Mark Estelle

List of Publications by Year in Descending Order

131 papers	27,763 citations	82 h-index	140 g-index
140 ext. papers	31,206 ext. citations	12.9 avg, IF	7 L-index

#	Paper	IF	Citations
131	S-Nitrosation of E3 Ubiquitin Ligase Complex Components Regulates Hormonal Signalings in Arabidopsis.. *Frontiers in Plant Science*, **2021**, 12, 794582	6.2	0
130	CUL3 E3 ligases in plant development and environmental response. *Nature Plants*, **2021**, 7, 6-16	11.5	6
129	Barebones of auxin signalling. *Nature Plants*, **2020**, 6, 440-441	11.5	
128	Dual Role of Auxin in Regulating Plant Defense and Bacterial Virulence Gene Expression During PtoDC3000 Pathogenesis. *Molecular Plant-Microbe Interactions*, **2020**, 33, 1059-1071	3.6	18
127	Diverse Allyl Glucosinolate Catabolites Independently Influence Root Growth and Development. *Plant Physiology*, **2020**, 183, 1376-1390	6.6	10
126	Genetic analysis of the Arabidopsis TIR1/AFB auxin receptors reveals both overlapping and specialized functions. *ELife*, **2020**, 9,	8.9	45
125	Auxin-sensitive Aux/IAA proteins mediate drought tolerance in Arabidopsis by regulating glucosinolate levels. *Nature Communications*, **2019**, 10, 4021	17.4	78
124	The PLOS Biology XV Collection: 15 Years of Exceptional Science Highlighted across 12 Months. *PLoS Biology*, **2019**, 17, e3000180	9.7	1
123	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	11.5	12
122	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	7.6	8
121	A novel Ca2+-binding protein that can rapidly transduce auxin responses during root growth. *PLoS Biology*, **2019**, 17, e3000085	9.7	16
120	Mutational studies of the Aux/IAA proteins in Physcomitrella reveal novel insights into their function. *New Phytologist*, **2018**, 218, 1534-1542	9.8	20
119	Regulation of SCF E3 ligase assembly by S-nitrosylation of Arabidopsis SKP1-like1 impacts on auxin signaling. *Redox Biology*, **2018**, 18, 200-210	11.3	22
118	The ALF4 protein is a regulator of SCF E3 ligases. *EMBO Journal*, **2018**, 37, 255-268	13	24
117	Plant Stress Tolerance Requires Auxin-Sensitive Aux/IAA Transcriptional Repressors. *Current Biology*, **2017**, 27, 437-444	6.3	80
116	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	6	28
115	Mechanisms of auxin signaling. *Development (Cambridge)*, **2016**, 143, 3226-9	6.6	165

