Christian Fankhauser

List of Publications by Year
in descending order

114 papers	17,676 citations	13099 68 h-index	26613 107 g-index
199 all docs	199 docs citations	199 times ranked	11814 citing authors

#	Article	IF	Citations
1	Shade suppresses wound-induced leaf repositioning through a mechanism involving PHYTOCHROME KINASE SUBSTRATE (PKS) genes. PLoS Genetics, 2022, 18, e1010213.	3.5	6
2	Phototropin-mediated perception of light direction in leaves regulates blade flattening. Plant Physiology, 2021, 187, 1235-1249.	4.8	11
3	Architecture and plasticity: optimizing plant performance in dynamic environments. Plant Physiology, 2021, 187, 1029-1032.	4.8	12
4	PHYTOCHROME INTERACTING FACTOR 7 is important for early responses to elevated temperature in Arabidopsis seedlings. New Phytologist, 2020, 226, 50-58.	7.3	130
5	UVR8-mediated inhibition of shade avoidance involves HFR1 stabilization in Arabidopsis. PLoS Genetics, 2020, 16, e1008797.	3.5	27
6	Low Blue Light Enhances Phototropism by Releasing Cryptochrome1-Mediated Inhibition of <i>PIF4</i> Expression. Plant Physiology, 2020, 183, 1780-1793.	4.8	30
7	A light-dependent molecular link between competition cues and defence responses in plants. Nature Plants, 2020, 6, 223-230.	9.3	92
8	UVR8-mediated inhibition of shade avoidance involves HFR1 stabilization in Arabidopsis. , 2020, 16, e1008797.		0
9	UVR8-mediated inhibition of shade avoidance involves HFR1 stabilization in Arabidopsis. , 2020, 16, e1008797.		0
10	UVR8-mediated inhibition of shade avoidance involves HFR1 stabilization in Arabidopsis. , 2020, 16, e1008797.		0
11	UVR8-mediated inhibition of shade avoidance involves HFR1 stabilization in Arabidopsis. , 2020, 16, e1008797.		0
12	PIF transcription factors link a neighbor threat cue to accelerated reproduction in Arabidopsis. Nature Communications, 2019, 10, 4005.	12.8	65
13	Molecular mechanisms underlying phytochrome-controlled morphogenesis in plants. Nature Communications, 2019, 10, 5219.	12.8	245
14	<i>Arabidopsis</i> RUP2 represses UVR8-mediated flowering in noninductive photoperiods. Genes and Development, 2018, 32, 1332-1343.	5.9	44
15	Changes in resource partitioning between and within organs support growth adjustment to neighbor proximity in <i>Brassicaceae</i> seedlings. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9953-E9961.	7.1	35
16	A phosphorylation switch turns a positive regulator of phototropism into an inhibitor of the process. Nature Communications, 2018, 9, 2403.	12.8	26
17	UV-B Perceived by the UVR8 Photoreceptor Inhibits Plant Thermomorphogenesis. Current Biology, 2017, 27, 120-127.	3.9	142
18	Plant Strategies for Enhancing Access to Sunlight. Current Biology, 2017, 27, R931-R940.	3.9	134

#	Article	IF	Citations
19	Low number of fixed somatic mutations in a long-lived oak tree. Nature Plants, 2017, 3, 926-929.	9.3	120
20	Local auxin production underlies a spatially restricted neighbor-detection response in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7444-7449.	7.1	70
21	The influence of greenhouse-integrated photovoltaics on crop production. Solar Energy, 2017, 155, 517-522.	6.1	96
22	BLADE-ON-PETIOLE proteins act in an E3 ubiquitin ligase complex to regulate PHYTOCHROME INTERACTING FACTOR 4 abundance. ELife, 2017, 6, .	6.0	106
23	Neighbor Detection Induces Organ-Specific Transcriptomes, Revealing Patterns Underlying Hypocotyl-Specific Growth. Plant Cell, 2016, 28, 2889-2904.	6.6	128
24	Integration of Phytochrome and Cryptochrome Signals Determines Plant Growth during Competition for Light. Current Biology, 2016, 26, 3320-3326.	3.9	148
25	Shade Promotes Phototropism through Phytochrome B-Controlled Auxin Production. Current Biology, 2016, 26, 3280-3287.	3.9	69
26	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
27	A photoreceptor's on-off switch. Science, 2016, 354, 282-283.	12.6	3
28	Shadow on the Plant: A Strategy to Exit. Cell, 2016, 164, 15-17.	28.9	28
29	Light-Mediated Hormonal Regulation of Plant Growth and Development. Annual Review of Plant Biology, 2016, 67, 513-537.	18.7	328
30	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
31	Sensing the light environment in plants: photoreceptors and early signaling steps. Current Opinion in Neurobiology, 2015, 34, 46-53.	4.2	344
32	Plant Phototropic Growth. Current Biology, 2015, 25, R384-R389.	3.9	141
33	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
34	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
35	Auxinâ€mediated plant architectural changes in response to shade and high temperature. Physiologia Plantarum, 2014, 151, 13-24.	5.2	77
36	Reduced phototropism in <i>pks</i> mutants may be due to altered auxinâ€regulated gene expression or reduced lateral auxin transport. Plant Journal, 2014, 77, 393-403.	5.7	41

