Masamitsu Wada

List of Publications by Year
in descending order

130 papers	8,301 citations	53794 45 h-index	49909 87 g-index
132 all docs	132 docs citations	132 times ranked	4209 citing authors

#	Article	IF	Citations
1	Signalling mechanism of phototropin-mediated chloroplast movement in Arabidopsis. Journal of Plant Biochemistry and Biotechnology, 2020, 29, 580-589.	1.7	9
2	ACTIN2 Functions in Chloroplast Photorelocation Movement in Arabidopsis thaliana. Journal of Plant Biology, 2020, 63, 379-389.	2.1	2
3	Light-induced chloroplast movements in Oryza species. Journal of Plant Research, 2020, 133, 525-535.	2.4	6
4	Phototropin2 Contributes to the Chloroplast Avoidance Response at the Chloroplast-Plasma Membrane Interface. Plant Physiology, 2020, 183, 304-316.	4.8	17
5	Light-dependent spatiotemporal control of plant cell development and organelle movement in fern gametophytes. Microscopy (Oxford, England), 2019, 68, 13-36.	1.5	1
6	Chloroplast Actin Filaments Involved in Chloroplast Photorelocation Movements. Plant Cell Monographs, 2019, , 37-48.	0.4	1
7	Palisade cell shape affects the light-induced chloroplast movements and leaf photosynthesis. Scientific Reports, 2018, 8, 1472.	3.3	46
8	Actin-mediated movement of chloroplasts. Journal of Cell Science, 2018, 131, .	2.0	54
9	Nuclear movement and positioning in plant cells. Seminars in Cell and Developmental Biology, 2018, 82, 17-24.	5.0	9
10	Chloroplast Accumulation Response Enhances Leaf Photosynthesis and Plant Biomass Production. Plant Physiology, 2018, 178, 1358-1369.	4.8	78
11	Shining Light on the Function of NPH3/RPT2-Like Proteins in Phototropin Signaling. Plant Physiology, 2018, 176, 1015-1024.	4.8	54
12	Temperature-dependent signal transmission in chloroplast accumulation response. Journal of Plant Research, 2017, 130, 779-789.	2.4	6
13	Ferns, mosses and liverworts as model systems for lightâ€mediated chloroplast movements. Plant, Cell and Environment, 2017, 40, 2447-2456.	5.7	18
14	Two Coiled-Coil Proteins, WEB1 and PMI2, Suppress the Signaling Pathway of Chloroplast Accumulation Response that Is Mediated by Two Phototropin-Interacting Proteins, RPT2 and NCH1, in Seed Plants. International Journal of Molecular Sciences, 2017, 18, 1469.	4.1	4
15	Chloroplast and nuclear photorelocation movements. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2016, 92, 387-411.	3.8	29
16	Evolution of the Cp-Actin-based Motility System of Chloroplasts in Green Plants. Frontiers in Plant Science, 2016, 7, 561.	3.6	25
17	RPT2/NCH1 subfamily of NPH3-like proteins is essential for the chloroplast accumulation response in land plants. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10424-10429.	7.1	36
18	Chloroplast avoidance movement is not functional in plants grown under strong sunlight. Plant, Cell and Environment, 2016, 39, 871-882.	5.7	35

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19	Molecular basis of chloroplast photorelocation movement. Journal of Plant Research, 2016, 129, 159-166.	2.4	43
20	Functional characterization of blue-light-induced responses and PHOTOTROPIN 1 gene in Welwitschia mirabilis. Journal of Plant Research, 2016, 129, 175-187.	2.4	11
21	Distinct Biochemical Properties of<i>Arabidopsis thaliana</i>Actin Isoforms. Plant and Cell Physiology, 2016, 57, 46-56.	3.1	32
22	Light-Induced Movements of Chloroplasts and Nuclei Are Regulated in Both Cp-Actin-Filament-Dependent and -Independent Manners in Arabidopsis thaliana. PLoS ONE, 2016, 11, e0157429.	2.5	32