114	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, 1383-90	3.2	54
113	Moss tasiRNAs Make the Auxin Network Robust. *Developmental Cell*, **2016**, 36, 241-2	10.2	1
112	HSP90 regulates temperature-dependent seedling growth in Arabidopsis by stabilizing the auxin co-receptor F-box protein TIR1. *Nature Communications*, **2016**, 7, 10269	17.4	134
111	Constitutive auxin response in Physcomitrella reveals complex interactions between Aux/IAA and ARF proteins. *ELife*, **2016**, 5,	8.9	78
110	The Arabidopsis NPF3 protein is a GA transporter. *Nature Communications*, **2016**, 7, 11486	17.4	115
109	SCFTIR1/AFB-based auxin perception: mechanism and role in plant growth and development. *Plant Cell*, **2015**, 27, 9-19	11.6	259
108	Untethering the TIR1 auxin receptor from the SCF complex increases its stability and inhibits auxin response. *Nature Plants*, **2015**, 1,	11.5	58
107	Ethylene prunes translation. *Cell*, **2015**, 163, 543-4	56.2	8
106	Distinct Characteristics of Indole-3-Acetic Acid and Phenylacetic Acid, Two Common Auxins in Plants. *Plant and Cell Physiology*, **2015**, 56, 1641-54	4.9	89
105	microRNA regulation of fruit growth. *Nature Plants*, **2015**, 1, 15036	11.5	78
104	Embryonic lethality of is caused by deletion of the adjacent gene. *Nature Plants*, **2015**, 1,	11.5	28
103	Auxin-regulated chromatin switch directs acquisition of flower primordium founder fate. *ELife*, **2015**, 4, e09269	8.9	132
102	Lysine Residues Are Not Required for Proteasome-Mediated Proteolysis of the Auxin/Indole Acidic Acid Protein IAA1. *Plant Physiology*, **2015**, 168, 708-20	6.6	32
101	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, 2275-80	11.5	241
100	Author response: Auxin-regulated chromatin switch directs acquisition of flower primordium founder fate **2015**,		2
99	Auxin perception: in the IAA of the beholder. *Physiologia Plantarum*, **2014**, 151, 52-61	4.6	30
98	Diversity and specificity: auxin perception and signaling through the TIR1/AFB pathway. *Current Opinion in Plant Biology*, **2014**, 21, 51-58	9.9	158
97	MiR393 regulation of auxin signaling and redox-related components during acclimation to salinity in Arabidopsis. *PLoS ONE*, **2014**, 9, e107678	3.7	85

96	Flying saucer1 is a transmembrane RING E3 ubiquitin ligase that regulates the degree of pectin methylesterification in Arabidopsis seed mucilage. *Plant Cell*, **2013**, 25, 944-59	11.6	66
95	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, 3858-70	11.6	95
94	A map of cell type-specific auxin responses. *Molecular Systems Biology*, **2013**, 9, 688	12.2	98
93	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, 4834-9	11.5	147
92	Mutations in the TIR1 auxin receptor that increase affinity for auxin/indole-3-acetic acid proteins result in auxin hypersensitivity. *Plant Physiology*, **2013**, 162, 295-303	6.6	45
91	Nitric oxide influences auxin signaling through S-nitrosylation of the Arabidopsis TRANSPORT INHIBITOR RESPONSE 1 auxin receptor. *Plant Journal*, **2012**, 70, 492-500	6.9	248
90	ENTIRE and GOBLET promote leaflet development in tomato by modulating auxin response. *Plant Journal*, **2012**, 70, 903-15	6.9	53
89	Ubiquitin-mediated control of plant hormone signaling. *Plant Physiology*, **2012**, 160, 47-55	6.6	107
88	A combinatorial TIR1/AFB-Aux/IAA co-receptor system for differential sensing of auxin. *Nature Chemical Biology*, **2012**, 8, 477-85	11.7	371
87	Hypocotyl transcriptome reveals auxin regulation of growth-promoting genes through GA-dependent and -independent pathways. *PLoS ONE*, **2012**, 7, e36210	3.7	105
86	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, 4668-73	11.5	240
85	The cyclophilin DIAGEOTROPICA has a conserved role in auxin signaling. *Development (Cambridge)*, **2012**, 139, 1115-24	6.6	41
84	The auxin signalling network translates dynamic input into robust patterning at the shoot apex. *Molecular Systems Biology*, **2011**, 7, 508	12.2	405
83	The Selaginella genome identifies genetic changes associated with the evolution of vascular plants. *Science*, **2011**, 332, 960-3	33.3	622
82	The AFB4 auxin receptor is a negative regulator of auxin signaling in seedlings. *Current Biology*, **2011**, 21, 520-5	6.3	70
81	The Arabidopsis D-type cyclin CYCD2;1 and the inhibitor ICK2/KRP2 modulate auxin-induced lateral root formation. *Plant Cell*, **2011**, 23, 641-60	11.6	92
80	The ubiquitin-proteasome system regulates plant hormone signaling. *Plant Journal*, **2010**, 61, 1029-40	6.9	273
79	Auxin perception--structural insights. *Cold Spring Harbor Perspectives in Biology*, **2010**, 2, a005546	10.2	122

