Christian Fankhauser

List of Publications by Year
in descending order

114	17,676	13099	26613
papers	citations	68 h-index	107 g-index

199	199	199	11814
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Role for Flavin Monooxygenase-Like Enzymes in Auxin Biosynthesis. Science, 2001, 291, 306-309.	12.6	1,075
2	A molecular framework for light and gibberellin control of cell elongation. Nature, 2008, 451, 480-484.	27.8	1,053
3	Activation Tagging in Arabidopsis. Plant Physiology, 2000, 122, 1003-1014.	4.8	896
4	Light Signal Transduction in Higher Plants. Annual Review of Genetics, 2004, 38, 87-117.	7.6	843
5	Light-Regulated Plant Growth and Development. Current Topics in Developmental Biology, 2010, 91, 29-66.	2.2	652
6	Phytochromeâ€mediated inhibition of shade avoidance involves degradation of growthâ€promoting bHLH transcription factors. Plant Journal, 2008, 53, 312-323.	5.7	651
7	Rhythmic growth explained by coincidence between internal and external cues. Nature, 2007, 448, 358-361.	27.8	599
8	Phytochrome interacting factors 4 and 5 control seedling growth in changing light conditions by directly controlling auxin signaling. Plant Journal, 2012, 71, 699-711.	5.7	498
9	LIGHT CONTROL OF PLANT DEVELOPMENT. Annual Review of Cell and Developmental Biology, 1997, 13, 203-229.	9.4	439
10	PKS1, a Substrate Phosphorylated by Phytochrome That Modulates Light Signaling in Arabidopsis. Science, 1999, 284, 1539-1541.	12.6	426
11	Light: an indicator of time and place. Genes and Development, 2000, 14, 257-271.	5.9	423
12	Inhibition of the shade avoidance response by formation of non-DNA binding bHLH heterodimers. EMBO Journal, 2009, 28, 3893-3902.	7.8	354
13	Sensing the light environment in plants: photoreceptors and early signaling steps. Current Opinion in Neurobiology, 2015, 34, 46-53.	4.2	344
14	Light-Mediated Hormonal Regulation of Plant Growth and Development. Annual Review of Plant Biology, 2016, 67, 513-537.	18.7	328
15	An Arabidopsis Mutant Defective in the Plastid General Protein Import Apparatus. , 1998, 282, 100-103.		301
16	Light-mediated polarization of the PIN3 auxin transporter for the phototropic response in Arabidopsis. Nature Cell Biology, 2011, 13, 447-452.	10.3	295
17	ELF3 Encodes a Circadian Clock-Regulated Nuclear Protein That Functions in an Arabidopsis PHYB Signal Transduction Pathway. Plant Cell, 2001, 13, 1293-1304.	6.6	288
18	The S. pombe cdc15 gene is a key element in the reorganization of F-actin at mitosis. Cell, 1995, 82, 435-444.	28.9	250

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19	Molecular mechanisms underlying phytochrome-controlled morphogenesis in plants. Nature Communications, 2019, 10, 5219.	12.8	245
20	The dmf1/mid1 gene is essential for correct positioning of the division septum in fission yeast.. Genes and Development, 1996, 10, 2707-2719.	5.9	238
21	bHLH class transcription factors take centre stage in phytochrome signalling. Trends in Plant Science, 2005, 10, 51-54.	8.8	216
22	ELF3 Encodes a Circadian Clockâ€“Regulated Nuclear Protein That Functions in an Arabidopsis PHYB Signal Transduction Pathway. Plant Cell, 2001, 13, 1293-1304.	6.6	214
23	Higher plants use LOV to perceive blue light. Current Opinion in Plant Biology, 2009, 12, 69-74.	7.1	207
24	The Degradation of HFR1, a Putative bHLH Class Transcription Factor Involved in Light Signaling, Is Regulated by Phosphorylation and Requires COP1. Current Biology, 2004, 14, 2296-2301.	3.9	204
25	PIF3 is a repressor of chloroplast development. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7654-7659.	7.1	201
26	From seed germination to flowering, light controls plant development via the pigment phytochrome.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 12066-12071.	7.1	189
27	PHYTOCHROME KINASE SUBSTRATE 1 is a phototropin 1 binding protein required for phototropism. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10134-10139.	7.1	176
28	The Phytochromes, a Family of Red/Far-red Absorbing Photoreceptors. Journal of Biological Chemistry, 2001, 276, 11453-11456.	3.4	175
29	Photoreceptors in Arabidopsis thaliana : light perception, signal transduction and entrainment of the endogenous clock. Planta, 2002, 216, 1-16.	3.2	166
30	The Arabidopsis PHYTOCHROME KINASE SUBSTRATE2 Protein Is a Phototropin Signaling Element That Regulates Leaf Flattening and Leaf Positioning. Plant Physiology, 2010, 152, 1391-1405.	4.8	157
31	HFR1, a putative bHLH transcription factor, mediates both phytochrome A and cryptochrome signalling. Plant Journal, 2003, 34, 827-836.	5.7	151
32	Integration of Phytochrome and Cryptochrome Signals Determines Plant Growth during Competition for Light. Current Biology, 2016, 26, 3320-3326.	3.9	148
33	UV-B Perceived by the UVR8 Photoreceptor Inhibits Plant Thermomorphogenesis. Current Biology, 2017, 27, 120-127.	3.9	142
34	The cdc7 protein kinase is a dosage dependent regulator of septum formation in fission yeast.. EMBO Journal, 1994, 13, 3011-3019.	7.8	141
35	Plant Phototropic Growth. Current Biology, 2015, 25, R384-R389.	3.9	141
36	Nuclear Accumulation of the Phytochrome A Photoreceptor Requires FHY1. Current Biology, 2005, 15, 2125-2130.	3.9	140