#	Article	IF	Citations
37	Differentially Phased Leaf Growth and Movements in <i>Arabidopsis</i> Depend on Coordinated Circadian and Light Regulation. Plant Cell, 2014, 26, 3911-3921.	6.6	83
38	Light intensity modulates the regulatory network of the shade avoidance response in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6515-6520.	7.1	111
39	Phototropism: at the crossroads of light-signaling pathways. Trends in Plant Science, 2013, 18, 393-401.	8.8	86
40	Phototropism: Translating light into directional growth. American Journal of Botany, 2013, 100, 47-59.	1.7	76
41	Defining the Site of Light Perception and Initiation of Phototropism in Arabidopsis. Current Biology, 2013, 23, 1934-1938.	3.9	47
42	Conditional Involvement of CONSTITUTIVE PHOTOMORPHOGENIC1 in the Degradation of Phytochrome A Â Â. Plant Physiology, 2013, 161, 2136-2145.	4.8	33
43	Phosphorylation of Phytochrome B Inhibits Light-Induced Signaling via Accelerated Dark Reversion in <i>Arabidopsis</i> Â Â. Plant Cell, 2013, 25, 535-544.	6.6	116
44	D6PK AGCVIII Kinases Are Required for Auxin Transport and Phototropic Hypocotyl Bending in <i>Arabidopsis</i> Â Â. Plant Cell, 2013, 25, 1674-1688.	6.6	118
45	Verification at the protein level of the PIF4-mediated external coincidence model for the temperature-adaptive photoperiodic control of plant growth in<i>Arabidopsis thaliana</i>. Plant Signaling and Behavior, 2013, 8, e23390.	2.4	54
46	Phytochrome Kinase Substrate 4 is phosphorylated by the phototropin 1 photoreceptor. EMBO Journal, 2012, 31, 3457-3467.	7.8	82
47	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
48	Nuclear Phytochrome A Signaling Promotes Phototropism in <i>Arabidopsis</i>. Plant Cell, 2012, 24, 566-576.	6.6	54
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	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
51	Plant Development: Should I Stop or Should I Grow?. Current Biology, 2012, 22, R645-R647.	3.9	7
52	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
53	Light receptor action is critical for maintaining plant biomass at warm ambient temperatures. Plant Journal, 2011, 65, 441-452.	5.7	122
54	Light-mediated polarization of the PIN3 auxin transporter for the phototropic response in Arabidopsis. Nature Cell Biology, 2011, 13, 447-452.	10.3	295

#	Article	IF	Citations
55	A Hormonal Regulatory Module That Provides Flexibility to Tropic Responses Â Â. Plant Physiology, 2011, 156, 1819-1825.	4.8	33
56	Light-regulated interactions with SPA proteins underlie cryptochrome-mediated gene expression: Figure 1.. Genes and Development, 2011, 25, 1004-1009.	5.9	34
57	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
58	Light-Regulated Plant Growth and Development. Current Topics in Developmental Biology, 2010, 91, 29-66.	2.2	652
59	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
60	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
61	Higher plants use LOV to perceive blue light. Current Opinion in Plant Biology, 2009, 12, 69-74.	7.1	207
62	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
63	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
64	Inhibition of the shade avoidance response by formation of non-DNA binding bHLH heterodimers. EMBO Journal, 2009, 28, 3893-3902.	7.8	354
65	Phytochromeâ€mediated inhibition of shade avoidance involves degradation of growthâ€promoting bHLH transcription factors. Plant Journal, 2008, 53, 312-323.	5.7	651
66	The evolutionary conserved BER1 gene is involved in microtubule stability in yeast. Current Genetics, 2008, 53, 107-115.	1.7	6
67	A molecular framework for light and gibberellin control of cell elongation. Nature, 2008, 451, 480-484.	27.8	1,053
68	Transposing phytochrome into the nucleus. Trends in Plant Science, 2008, 13, 596-601.	8.8	88
69	PHYTOCHROME KINASE SUBSTRATE1 Regulates Root Phototropism and Gravitropism. Plant Physiology, 2008, 146, 108-115.	4.8	68
70	PHYTOCHROME KINASE SUBSTRATE4 Modulates Phytochrome-Mediated Control of Hypocotyl Growth Orientation Â Â. Plant Physiology, 2008, 147, 661-671.	4.8	39
71	FHY1 Mediates Nuclear Import of the Light-Activated Phytochrome A Photoreceptor. PLoS Genetics, 2008, 4, e1000143.	3.5	104
72	The Protein Phosphatase 7 Regulates Phytochrome Signaling in Arabidopsis. PLoS ONE, 2008, 3, e2699.	2.5	23