78	Physcomitrella patens auxin-resistant mutants affect conserved elements of an auxin-signaling pathway. *Current Biology*, **2010**, 20, 1907-12	6.3	109
77	Recent advances and emerging trends in plant hormone signalling. *Nature*, **2009**, 459, 1071-8	50.4	676
76	Plant hormones are versatile chemical regulators of plant growth. *Nature Chemical Biology*, **2009**, 5, 301-7	11.7	484
75	Journal club: growth versus development. *Nature Reviews Molecular Cell Biology*, **2009**, 10, 813	48.7	1
74	Mechanism of auxin-regulated gene expression in plants. *Annual Review of Genetics*, **2009**, 43, 265-85	14.5	512
73	The TRANSPORT INHIBITOR RESPONSE2 gene is required for auxin synthesis and diverse aspects of plant development. *Plant Physiology*, **2009**, 151, 168-79	6.6	150
72	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, 22540-5	11.5	324
71	Phosphate availability alters lateral root development in Arabidopsis by modulating auxin sensitivity via a mechanism involving the TIR1 auxin receptor. *Plant Cell*, **2008**, 20, 3258-72	11.6	377
70	Degradation of the cyclin-dependent kinase inhibitor KRP1 is regulated by two different ubiquitin E3 ligases. *Plant Journal*, **2008**, 53, 705-16	6.9	87
69	The Physcomitrella genome reveals evolutionary insights into the conquest of land by plants. *Science*, **2008**, 319, 64-9	33.3	1419
68	The impact of Arabidopsis on human health: diversifying our portfolio. *Cell*, **2008**, 133, 939-43	56.2	79
67	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, 15190-5	11.5	79
66	Auxin receptors and plant development: a new signaling paradigm. *Annual Review of Cell and Developmental Biology*, **2008**, 24, 55-80	12.6	455
65	Mechanism of auxin perception by the TIR1 ubiquitin ligase. *Nature*, **2007**, 446, 640-5	50.4	1118
64	AXL and AXR1 have redundant functions in RUB conjugation and growth and development in Arabidopsis. *Plant Journal*, **2007**, 52, 114-23	6.9	58
63	A new CULLIN 1 mutant has altered responses to hormones and light in Arabidopsis. *Plant Physiology*, **2007**, 143, 684-96	6.6	65
62	Auxin receptors: a new role for F-box proteins. *Current Opinion in Cell Biology*, **2006**, 18, 152-6	9	118
61	The Arabidopsis SUPPRESSOR OF AUXIN RESISTANCE proteins are nucleoporins with an important role in hormone signaling and development. *Plant Cell*, **2006**, 18, 1590-603	11.6	130