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37	The S. pombe cdc16 gene is required both for maintenance of p34cdc2 kinase activity and regulation of septum formation: a link between mitosis and cytokinesis?. EMBO Journal, 1993, 12, 2697-2704.	7.8	139
38	Plant Strategies for Enhancing Access to Sunlight. Current Biology, 2017, 27, R931-R940.	3.9	134
39	PHYTOCHROME INTERACTING FACTOR 7 is important for early responses to elevated temperature in Arabidopsis seedlings. New Phytologist, 2020, 226, 50-58.	7.3	130
40	Neighbor Detection Induces Organ-Specific Transcriptomes, Revealing Patterns Underlying Hypocotyl-Specific Growth. Plant Cell, 2016, 28, 2889-2904.	6.6	128
41	Light receptor action is critical for maintaining plant biomass at warm ambient temperatures. Plant Journal, 2011, 65, 441-452.	5.7	122
42	Low number of fixed somatic mutations in a long-lived oak tree. Nature Plants, 2017, 3, 926-929.	9.3	120
43	Atomic Force Microscopy Stiffness Tomography on Living Arabidopsis thaliana Cells Reveals the Mechanical Properties of Surface and Deep Cell-Wall Layers during Growth. Biophysical Journal, 2012, 103, 386-394.	0.5	119
44	D6PK AGCVIII Kinases Are Required for Auxin Transport and Phototropic Hypocotyl Bending in Arabidopsis Â Â. Plant Cell, 2013, 25, 1674-1688.	6.6	118
45	Signalling for developmental plasticity. Trends in Plant Science, 2004, 9, 309-314.	8.8	117
46	Phosphorylation of Phytochrome B Inhibits Light-Induced Signaling via Accelerated Dark Reversion in Arabidopsis Â Â. Plant Cell, 2013, 25, 535-544.	6.6	116
47	RSF1, an Arabidopsis Locus Implicated in Phytochrome A Signaling. Plant Physiology, 2000, 124, 39-46.	4.8	113
48	Light intensity modulates the regulatory network of the shade avoidance response in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6515-6520.	7.1	111
49	Spatially and genetically distinct control of seed germination by phytochromes A and B. Genes and Development, 2012, 26, 1984-1996.	5.9	110
50	Phytochromeâ€hormonal signalling networks. New Phytologist, 2003, 157, 449-463.	7.3	108
51	Phenotypic characterization of a photomorphogenic mutant. Plant Journal, 2004, 39, 747-760.	5.7	106
52	BLADE-ON-PETIOLE proteins act in an E3 ubiquitin ligase complex to regulate PHYTOCHROME INTERACTING FACTOR 4 abundance. ELife, 2017, 6, .	6.0	106
53	FHY1 Mediates Nuclear Import of the Light-Activated Phytochrome A Photoreceptor. PLoS Genetics, 2008, 4, e1000143.	3.5	104
54	Contrasting growth responses in lamina and petiole during neighbor detection depend on differential auxin responsiveness rather than different auxin levels. New Phytologist, 2015, 208, 198-209.	7.3	100