23	Clues to the signals for chloroplast photoâ€relocation from the lifetimes of accumulation and avoidance responses. Journal of Integrative Plant Biology, 2015, 57, 120-126.	8.5	17
24	PLASTID MOVEMENT IMPAIRED1 and PLASTID MOVEMENT IMPAIRED1-RELATED1 Mediate Photorelocation Movements of Both Chloroplasts and Nuclei. Plant Physiology, 2015, 169, 1155-1167.	4.8	44
25	Gene Silencing by DNA Interference in Fern Gametophytes. Methods in Molecular Biology, 2015, 1287, 119-127.	0.9	1
26	Actin-dependent plastid movement is required for motive force generation in directional nuclear movement in plants. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4327-4331.	7.1	67
27	Phototropin Encoded by a Single-Copy Gene Mediates Chloroplast Photorelocation Movements in the Liverwort<i>Marchantia polymorpha</i>Â Â. Plant Physiology, 2014, 166, 411-427.	4.8	63
28	Recent advances in understanding the molecular mechanism of chloroplast photorelocation movement. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 522-530.	1.0	63
29	Plant nuclear photorelocation movement. Journal of Experimental Botany, 2014, 65, 2873-2881.	4.8	22
30	Chloroplast movement. Plant Science, 2013, 210, 177-182.	3.6	142
31	Chloroplasts continuously monitor photoreceptor signals during accumulation movement. Journal of Plant Research, 2013, 126, 557-566.	2.4	13
32	Interaction between avoidance of photon absorption, excess energy dissipation and zeaxanthin synthesis against photooxidative stress in <scp>A</scp>rabidopsis. Plant Journal, 2013, 76, 568-579.	5.7	114
33	Evolution of Three LOV Blue Light Receptor Families in Green Plants and Photosynthetic Stramenopiles: Phototropin, ZTL/FKF1/LKP2 and Aureochrome. Plant and Cell Physiology, 2013, 54, 8-23.	3.1	115
34	Both Phototropin 1 and 2 Localize on the Chloroplast Outer Membrane with Distinct Localization Activity. Plant and Cell Physiology, 2013, 54, 80-92.	3.1	65
35	Rapid Severing and Motility of Chloroplast-Actin Filaments Are Required for the Chloroplast Avoidance Response in<i>Arabidopsis</i>Â Â Â. Plant Cell, 2013, 25, 572-590.	6.6	65
36	A C-Terminal Membrane Association Domain of Phototropin 2 is Necessary for Chloroplast Movement. Plant and Cell Physiology, 2013, 54, 57-68.	3.1	34

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37	Both LOV1 and LOV2 domains of phototropin2 function as the photosensory domain for hypocotyl phototropic responses in <i>Arabidopsis thaliana</i> (Brassicaceae). American Journal of Botany, 2013, 100, 60-69.	1.7	24
38	The KAC Family of Kinesin-Like Proteins is Essential for the Association of Chloroplasts with the Plasma Membrane in Land Plants. Plant and Cell Physiology, 2012, 53, 1854-1865.	3.1	44
39	CHUP1 mediates actin-based light-induced chloroplast avoidance movement in the moss Physcomitrella patens. Planta, 2012, 236, 1889-1897.	3.2	27
40	Distribution pattern changes of actin filaments during chloroplast movement in Adiantum capillus-veneris. Journal of Plant Research, 2012, 125, 417-428.	2.4	28
41	Chloroplast actin filaments organize meshwork on the photorelocated chloroplasts in the moss Physcomitrella patens. Planta, 2011, 233, 357-368.	3.2	46
42	Chloroplasts can move in any direction to avoid strong light. Journal of Plant Research, 2011, 124, 201-210.	2.4	49
43	Red Light, Phot1 and JAC1 Modulate Phot2-Dependent Reorganization of Chloroplast Actin Filaments and Chloroplast Avoidance Movement. Plant and Cell Physiology, 2011, 52, 1422-1432.	3.1	36