60	AXR4 is required for localization of the auxin influx facilitator AUX1. *Science*, **2006**, 312, 1218-20	33.3	156
59	A plant miRNA contributes to antibacterial resistance by repressing auxin signaling. *Science*, **2006**, 312, 436-9	33.3	1461
58	Plant development is regulated by a family of auxin receptor F box proteins. *Developmental Cell*, **2005**, 9, 109-19	10.2	770
57	Point mutations in Arabidopsis Cullin1 reveal its essential role in jasmonate response. *Plant Journal*, **2005**, 42, 514-24	6.9	76
56	The F-box protein TIR1 is an auxin receptor. *Nature*, **2005**, 435, 441-5	50.4	1590
55	Arabidopsis AtCUL3a and AtCUL3b form complexes with members of the BTB/POZ-MATH protein family. *Plant Physiology*, **2005**, 137, 83-93	6.6	97
54	Sites and regulation of auxin biosynthesis in Arabidopsis roots. *Plant Cell*, **2005**, 17, 1090-104	11.6	410
53	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, 18810-21	5.4	119
52	The ubiquitin-proteasome pathway and plant development. *Plant Cell*, **2004**, 16, 3181-95	11.6	418
51	The IAA1 protein is encoded by AXR5 and is a substrate of SCF(TIR1). *Plant Journal*, **2004**, 40, 772-82	6.9	171
50	Regulation of cullin-based ubiquitin ligases by the Nedd8/RUB ubiquitin-like proteins. *Seminars in Cell and Developmental Biology*, **2004**, 15, 221-9	7.5	71
49	Auxin signaling and regulated protein degradation. *Trends in Plant Science*, **2004**, 9, 302-8	13.1	208
48	The RUB/Nedd8 conjugation pathway is required for early development in Arabidopsis. *EMBO Journal*, **2003**, 22, 1762-70	13	120
47	Arabidopsis AXR6 encodes CUL1 implicating SCF E3 ligases in auxin regulation of embryogenesis. *EMBO Journal*, **2003**, 22, 3314-25	13	127
46	Auxin action in a cell-free system. *Current Biology*, **2003**, 13, 1418-22	6.3	142
45	Protein interaction analysis of SCF ubiquitin E3 ligase subunits from Arabidopsis. *Plant Journal*, **2003**, 34, 753-67	6.9	191
44	The role of regulated protein degradation in auxin response. *Plant Molecular Biology*, **2002**, 49, 401-408	4.6	90
43	AXR1-ECR1-dependent conjugation of RUB1 to the Arabidopsis Cullin AtCUL1 is required for auxin response. *Plant Cell*, **2002**, 14, 421-33	11.6	200

42	Plant development: regulation by protein degradation. *Science*, **2002**, 297, 793-7	33.3	280
41	Role of the Arabidopsis RING-H2 protein RBX1 in RUB modification and SCF function. *Plant Cell*, **2002**, 14, 2137-44	11.6	137
40	Null mutation of AtCUL1 causes arrest in early embryogenesis in Arabidopsis. *Molecular Biology of the Cell*, **2002**, 13, 1916-28	3.5	144
39	The role of regulated protein degradation in auxin response. *Plant Molecular Biology*, **2002**, 49, 401-9	4.6	46
38	Auxin Signaling Involves Regulated Protein Degradation by the Ubiquitin-Proteasome Pathway. *Journal of Plant Growth Regulation*, **2001**, 20, 265-273	4.7	18
37	Auxin regulates SCF(TIR1)-dependent degradation of AUX/IAA proteins. *Nature*, **2001**, 414, 271-6	50.4	1053
36	Proteases and cellular regulation in plants. *Current Opinion in Plant Biology*, **2001**, 4, 254-60	9.9	88
35	BIG: a calossin-like protein required for polar auxin transport in Arabidopsis. *Genes and Development*, **2001**, 15, 1985-97	12.6	212
34	Interactions of the COP9 signalosome with the E3 ubiquitin ligase SCFTIRI in mediating auxin response. *Science*, **2001**, 292, 1379-82	33.3	410
33	Function of the ubiquitin-proteasome pathway in auxin response. *Trends in Biochemical Sciences*, **2000**, 25, 133-8	10.3	162
32	F-box proteins and protein degradation: an emerging theme in cellular regulation. *Plant Molecular Biology*, **2000**, 44, 123-8	4.6	98
31	AXR2 encodes a member of the Aux/IAA protein family. *Plant Physiology*, **2000**, 123, 563-74	6.6	385
30	The axr6 mutants of Arabidopsis thaliana define a gene involved in auxin response and early development. *Development (Cambridge)*, **2000**, 127, 23-32	6.6	156
29	The axr6 mutants of Arabidopsis thaliana define a gene involved in auxin response and early development. *Development (Cambridge)*, **2000**, 127, 23-32	6.6	80
28	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, 15342-7	11.5	152
27	Function of the ubiquitin-proteosome pathway in auxin response. *Trends in Plant Science*, **1999**, 4, 107-112	13.1	82
26	Identification of an SCF ubiquitin-ligase complex required for auxin response in Arabidopsis thaliana. *Genes and Development*, **1999**, 13, 1678-91	12.6	384
25	Molecular mechanisms of auxin action. *Current Opinion in Plant Biology*, **1998**, 1, 434-9	9.9	59