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55	The influence of greenhouse-integrated photovoltaics on crop production. Solar Energy, 2017, 155, 517-522.	6.1	96
56	Hypocotyl growth orientation in blue light is determined by phytochrome A inhibition of gravitropism and phototropin promotion of phototropism. Plant Journal, 2004, 40, 826-834.	5.7	94
57	A light-dependent molecular link between competition cues and defence responses in plants. Nature Plants, 2020, 6, 223-230.	9.3	92
58	The Arabidopsis SRR1 gene mediates phyB signaling and is required for normal circadian clock function. Genes and Development, 2003, 17, 256-268.	5.9	91
59	Transposing phytochrome into the nucleus. Trends in Plant Science, 2008, 13, 596-601.	8.8	88
60	Phytochrome interacting factors 4 and 5 redundantly limit seedling deâ€etiolation in continuous farâ€red light. Plant Journal, 2009, 60, 449-461.	5.7	88
61	Phototropism: at the crossroads of light-signaling pathways. Trends in Plant Science, 2013, 18, 393-401.	8.8	86
62	Phytochrome-mediated light signalling in Arabidopsis. Current Opinion in Plant Biology, 2004, 7, 564-569.	7.1	85
63	Differentially Phased Leaf Growth and Movements in Arabidopsis Depend on Coordinated Circadian and Light Regulation. Plant Cell, 2014, 26, 3911-3921.	6.6	83
64	Phytochrome Kinase Substrate 4 is phosphorylated by the phototropin 1 photoreceptor. EMBO Journal, 2012, 31, 3457-3467.	7.8	82
65	The Schizosaccharomyces pombe cdc14 gene is required for septum formation and can also inhibit nuclear division.. Molecular Biology of the Cell, 1993, 4, 531-539.	2.1	80
66	Auxinâ€mediated plant architectural changes in response to shade and high temperature. Physiologia Plantarum, 2014, 151, 13-24.	5.2	77
67	Phototropism: Translating light into directional growth. American Journal of Botany, 2013, 100, 47-59.	1.7	76
68	Measuring the diurnal pattern of leaf hyponasty and growth in Arabidopsis - a novel phenotyping approach using laser scanning. Functional Plant Biology, 2012, 39, 860.	2.1	73
69	Local auxin production underlies a spatially restricted neighbor-detection response in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7444-7449.	7.1	70
70	Shade Promotes Phototropism through Phytochrome B-Controlled Auxin Production. Current Biology, 2016, 26, 3280-3287.	3.9	69
71	PHYTOCHROME KINASE SUBSTRATE1 Regulates Root Phototropism and Gravitropism. Plant Physiology, 2008, 146, 108-115.	4.8	68
72	A Growth Regulatory Loop That Provides Homeostasis to Phytochrome A Signaling[W]. Plant Cell, 2003, 15, 2966-2978.	6.6	67

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73	PIF transcription factors link a neighbor threat cue to accelerated reproduction in Arabidopsis. Nature Communications, 2019, 10, 4005.	12.8	65
74	Cloning of the Arabidopsis RSF1 Gene by Using a Mapping Strategy Based on High-Density DNA Arrays and Denaturing High-Performance Liquid Chromatography. Plant Cell, 2000, 12, 2485-2498.	6.6	61
75	Nuclear Phytochrome A Signaling Promotes Phototropism in Arabidopsis. Plant Cell, 2012, 24, 566-576.	6.6	54
76	Verification at the protein level of the PIF4-mediated external coincidence model for the temperature-adaptive photoperiodic control of plant growth inArabidopsis thaliana. Plant Signaling and Behavior, 2013, 8, e23390.	2.4	54
77	Plasma membrane <scp>H</scp>⁺â€<scp>ATP</scp>ase regulation is required for auxin gradient formation preceding phototropic growth. Molecular Systems Biology, 2014, 10, 751.	7.2	54
78	Photomorphogenesis: Light receptor kinases in plants!. Current Biology, 1999, 9, R123-R126.	3.9	51
79	The serine-rich N-terminal region of Arabidopsis phytochrome A is required for protein stability. Plant Molecular Biology, 2007, 63, 669-678.	3.9	48
80	Defining the Site of Light Perception and Initiation of Phototropism in Arabidopsis. Current Biology, 2013, 23, 1934-1938.	3.9	47
81	Arabidopsis RUP2 represses UVR8-mediated flowering in noninductive photoperiods. Genes and Development, 2018, 32, 1332-1343.	5.9	44
82	Let there be light in the nucleus!. Current Opinion in Plant Biology, 2006, 9, 509-514.	7.1	42
83	Light perception in plants: cytokinins and red light join forces to keep phytochrome B active. Trends in Plant Science, 2002, 7, 143-145.	8.8	41
84	Reduced phototropism in pks mutants may be due to altered auxinâ€regulated gene expression or reduced lateral auxin transport. Plant Journal, 2014, 77, 393-403.	5.7	41
85	PHYTOCHROME KINASE SUBSTRATE4 Modulates Phytochrome-Mediated Control of Hypocotyl Growth Orientation Â Â. Plant Physiology, 2008, 147, 661-671.	4.8	39
86	Cold fission: splitting the pombe cell at room temperature. Trends in Cell Biology, 1994, 4, 96-101.	7.9	38
87	Changes in resource partitioning between and within organs support growth adjustment to neighbor proximity in Brassicaceae seedlings. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9953-E9961.	7.1	35
88	Phytochromes as light-modulated protein kinases. Seminars in Cell and Developmental Biology, 2000, 11, 467-473.	5.0	34
89	Light-regulated interactions with SPA proteins underlie cryptochrome-mediated gene expression: Figure 1.. Genes and Development, 2011, 25, 1004-1009.	5.9	34
90	Lipid anchoring of A rabidopsis phototropin 1 to assess the functional significance of receptor internalization: should I stay or should I go?. New Phytologist, 2015, 206, 1038-1050.	7.3	34