44	New Insights into Dynamic Actin-Based Chloroplast Photorelocation Movement. Molecular Plant, 2011, 4, 771-781.	8.3	50
45	Analysis of Chloroplast Movement and Relocation in Arabidopsis. Methods in Molecular Biology, 2011, 774, 87-102.	0.9	39
46	Why have chloroplasts developed a unique motility system?. Plant Signaling and Behavior, 2010, 5, 1190-1196.	2.4	47
47	Speed of signal transfer in the chloroplast accumulation response. Journal of Plant Research, 2010, 123, 381-390.	2.4	28
48	Crystallographic and Functional Analyses of J-Domain of JAC1 Essential for Chloroplast Photorelocation Movement in Arabidopsis thaliana. Plant and Cell Physiology, 2010, 51, 1372-1376.	3.1	20
49	Two kinesin-like proteins mediate actin-based chloroplast movement in <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8860-8865.	7.1	145
50	Two interacting coiled-coil proteins, WEB1 and PMI2, maintain the chloroplast photorelocation movement velocity in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19591-19596.	7.1	75
51	Short actin-based mechanism for light-directed chloroplast movement in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13106-13111.	7.1	189
52	Chloroplasts do not have a polarity for light-induced accumulation movement. Journal of Plant Research, 2009, 122, 131-140.	2.4	32
53	Chloroplast Outer Envelope Protein CHUP1 Is Essential for Chloroplast Anchorage to the Plasma Membrane and Chloroplast Movement Â. Plant Physiology, 2008, 148, 829-842.	4.8	178
54	Phototropins and Neochrome1 Mediate Nuclear Movement in the Fern Adiantum capillus-veneris. Plant and Cell Physiology, 2007, 48, 892-896.	3.1	52

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55	Chloroplast photorelocation movement mediated by phototropin family proteins in green plants. Biological Chemistry, 2007, 388, 927-935.	2.5	107
56	The fern as a model system to study photomorphogenesis. Journal of Plant Research, 2007, 120, 3-16.	2.4	36
57	PHOTOMORPHOGENESIS OF FERNS. , 2006, , 515-536.		8
58	An Auxilin-Like J-Domain Protein, JAC1, Regulates Phototropin-Mediated Chloroplast Movement in Arabidopsis. Plant Physiology, 2005, 139, 151-162.	4.8	150
59	From The Cover: A chimeric photoreceptor gene, NEOCHROME, has arisen twice during plant evolution. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13705-13709.	7.1	163
60	DNA Interference: a Simple and Efficient Gene-Silencing System for High-Throughput Functional Analysis in the Fern Adiantum. Plant and Cell Physiology, 2004, 45, 1648-1657.	3.1	54
61	Phototropins Mediate Blue and Red Light-Induced Chloroplast Movements in Physcomitrella patens. Plant Physiology, 2004, 135, 1388-1397.	4.8	138
62	Function Analysis of Phototropin2 using Fern Mutants Deficient in Blue Light-Induced Chloroplast Avoidance Movement. Plant and Cell Physiology, 2004, 45, 416-426.	3.1	113
63	Plant organelle positioning. Current Opinion in Plant Biology, 2004, 7, 626-631.	7.1	114
64	Velocity of chloroplast avoidance movement is fluence rate dependent. Photochemical and Photobiological Sciences, 2004, 3, 592.	2.9	49
65	Accumulation response of chloroplasts induced by mechanical stimulation in bryophyte cells. Planta, 2003, 216, 772-777.	3.2	40
66	Responses of ferns to red light are mediated by an unconventional photoreceptor. Nature, 2003, 421, 287-290.	27.8	221
67	CHLOROPLASTMOVEMENT. Annual Review of Plant Biology, 2003, 54, 455-468.	18.7	321
