Kimitsune Ishizaki

List of Publications by Year
in descending order

101 papers	8,302 citations	50273 46 h-index	53222 85 g-index
112 all docs	112 docs citations	112 times ranked	6784 citing authors

#	Article	IF	Citations
1	Insights into Land Plant Evolution Garnered from the Marchantia polymorpha Genome. Cell, 2017, 171, 287-304.e15.	28.9	973
2	Comparative transcriptome analysis reveals significant differences in gene expression and signalling pathways between developmental and dark/starvation-induced senescence in Arabidopsis. Plant Journal, 2005, 42, 567-585.	5.7	924
3	Protein degradation â€“ an alternative respiratory substrate for stressed plants. Trends in Plant Science, 2011, 16, 489-498.	8.8	367
4	Agrobacterium-Mediated Transformation of the Haploid Liverwort Marchantia polymorpha L., an Emerging Model for Plant Biology. Plant and Cell Physiology, 2008, 49, 1084-1091.	3.1	310
5	Identification of the 2-Hydroxyglutarate and Isovaleryl-CoA Dehydrogenases as Alternative Electron Donors Linking Lysine Catabolism to the Electron Transport Chain of <i>Arabidopsis</i> Mitochondria Â. Plant Cell, 2010, 22, 1549-1563.	6.6	296
6	Efficient<i>Agrobacterium</i>-Mediated Transformation of the Liverwort<i>Marchantia polymorpha</i>Using Regenerating Thalli. Bioscience, Biotechnology and Biochemistry, 2013, 77, 167-172.	1.3	247
7	Development of Gateway Binary Vector Series with Four Different Selection Markers for the Liverwort Marchantia polymorpha. PLoS ONE, 2015, 10, e0138876.	2.5	231
8	The Critical Role of Arabidopsis Electron-Transfer Flavoprotein:Ubiquinone Oxidoreductase during Dark-Induced Starvation. Plant Cell, 2005, 17, 2587-2600.	6.6	211
9	Molecular Genetic Tools and Techniques for<i>Marchantia polymorpha</i>Research. Plant and Cell Physiology, 2016, 57, 262-270.	3.1	195
10	Auxin-Mediated Transcriptional System with a Minimal Set of Components Is Critical for Morphogenesis through the Life Cycle in Marchantia polymorpha. PLoS Genetics, 2015, 11, e1005084.	3.5	157
11	Stomatal Guard Cells Co-opted an Ancient ABA-Dependent Desiccation Survival System to Regulate Stomatal Closure. Current Biology, 2015, 25, 928-935.	3.9	154
12	Auxin Produced by the Indole-3-Pyruvic Acid Pathway Regulates Development and Gemmae Dormancy in the Liverwort <i>Marchantia polymorpha</i>. Plant Cell, 2015, 27, 1650-1669.	6.6	138
13	RSL Class I Genes Controlled the Development of Epidermal Structures in the Common Ancestor of Land Plants. Current Biology, 2016, 26, 93-99.	3.9	129
14	The mitochondrial electron transfer flavoprotein complex is essential for survival of Arabidopsis in extended darkness. Plant Journal, 2006, 47, 751-760.	5.7	128
15	Application of Lifeact Reveals F-Actin Dynamics in Arabidopsis thaliana and the Liverwort, Marchantia polymorpha. Plant and Cell Physiology, 2009, 50, 1041-1048.	3.1	127
16	Gene organization of the liverwort Y chromosome reveals distinct sex chromosome evolution in a haploid system. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 6472-6477.	7.1	125
17	Homologous recombination-mediated gene targeting in the liverwort Marchantia polymorpha L.. Scientific Reports, 2013, 3, 1532.	3.3	119
18	Direct transformation of the liverwort Marchantia polymorpha L. by particle bombardment using immature thalli developing from spores. Plant Cell Reports, 2008, 27, 1467-1473.	5.6	111

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19	An Evolutionarily Conserved Plant RKD Factor Controls Germ Cell Differentiation. Current Biology, 2016, 26, 1775-1781.	3.9	109