24	Auxin and ethylene promote root hair elongation in Arabidopsis. *Plant Journal*, **1998**, 16, 553-60	6.9	416
23	Changes in auxin response from mutations in an AUX/IAA gene. *Science*, **1998**, 279, 1371-3	33.3	333
22	The ubiquitin-related protein RUB1 and auxin response in Arabidopsis. *Science*, **1998**, 280, 1760-3	33.3	200
21	Polar auxin transport. New support for an old model. *Plant Cell*, **1998**, 10, 1775-8	11.6	66
20	Auxin transport is required for hypocotyl elongation in light-grown but not dark-grown Arabidopsis. *Plant Physiology*, **1998**, 116, 455-62	6.6	244
19	Polar Auxin Transport: New Support for an Old Model. *Plant Cell*, **1998**, 10, 1775	11.6	1
18	The TIR1 protein of Arabidopsis functions in auxin response and is related to human SKP2 and yeast grr1p. *Genes and Development*, **1998**, 12, 198-207	12.6	502
17	High temperature promotes auxin-mediated hypocotyl elongation in Arabidopsis. *Proceedings of the National Academy of Sciences of the United States of America*, **1998**, 95, 7197-202	11.5	455
16	Modification of yeast Cdc53p by the ubiquitin-related protein rub1p affects function of the SCFCdc4 complex. *Genes and Development*, **1998**, 12, 914-26	12.6	265
15	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, 745-57	11.6	273
14	The SAR1 gene of Arabidopsis acts downstream of the AXR1 gene in auxin response. *Development (Cambridge)*, **1997**, 124, 1583-1591	6.6	63
13	Mutations in the AXR3 gene of Arabidopsis result in altered auxin response including ectopic expression from the SAUR-AC1 promoter. *Plant Journal*, **1996**, 10, 403-13	6.9	361
12	The axr4 auxin-resistant mutants of Arabidopsis thaliana define a gene important for root gravitropism and lateral root initiation. *Plant Journal*, **1995**, 7, 211-20	6.9	270
11	The AXR1 and AUX1 genes of Arabidopsis function in separate auxin-response pathways. *Plant Journal*, **1995**, 8, 561-9	6.9	141
10	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, 1071-83	4.6	138
9	Genetic approaches to auxin action. *Plant, Cell and Environment*, **1994**, 17, 525-40	8.4	108
8	The axr2-1 mutation of Arabidopsis thaliana is a gain-of-function mutation that disrupts an early step in auxin response. *Genetics*, **1994**, 138, 1239-49	4	149
7	Arabidopsis auxin-resistance gene AXR1 encodes a protein related to ubiquitin-activating enzyme E1. *Nature*, **1993**, 364, 161-4	50.4	471

6	Effects of the axr2 mutation of Arabidopsis on cell shape in hypocotyl and inflorescence. *Planta*, **1992**, 188, 271-8	4.7	82
5	The plant hormone auxin: insight in sight. *BioEssays*, **1992**, 14, 439-44	4.1	54
4	A dominant mutation in Arabidopsis confers resistance to auxin, ethylene and abscisic acid. *Molecular Genetics and Genomics*, **1990**, 222, 377-83		355
3	The aux1 Mutation of Arabidopsis Confers Both Auxin and Ethylene Resistance. *Plant Physiology*, **1990**, 94, 1462-6	6.6	272
2	Growth and development of the axr1 mutants of Arabidopsis. *Plant Cell*, **1990**, 2, 1071-80	11.6	610
1	Auxin-sensitive Aux/IAA proteins mediate drought tolerance in Arabidopsis by regulating glucosinolate levels		2