68	CHLOROPLAST UNUSUAL POSITIONING1 Is Essential for Proper Chloroplast Positioning. Plant Cell, 2003, 15, 2805-2815.	6.6	246
69	Chloroplast avoidance movement reduces photodamage in plants. Nature, 2002, 420, 829-832.	27.8	497
70	Arabidopsis NPL1: A Phototropin Homolog Controlling the Chloroplast High-Light Avoidance Response. Science, 2001, 291, 2138-2141.	12.6	642
71	phot1 and phot2 mediate blue light regulation of stomatal opening. Nature, 2001, 414, 656-660.	27.8	841
72	External Ca2+ Is Essential for Chloroplast Movement Induced by Mechanical Stimulation But Not by Light Stimulation. Plant Physiology, 2001, 127, 497-504.	4.8	54

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73	A Role for LKP2 in the Circadian Clock of Arabidopsis. Plant Cell, 2001, 13, 2659-2670.	6.6	225
74	LKP1 (LOV kelch protein 1): a factor involved in the regulation of flowering time in Arabidopsis. Plant Journal, 2000, 23, 807-815.	5.7	89
75	Cryptochrome Nucleocytoplasmic Distribution and Gene Expression Are Regulated by Light Quality in the Fern Adiantum capillus-veneris. Plant Cell, 2000, 12, 81-95.	6.6	104
76	Intracellular chloroplast photorelocation in the moss Physcomitrella patens is mediated by phytochrome as well as by a blue-light receptor. Planta, 2000, 210, 932-937.	3.2	101
77	Chloroplast-Avoidance Response Induced by High-Fluence Blue Light in Prothallial Cells of the Fern Adiantum capillus-veneris as Analyzed by Microbeam Irradiation1. Plant Physiology, 1999, 119, 917-924.	4.8	62
78	Phytochrome-controlled phototropism of protonemata of the moss Ceratodon purpureus : physiology of the wild type and class 2 ptr -mutants. Planta, 1999, 209, 290-298.	3.2	34
79	Cytoskeletal pattern changes during branch formation in a centrifugedAdiantum protonema. Journal of Plant Research, 1998, 111, 53-58.	2.4	10
80	Branch formation induced by microbeam irradiation ofAdiantum protonemata. Journal of Plant Research, 1998, 111, 587-590.	2.4	4
81	Nuclear recovery from centrifugation-caused elongation: Involvement of the microfilament system in the nuclear plasticity. Journal of Plant Research, 1998, 111, 389-398.	2.4	1
82	Detection of intranuclear forces by the use of laser optics during the recovery process of elongated interphase nuclei in centrifuged protenemal cells ofAdiantum capillus-veneris. Journal of Plant Research, 1998, 111, 399-405.	2.4	2
83	Phytochrome-mediated Phototropism in Adiantum Protonemata II. Participation of Phytochrome Dark Reversion. Photochemistry and Photobiology, 1997, 65, 1032-1038.	2.5	4
84	A full lengthTy3/gypsy-type retrotransposon in the fernAdiantum. Journal of Plant Research, 1997, 110, 495-499.	2.4	16
85	Phytochrome-mediated branch formation in protonemata of the mossCeratodon purpureus. Journal of Plant Research, 1997, 110, 363-370.	2.4	25
86	Formation of a phragmosome-like structure in centrifuged protonemal cells of Adiantum capillus-veneris L.. Planta, 1997, 201, 273-280.	3.2	9
87	Polarized light induces nuclear migration in prothallial cells ofAdiantum capillus-veneris L.. Planta, 1995, 196, 775-780.	3.2	23
88	Nuclear behavior during branch formation in a centrifugedAdiantum protonema and the nuclear polarity. Journal of Plant Research, 1995, 108, 501-509.	2.4	12
89	Brief irradiation with red or blue light induces orientational movement of chloroplasts in dark-adapted prothallial cells of the fernAdiantum. Journal of Plant Research, 1994, 107, 389-398.	2.4	53