#	Article	IF	Citations
73	Rhythmic growth explained by coincidence between internal and external cues. Nature, 2007, 448, 358-361.	27.8	599
74	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
75	Let there be light in the nucleus!. Current Opinion in Plant Biology, 2006, 9, 509-514.	7.1	42
76	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
77	Nuclear Accumulation of the Phytochrome A Photoreceptor Requires FHY1. Current Biology, 2005, 15, 2125-2130.	3.9	140
78	bHLH class transcription factors take centre stage in phytochrome signalling. Trends in Plant Science, 2005, 10, 51-54.	8.8	216
79	The Effect of Light and Gravity on Hypocotyl Growth Orientation. , 2005, , 277-284.		3
80	Phenotypic characterization of a photomorphogenic mutant. Plant Journal, 2004, 39, 747-760.	5.7	106
81	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
82	Phytochrome-mediated light signalling in Arabidopsis. Current Opinion in Plant Biology, 2004, 7, 564-569.	7.1	85
83	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
84	PKS1 and PKS2 affect the phyA state in etiolated Arabidopsis seedlings. Photochemical and Photobiological Sciences, 2004, 3, 608.	2.9	10
85	Signalling for developmental plasticity. Trends in Plant Science, 2004, 9, 309-314.	8.8	117
86	Light Signal Transduction in Higher Plants. Annual Review of Genetics, 2004, 38, 87-117.	7.6	843
87	HFR1, a putative bHLH transcription factor, mediates both phytochrome A and cryptochrome signalling. Plant Journal, 2003, 34, 827-836.	5.7	151
88	Phytochromeâ€hormonal signalling networks. New Phytologist, 2003, 157, 449-463.	7.3	108
89	A Growth Regulatory Loop That Provides Homeostasis to Phytochrome A Signaling[W]. Plant Cell, 2003, 15, 2966-2978.	6.6	67
90	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

#	Article	IF	Citations
91	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
92	Photoreceptors in Arabidopsis thaliana : light perception, signal transduction and entrainment of the endogenous clock. Planta, 2002, 216, 1-16.	3.2	166
93	A Role for Flavin Monooxygenase-Like Enzymes in Auxin Biosynthesis. Science, 2001, 291, 306-309.	12.6	1,075
94	<i>ELF3</i> Encodes a Circadian Clockâ€"Regulated Nuclear Protein That Functions in an Arabidopsis <i>PHYB</i> Signal Transduction Pathway. Plant Cell, 2001, 13, 1293-1304.	6.6	214
95	The Phytochromes, a Family of Red/Far-red Absorbing Photoreceptors. Journal of Biological Chemistry, 2001, 276, 11453-11456.	3.4	175
96	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
97	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
98	Activation Tagging in Arabidopsis. Plant Physiology, 2000, 122, 1003-1014.	4.8	896
99	RSF1, an Arabidopsis Locus Implicated in Phytochrome A Signaling. Plant Physiology, 2000, 124, 39-46.	4.8	113
100	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
101	Periodic accumulation of cdc15 mRNA is not necessary for septation in Schizosaccharomyces pombe. Journal of Molecular Biology, 2000, 302, 751-759.	4.2	7
102	Phytochromes as light-modulated protein kinases. Seminars in Cell and Developmental Biology, 2000, 11, 467-473.	5.0	34
103	Light: an indicator of time and place. Genes and Development, 2000, 14, 257-271.	5.9	423
104	Photomorphogenesis: Light receptor kinases in plants!. Current Biology, 1999, 9, R123-R126.	3.9	51
105	PKS1, a Substrate Phosphorylated by Phytochrome That Modulates Light Signaling in Arabidopsis. Science, 1999, 284, 1539-1541.	12.6	426
106	An Arabidopsis Mutant Defective in the Plastid General Protein Import Apparatus. , 1998, 282, 100-103.		301
107	LIGHT CONTROL OF PLANT DEVELOPMENT. Annual Review of Cell and Developmental Biology, 1997, 13, 203-229.	9.4	439
108	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

#	Article	IF	Citations
109	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
110	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
111	The cdc7 protein kinase is a dosage dependent regulator of septum formation in fission yeast.. EMBO Journal, 1994, 13, 3011-3019.	7.8	141
112	Cold fission: splitting the pombe cell at room temperature. Trends in Cell Biology, 1994, 4, 96-101.	7.9	38
113	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
114	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