20	Co-option of a photoperiodic growth-phase transition system during land plant evolution. Nature Communications, 2014, 5, 3668.	12.8	100
21	Cell-specific localization of alkaloids in <i>Catharanthus roseus</i> stem tissue measured with Imaging MS and Single-cell MS. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3891-3896.	7.1	99
22	Evolutionarily Conserved Regulatory Mechanisms of Abscisic Acid Signaling in Land Plants: Characterization of <i>ABSCISIC ACID INSENSITIVE1</i>-Like Type 2C Protein Phosphatase in the Liverwort <i>Marchantia polymorpha</i>. Plant Physiology, 2010, 152, 1529-1543.	4.8	96
23	Chloroplastic <scp>ATP</scp> synthase builds up a proton motive force preventing production of reactive oxygen species in photosystem I. Plant Journal, 2017, 91, 306-324.	5.7	96
24	Phytochrome Signaling Is Mediated by PHYTOCHROME INTERACTING FACTOR in the Liverwort <i>Marchantia polymorpha</i>. Plant Cell, 2016, 28, 1406-1421.	6.6	94
25	Comparison of the MpEF1Î± and CaMV35 promoters for application in Marchantia polymorpha overexpression studies. Transgenic Research, 2014, 23, 235-244.	2.4	93
26	The Liverwort, <i>Marchantia</i>, Drives Alternative Electron Flow Using a Flavodiiron Protein to Protect PSI. Plant Physiology, 2017, 173, 1636-1647.	4.8	91
27	Composition and physiological function of the chloroplast NADH dehydrogenaseâ€like complex in <i>Marchantia polymorpha</i>. Plant Journal, 2012, 72, 683-693.	5.7	88
28	Generative Cell Specification Requires Transcription Factors Evolutionarily Conserved in Land Plants. Current Biology, 2018, 28, 479-486.e5.	3.9	87
29	Diversification of histone H2A variants during plant evolution. Trends in Plant Science, 2015, 20, 419-425.	8.8	85
30	Transcriptional Framework of Male Gametogenesis in the Liverwort<i>Marchantia polymorpha</i>L.. Plant and Cell Physiology, 2016, 57, 325-338.	3.1	83
31	SNARE Molecules in<i>Marchantia polymorpha</i>: Unique and Conserved Features of the Membrane Fusion Machinery. Plant and Cell Physiology, 2016, 57, 307-324.	3.1	82
32	Diversity of strategies for escaping reactive oxygen species production within photosystem I among land plants: <scp>P700</scp> oxidation system is prerequisite for alleviating photoinhibition in photosystem I. Physiologia Plantarum, 2017, 161, 56-74.	5.2	73
33	The Roles of the Sole Activator-Type Auxin Response Factor in Pattern Formation of Marchantia polymorpha. Plant and Cell Physiology, 2017, 58, 1642-1651.	3.1	73
34	Design principles of a minimal auxin response system. Nature Plants, 2020, 6, 473-482.	9.3	71
35	Visualization of auxin-mediated transcriptional activation using a common auxin-responsive reporter system in the liverwort Marchantia polymorpha. Journal of Plant Research, 2012, 125, 643-651.	2.4	70
36	Identification of miRNAs and Their Targets in the Liverwort<i>Marchantia polymorpha</i>by Integrating RNA-Seq and Degradome Analyses. Plant and Cell Physiology, 2016, 57, 339-358.	3.1	70

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37	Profiling and Characterization of Small RNAs in the Liverwort,<i>Marchantia polymorpha</i>, Belonging to the First Diverged Land Plants. Plant and Cell Physiology, 2016, 57, 359-372.	3.1	68
38	An Evolutionarily Conserved Abscisic Acid Signaling Pathway Regulates Dormancy in the Liverwort Marchantia polymorpha. Current Biology, 2018, 28, 3691-3699.e3.	3.9	68
39	The complexity of intercellular localisation of alkaloids revealed by singleâ€cell metabolomics. New Phytologist, 2019, 224, 848-859.	7.3	65