90	Photobiology of ferns. , 1994, , 783-802.		40

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91	New trends in photobiology. Journal of Photochemistry and Photobiology B: Biology, 1993, 17, 3-25.	3.8	79
92	Cell division in caffeine-induced binucleate protonemal cells ofAdiantum. I. Asynchronous mitosis of two nuclei in a single cell. Journal of Plant Research, 1993, 106, 305-311.	2.4	10
93	Cell division in caffeine-induced binucleate protonemal cells ofAdiantum. II. Formation of the preprophase band and cell division in centrifuged and non-centrifuged cells. Journal of Plant Research, 1993, 106, 313-318.	2.4	8
94	INTRACELLULAR DICHROIC ORIENTATION OF THE BLUE LIGHTâ€ABSORBING PIGMENT AND THE BLUEâ€ABSORPTION BAND OF THE REDâ€ABSORBING FORM OF PHYTOCHROME RESPONSIBLE FOR PHOTOTROPISM OF THE FERN <i>Adiantum</i> PROTONEMATA. Photochemistry and Photobiology, 1992, 56, 661-666.	2.5	17
95	Cell Cycle-Specific Disruption of the Preprophase Band of Microtubules in Fern Protonemata: Effects of Displacement of the Endoplasm by Centrifugation. Journal of Cell Science, 1992, 101, 93-98.	2.0	19
96	Effects of centrifugation on preprophase-band formation in Adiantum protonemata. Planta, 1991, 183, 391-8.	3.2	81
97	Experimental obliteration of the preprophase band alters the site of cell division, cell plate orientation and phragmoplast expansion in <i>Adiantum</i> protonemata. Journal of Cell Science, 1991, 100, 551-557.	2.0	24
98	PHYTOCHROME-MEDIATED PHOTOTROPISM IN Adiantum PROTONEMATA-I. PHOTOTROPISM AS A FUNCTION OF THE LATERAL Pfr GRADIENT. Photochemistry and Photobiology, 1990, 51, 469-476.	2.5	9
99	QUATERNARY STRUCTURE OF PEA PHYTOCHROME I DIMER STUDIED WITH SMALLâ€ANGLE Xâ€RAY SCATTERING and ROTARYâ€SHADOWING ELECTRON MICROSCOPY. Photochemistry and Photobiology, 1990, 52, 3-12.	2.5	50
100	Changes in microtubule and microfibril arrangement during polarotropism inAdiantum protonemata. Botanical Magazine, 1990, 103, 391-401.	0.6	15
101	High-fluence rate responses in the light-oriented chloroplast movement in Adiantum protonemata. Plant Science, 1990, 68, 87-94.	3.6	34
102	Organization of cortical microtubules and microfibril deposition in response to blue-light-induced apical swelling in a tip-growing Adiantum protonema cell. Planta, 1989, 178, 334-341.	3.2	45
103	A model for the dimeric molecular structure of phytochrome based on small-angle X-ray scattering. FEBS Letters, 1989, 247, 139-142.	2.8	43
104	Circular Arrangement of Cortical F-actin around the Subapical Region of a Tip-Growing Fern Protonemal Cell. Plant and Cell Physiology, 1989, 30, 1183-1186.	3.1	31
105	Polarotropism and Photomovement of Chloroplasts in the Protonemata of the Ferns Pteris and Adiantum: Evidence for the Possible Lack of Dichroic Phytochrome in Pteris. Plant and Cell Physiology, 1989, 30, 523-531.	3.1	30
106	Chloroplast proliferation based on their distribution and arrangement inAdiantum protonemata growing under red light. Botanical Magazine, 1988, 101, 519-528.	0.6	6
107	Photocontrol of the orientation of cell division inAdiantum. Botanical Magazine, 1988, 101, 111-120.	0.6	2
108	Chloroplast Photoorientation in Enucleated Fern Protonemata. Plant and Cell Physiology, 1988, , .	3.1	2

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109	Effect of sulfite on compositional changes of cell constituents in germinating spores ofAdiantum capillus-veneris L.. Botanical Magazine, 1987, 100, 1-8.	0.6	1