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91	Light-induced degradation of phyA is promoted by transfer of the photoreceptor into the nucleus. Plant Molecular Biology, 2010, 73, 687-695.	3.9	33
92	A Hormonal Regulatory Module That Provides Flexibility to Tropic Responses Â Â. Plant Physiology, 2011, 156, 1819-1825.	4.8	33
93	Conditional Involvement of CONSTITUTIVE PHOTOMORPHOGENIC1 in the Degradation of Phytochrome A Â Â. Plant Physiology, 2013, 161, 2136-2145.	4.8	33
94	Low Blue Light Enhances Phototropism by Releasing Cryptochrome1-Mediated Inhibition of PIF4 Expression. Plant Physiology, 2020, 183, 1780-1793.	4.8	30
95	Shadow on the Plant: A Strategy to Exit. Cell, 2016, 164, 15-17.	28.9	28
96	UVR8-mediated inhibition of shade avoidance involves HFR1 stabilization in Arabidopsis. PLoS Genetics, 2020, 16, e1008797.	3.5	27
97	REPRESSOR OF ULTRAVIOLET-B PHOTOMORPHOGENESIS function allows efficient phototropin mediated ultraviolet-B phototropism in etiolated seedlings. Plant Science, 2016, 252, 215-221.	3.6	26
98	A phosphorylation switch turns a positive regulator of phototropism into an inhibitor of the process. Nature Communications, 2018, 9, 2403.	12.8	26
99	The Protein Phosphatase 7 Regulates Phytochrome Signaling in Arabidopsis. PLoS ONE, 2008, 3, e2699.	2.5	23
100	Architecture and plasticity: optimizing plant performance in dynamic environments. Plant Physiology, 2021, 187, 1029-1032.	4.8	12
101	Phototropin-mediated perception of light direction in leaves regulates blade flattening. Plant Physiology, 2021, 187, 1235-1249.	4.8	11
102	PKS1 and PKS2 affect the phyA state in etiolated Arabidopsis seedlings. Photochemical and Photobiological Sciences, 2004, 3, 608.	2.9	10
103	Periodic accumulation of cdc15 mRNA is not necessary for septation in Schizosaccharomyces pombe. Journal of Molecular Biology, 2000, 302, 751-759.	4.2	7
104	Plant Development: Should I Stop or Should I Grow?. Current Biology, 2012, 22, R645-R647.	3.9	7
105	The evolutionary conserved BER1 gene is involved in microtubule stability in yeast. Current Genetics, 2008, 53, 107-115.	1.7	6
106	Shade suppresses wound-induced leaf repositioning through a mechanism involving PHYTOCHROME KINASE SUBSTRATE (PKS) genes. PLoS Genetics, 2022, 18, e1010213.	3.5	6
107	A photoreceptor's on-off switch. Science, 2016, 354, 282-283.	12.6	3
108	The Effect of Light and Gravity on Hypocotyl Growth Orientation. , 2005, , 277-284.		3

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109	Cloning of the Arabidopsis RSF1 Gene by Using a Mapping Strategy Based on High-Density DNA Arrays and Denaturing High-Performance Liquid Chromatography. Plant Cell, 2000, 12, 2485.	6.6	1
110	The role of PIF3 in phytochrome regulation of chloroplast development. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2009, 153, S209.	1.8	0
111	UVR8-mediated inhibition of shade avoidance involves HFR1 stabilization in Arabidopsis. , 2020, 16, e1008797.		0
112	UVR8-mediated inhibition of shade avoidance involves HFR1 stabilization in Arabidopsis. , 2020, 16, e1008797.		0
113	UVR8-mediated inhibition of shade avoidance involves HFR1 stabilization in Arabidopsis. , 2020, 16, e1008797.		0
114	UVR8-mediated inhibition of shade avoidance involves HFR1 stabilization in Arabidopsis. , 2020, 16, e1008797.		0