40	Functional analysis of allene oxide cyclase, MpAOC, in the liverwort Marchantia polymorpha. Phytochemistry, 2015, 116, 48-56.	2.9	64
41	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
42	Development and Molecular Genetics of <i>Marchantia polymorpha</i>. Annual Review of Plant Biology, 2021, 72, 677-702.	18.7	61
43	The Naming of Names: Guidelines for Gene Nomenclature in<i>Marchantia</i>. Plant and Cell Physiology, 2016, 57, 257-261.	3.1	60
44	Phytochrome-mediated regulation of cell division and growth during regeneration and sporeling development in the liverwort Marchantia polymorpha. Journal of Plant Research, 2015, 128, 407-421.	2.4	58
45	Occurrence of brassinosteroids in non-flowering land plants, liverwort, moss, lycophyte and fern. Phytochemistry, 2017, 136, 46-55.	2.9	56
46	Control of proliferation in the haploid meristem by CLE peptide signaling in Marchantia polymorpha. PLoS Genetics, 2019, 15, e1007997.	3.5	55
47	Transcription factor DUO1 generated by neo-functionalization is associated with evolution of sperm differentiation in plants. Nature Communications, 2018, 9, 5283.	12.8	54
48	Induction of Multichotomous Branching by CLAVATA Peptide in Marchantia polymorpha. Current Biology, 2020, 30, 3833-3840.e4.	3.9	54
49	Biochemical characterization of allene oxide synthases from the liverwort Marchantia polymorpha and green microalgae Klebsormidium flaccidum provides insight into the evolutionary divergence of the plant CYP74 family. Planta, 2015, 242, 1175-1186.	3.2	51
50	Multicopy genes uniquely amplified in the Y chromosome-specific repeats of the liverwort Marchantia polymorpha. Nucleic Acids Research, 2002, 30, 4675-4681.	14.5	50
51	Essential Role of the E3 Ubiquitin Ligase NOPPERABO1 in Schizogenous Intercellular Space Formation in the Liverwort <i>Marchantia polymorpha</i> Â. Plant Cell, 2013, 25, 4075-4084.	6.6	50
52	Biosynthesis of riccionidins and marchantins is regulated by R2R3-MYB transcription factors in Marchantia polymorpha. Journal of Plant Research, 2018, 131, 849-864.	2.4	50
53	Coldâ€induced organelle relocation in the liverwort <i><scp>M</scp>archantia polymorpha</i>â€…<scp>L.</scp>. Plant, Cell and Environment, 2013, 36, 1520-1528.	5.7	47
54	Evolution of land plants: insights from molecular studies on basal lineages. Bioscience, Biotechnology and Biochemistry, 2017, 81, 73-80.	1.3	47

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55	Land plants drive photorespiration as higher electronâ€sink: comparative study of postâ€illumination transient <scp>O₂</scp>â€uptake rates from liverworts to angiosperms through ferns and gymnosperms. Physiologia Plantarum, 2017, 161, 138-149.	5.2	45
56	Characterization of the Plasma Membrane H+-ATPase in the Liverwort <i>Marchantia polymorpha</i> Â Â Â. Plant Physiology, 2012, 159, 826-834.	4.8	42
57	Cytokinin Signaling Is Essential for Organ Formation in <i>Marchantia polymorpha</i>. Plant and Cell Physiology, 2019, 60, 1842-1854.	3.1	41
58	Analysis of a Range of Catabolic Mutants Provides Evidence That Phytanoyl-Coenzyme A Does Not Act as a Substrate of the Electron-Transfer Flavoprotein/Electron-Transfer Flavoprotein:Ubiquinone Oxidoreductase Complex in Arabidopsis during Dark-Induced Senescence Â Â. Plant Physiology, 2011, 157, 55-69.	4.8	39
59	GEMMA CUP-ASSOCIATED MYB1, an Ortholog of Axillary Meristem Regulators, Is Essential in Vegetative Reproduction in MarchantiaÂpolymorpha. Current Biology, 2019, 29, 3987-3995.e5.	3.9	35