110	A model system to study the effect of SO2 on plant cells. Botanical Magazine, 1987, 100, 51-62.	0.6	8
111	Heart-Shaped Prothallia of the Fern Adiantum capillus-veneris L. Develop in the Polarization Plane of White Light. Plant and Cell Physiology, 1986, 27, 903-910.	3.1	5
112	A model system to study the effect of SO2 on plant cells. I Experimental conditions in the case of fern gametophytes.. Seibutsu Kankyo Chosetsu [Environment Control in Biology, 1986, 24, 95-102.	0.2	3
113	Photoresponses in cell cycle regulation. Proceedings of the Royal Society of Edinburgh Section B Biological Sciences, 1985, 86, 231-235.	0.2	1
114	Action spectra for polarotropism and phototropism in protonemata of the fern Adiantum capillus-veneris. Physiologia Plantarum, 1984, 61, 327-330.	5.2	29
115	Intracellular Localization and Dichroic Orientation of Phytochrome in Plasma Membrane and/or Ectoplasm of a Centrifuged Protonema of Fern Adiantum capillus-veneris L.. Plant and Cell Physiology, 1983, 24, 1441-1447.	3.1	73
116	PHYTOCHROMEâ€MEDIATED PHOTOTROPISM AND DIFFERENT DICHROIC ORIENTATION OF Pr AND Pfr IN PROTONEMATA OF THE FERN ADIANTUM CAPILLUSâ€VENERIS L.. Photochemistry and Photobiology, 1982, 35, 533-536.	2.5	85
117	Intracellular Photoreceptive Site for Polarotropism in Protonema of the Fern Adiantum capillus-veneris L.. Plant and Cell Physiology, 1981, 22, 1481-1488.	3.1	118
118	Freeze-fracture observations on the plasma membrane, the cell wall and the cuticle of growing protonemata of Adiantum capillus-veneris L.. Planta, 1981, 151, 462-468.	3.2	62
119	The changes of nuclear position and distribution of circumferentially aligned cortical microtubules during the progression of cell cycle inAdiantum protonemata. Botanical Magazine, 1980, 93, 237-245.	0.6	37
120	EFFECTS OF PHYTOCHROME AND BLUE-NEAR ULTRAVIOLET LIGHT-ABSORBING PIGMENT ON DURATION OF COMPONENT PHASES OF THE CELL CYCLE IN ADIANTUM GAMETOPHYTES. Development Growth and Differentiation, 1979, 21, 577-584.	1.5	29
121	Apical growth of protonemata in Adiantum capillus-veneris. III: Action spectra for the light effect on dark cessation of apical growth and the intracellular photoreceptive site. Plant Science Letters, 1979, 15, 193-201.	1.8	24
122	Effects of narrow-beam irradiations with blue and far-red light on the timing of cell division in Adiantum gametophytes. Planta, 1978, 138, 85-90.	3.2	49
123	Microscopical observations onAvena coleoptile cell walls after stretching on a tensile-tester. Botanical Magazine, 1978, 91, 221-225.	0.6	2
124	Apical growth of protonemata inAdiantum capillus-veneris. Botanical Magazine, 1978, 91, 113-120.	0.6	18
125	Action Spectrum for the Timing of Photo-Induced Cell Division in Adiantum Gametophytes. Physiologia Plantarum, 1974, 32, 377-381.	5.2	33
126	PHOTOCONTROL OF THE ORIENTATION OF CELL DIVISION IN ADIANTUM. III. EFFECTS OF METABOLIC INHIBITORS. Development Growth and Differentiation, 1973, 15, 73-80.	1.5	1

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127	Phytochrome Action on the Timing of Cell Division in <i>Adiantum</i> Gametophytes. Plant Physiology, 1972, 49, 110-113.	4.8	48
128	Photocontrol of the orientation of cell division in Adiantum. Planta, 1971, 98, 177-185.	3.2	25
129	PHOTOCONTROL OF THE ORIENTATION OF CELL DIVISION IN ADIANTUM. I. EFFECTS OF THE DARK AND RED PERIODS IN THE APICAL CELL OF GAMETOPHYTES. Development Growth and Differentiation, 1970, 12, 109-118.	1.5	46
130	Photoresponses in fern gametophytes. , 0, , 3-48.		7