plants, 2021, 7, 6-16.	9.3	33
117	Mutational studies of the Aux/<scp>IAA</scp> proteins in Physcomitrella reveal novel insights into their function. New Phytologist, 2018, 218, 1534-1542.	7.3	32
118	Leaf cell-specific and single-cell transcriptional profiling reveals a role for the palisade layer in UV light protection. Plant Cell, 2022, 34, 3261-3279.	6.6	31
119	The Arabidopsis <scp>ALF</scp> 4 protein is a regulator of <scp>SCF</scp> E3 ligases. EMBO Journal, 2018, 37, 255-268.	7.8	30
120	Quantitative Early Auxin Root Proteomics Identifies GAUT10, a Galacturonosyltransferase, as a Novel Regulator of Root Meristem Maintenance. Molecular and Cellular Proteomics, 2019, 18, 1157-1170.	3.8	29
121	Selective auxin agonists induce specific AUX/IAA protein degradation to modulate plant development. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6463-6472.	7.1	23
122	Auxin Signaling Involves Regulated Protein Degradation by the Ubiquitin-Proteasome Pathway. Journal of Plant Growth Regulation, 2001, 20, 265-273.	5.1	18
123	Transporters on the move. Nature, 2001, 413, 374-375.	27.8	15
124	Ethylene Prunes Translation. Cell, 2015, 163, 543-544.	28.9	10
125	S-Nitrosation of E3 Ubiquitin Ligase Complex Components Regulates Hormonal Signalings in Arabidopsis. Frontiers in Plant Science, 2021, 12, 794582.	3.6	6
126	Polar Auxin Transport: New Support for an Old Model. Plant Cell, 1998, 10, 1775.	6.6	5

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127	Growth versus development. Nature Reviews Molecular Cell Biology, 2009, 10, 813-813.	37.0	2
128	Moss tasiRNAs Make the Auxin Network Robust. Developmental Cell, 2016, 36, 241-242.	7.0	1
129	The PLOS Biology XV Collection: 15 Years of Exceptional Science Highlighted across 12 Months. PLoS Biology, 2019, 17, e3000180.	5.6	1
130	Barebones of auxin signalling. Nature Plants, 2020, 6, 440-441.	9.3	0
131	Mutations in the gene encoding Aminodeoxychorismate Synthase confer auxotrophic phenotypes. MicroPublication Biology, 2021, 2021, .	0.1	0