60	A conserved regulatory mechanism mediates the convergent evolution of plant shoot lateral organs. PLoS Biology, 2019, 17, e3000560.	5.6	34
61	Gemma cup and gemma development in <i>Marchantia polymorpha</i>. New Phytologist, 2020, 228, 459-465.	7.3	33
62	Characterization of Four Nuclear-Encoded Plastid RNA Polymerase Sigma Factor Genes in the Liverwort Marchantia polymorpha: Blue-Light- and Multiple Stress-Responsive SIG5 was Acquired Early in the Emergence of Terrestrial Plants. Plant and Cell Physiology, 2013, 54, 1736-1748.	3.1	31
63	An evolutionarily conserved NIMA-related kinase directs rhizoid tip growth in the basal land plant Marchantia polymorpha. Development (Cambridge), 2018, 145, .	2.5	30
64	Physiological function of photoreceptor UVR8 in UV-B tolerance in the liverwort Marchantia polymorpha. Planta, 2019, 249, 1349-1364.	3.2	29
65	Major components of the KARRIKIN INSENSITIVE2-dependent signaling pathway are conserved in the liverwort<i>Marchantia polymorpha</i>. Plant Cell, 2021, 33, 2395-2411.	6.6	28
66	Diversity of Pectin Rhamnogalacturonan I Rhamnosyltransferases in Glycosyltransferase Family 106. Frontiers in Plant Science, 2020, 11, 997.	3.6	27
67	Arachidonic acid-dependent carbon-eight volatile synthesis from wounded liverwort (Marchantia) Tj ETQq1 1 0.784314 rgBT /Overlock 1	2.9	25
68	Cryopreservation of Gemmae from the Liverwort<i>Marchantia polymorpha</i>L.. Plant and Cell Physiology, 2016, 57, 300-306.	3.1	25
69	Development of schizogenous intercellular spaces in plants. Frontiers in Plant Science, 2015, 6, 497.	3.6	24
70	Abscisic acid induces biosynthesis of bisbibenzyls and tolerance to UV-C in the liverwort Marchantia polymorpha. Phytochemistry, 2015, 117, 547-553.	2.9	23
71	The RopGEF KARAPPO Is Essential for the Initiation of Vegetative Reproduction in Marchantia polymorpha. Current Biology, 2019, 29, 3525-3531.e7.	3.9	23
72	Abscisic acidâ€induced gene expression in the liverwort <i>Marchantia polymorpha</i> is mediated by evolutionarily conserved promoter elements. Physiologia Plantarum, 2016, 156, 407-420.	5.2	20

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73	Evolution of ribosomal DNA unit on the X chromosome independent of autosomal units in the liverwort Marchantia polymorpha. Chromosome Research, 2003, 11, 695-703.	2.2	19
74	Dynamic reorganization of the endomembrane system during spermatogenesis in Marchantia polymorpha. Journal of Plant Research, 2017, 130, 433-441.	2.4	19
75	Inositol Hexakis Phosphate is the Seasonal Phosphorus Reservoir in the Deciduous Woody Plant Populus alba L.. Plant and Cell Physiology, 2017, 58, 1477-1485.	3.1	19
76	DRP3 and ELM1 are required for mitochondrial fission in the liverwort Marchantia polymorpha. Scientific Reports, 2017, 7, 4600.	3.3	18
77	Evolutionary analysis of iron (Fe) acquisition system in <i>Marchantia polymorpha</i>. New Phytologist, 2016, 211, 569-583.	7.3	17
78	Transcriptional and Morpho-Physiological Responses of Marchantia polymorpha upon Phosphate Starvation. International Journal of Molecular Sciences, 2020, 21, 8354.	4.1	17
79	Subfunctionalization of Sigma Factors during the Evolution of Land Plants Based on Mutant Analysis of Liverwort (Marchantia polymorpha L.) MpSIG1. Genome Biology and Evolution, 2013, 5, 1836-1848.	2.5	16
80	Isolation and characterization of high-CO₂ requiring mutants from <I>Chlamydomonas</I> <I>reinhardtii</I> by gene tagging. Canadian Journal of Botany, 1998, 76, 1092-1097.	1.1	16
81	Altered levels of primary metabolites in response to exogenous indole-3-acetic acid in wild type and auxin signaling mutants of <i>Arabidopsis thaliana</i>: A capillary electrophoresis-mass spectrometry analysis. Plant Biotechnology, 2015, 32, 65-79.	1.0	12
82	Isolation and characterization of high-CO2 requiring mutants from Chlamydomonas reinhardtii by gene tagging. Canadian Journal of Botany, 1998, 76, 1092-1097.	1.1	11
83	Gene content, organization and molecular evolution of plant organellar genomes and sex chromosomes - Insights from the case of the liverwort Marchantia polymorpha. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2009, 85, 108-124.	3.8	10
84	Cryopreservation of Marchantia polymorpha spermatozoa. Journal of Plant Research, 2018, 131, 1047-1054.	2.4	9
85	Involvement of Ca²⁺in Vacuole Degradation Caused by a Rapid Temperature Decrease in<i>Saintpaulia</i>Palisade Cells: A Case of Gene Expression Analysis in a Specialized Small Tissue. Plant and Cell Physiology, 2015, 56, 1297-1305.	3.1	8
86	Responses of the chloroplast glyoxalase system to high CO2 concentrations. Bioscience, Biotechnology and Biochemistry, 2018, 82, 2072-2083.	1.3	6
87	Differential regulation of fluorescent alkaloid metabolism between idioblast and lacticifer cells during leaf development in Catharanthus roseus seedlings. Journal of Plant Research, 2022, 135, 473-483.	2.4	6
88	A glycogen synthase kinase 3-like kinase MpGSK regulates cell differentiation in <i>Marchantia polymorpha</i>. Plant Biotechnology, 2022, 39, 65-72.	1.0	5
89	Visualization of phosphorus reâ€translocation and phosphate transporter expression profiles in a shortened annual cycle system of poplar. Plant, Cell and Environment, 2022, 45, 1749-1764.	5.7	5
90	Migration of prospindle before the first asymmetric division in germinating spore of <i>Marchantia polymorpha</i>. Plant Biotechnology, 2022, 39, 5-12.	1.0	2

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91	Phosphate Starvation Triggers Transcriptional Changes in the Biosynthesis and Signaling Pathways of Phytohormones in Marchantia polymorphaÂ. Biology and Life Sciences Forum, 2021, 4, 89.	0.6	1
92	Distinct Functions of the Atypical Terminal Hydrophilic Domain of the HKT Transporter in the Liverwort <i>Marchantia polymorpha</i>. Plant and Cell Physiology, 2022, , .	3.1	1
93	Localization of small molecules in plant tissues visualized by an imaging mass spectrometer. Plant Morphology, 2016, 28, 23-27.	0.1	0
94	The RopGEF KARAPPO is Essential for the Initiation of Vegetative Reproduction in Marchantia. SSRN Electronic Journal, 0, , .	0.4	0
95	åºã®åŽ„ä»‹è€…ã‚¼ãƒ‹ã‚´ã‚±ã§Œã‚¯ãƒãƒ¼ãƒ³å€‹ä½“ã‚’ãããŠç¹æ®–ã•ã‚‹ä»•çµ„ã¿. Kagaku To Seibutsu, 2020, 58, 502-504.	0.2	0
96	A conserved regulatory mechanism mediates the convergent evolution of plant shoot lateral organs. , 2019, 17, e3000560.		0
97	A conserved regulatory mechanism mediates the convergent evolution of plant shoot lateral organs. , 2019, 17, e3000560.		0
98	A conserved regulatory mechanism mediates the convergent evolution of plant shoot lateral organs. , 2019, 17, e3000560.		0
99	A conserved regulatory mechanism mediates the convergent evolution of plant shoot lateral organs. , 2019, 17, e3000560.		0
100	A conserved regulatory mechanism mediates the convergent evolution of plant shoot lateral organs. , 2019, 17, e3000560.		0
101	A conserved regulatory mechanism mediates the convergent evolution of plant shoot lateral organs. , 2019, 17, e3000560.		0