

# Matsuo Uemura

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7389513/publications.pdf>

Version: 2024-02-01

116  
papers

6,703  
citations

81839

39  
h-index

64755

79  
g-index

122  
all docs

122  
docs citations

122  
times ranked

5627  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of Fe and Mn Deficiencies on the Root Protein Profiles of Tomato ( <i>Solanum lycopersicum</i> ) Using Two-Dimensional Electrophoresis and Label-Free Shotgun Analyses. <i>International Journal of Molecular Sciences</i> , 2022, 23, 3719.	1.8	5
2	In Planta Monitoring of Cold-Responsive Promoter Activity Reveals a Distinctive Photoperiodic Response in Cold Acclimation. <i>Plant and Cell Physiology</i> , 2021, 62, 43-52.	1.5	5
3	Effects of the blue light-activated cryptochrome system on the early process of cold acclimation of <i>Arabidopsis thaliana</i> . <i>Environmental and Experimental Botany</i> , 2021, 183, 104340.	2.0	8
4	The <i>Brachypodium distachyon</i> cold-acclimated plasma membrane proteome is primed for stress resistance. <i>G3: Genes, Genomes, Genetics</i> , 2021, 11, .	0.8	6
5	Quality and microbial evaluation of fresh-cut apples during 10 days of supercooled storage. <i>Food Control</i> , 2021, 126, 108014.	2.8	27
6	Study on Moisture Content Changes during Atmospheric Freeze Drying of Fresh-cut Japanese Radish and its Quality after Drying and Rehydration. <i>Journal of the Japanese Society for Food Science and Technology</i> , 2021, 68, 464-470.	0.1	0
7	Effect of Supercooled Storage on Maintaining the Quality of Fresh-cut Pear. <i>Journal of the Japanese Society for Food Science and Technology</i> , 2021, 68, 455-463.	0.1	1
8	Season specificity in the cold-induced calcium signal and the volatile chemicals in the atmosphere. <i>Physiologia Plantarum</i> , 2020, 168, 803-818.	2.6	2
9	Plasma membrane proteome analyses of <i>Arabidopsis thaliana</i> suspension-cultured cells during cold or ABA treatment: Relationship with freezing tolerance and growth phase. <i>Journal of Proteomics</i> , 2020, 211, 103528.	1.2	9
10	Regulation of Sugar and Storage Oil Metabolism by Phytochrome during De-etiolation. <i>Plant Physiology</i> , 2020, 182, 1114-1129.	2.3	29
11	Assessing the supercooling of fresh-cut onions at $-5^{\circ}\text{C}$ using electrical impedance analysis. <i>Food Quality and Safety</i> , 2020, 4, 55-58.	0.6	4
12	Large-Scale Phosphoproteomic Study of <i>Arabidopsis</i> Membrane Proteins Reveals Early Signaling Events in Response to Cold. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8631.	1.8	19
13	Effects of Excess Manganese on the Xylem Sap Protein Profile of Tomato ( <i>Solanum lycopersicum</i> ) as Revealed by Shotgun Proteomic Analysis. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8863.	1.8	10
14	A single seed treatment mediated through reactive oxygen species increases germination, growth performance, and abiotic stress tolerance in <i>Arabidopsis</i> and rice. <i>Bioscience, Biotechnology and Biochemistry</i> , 2020, 84, 2597-2608.	0.6	2
15	Decreased R:FR Ratio in Incident White Light Affects the Composition of Barley Leaf Lipidome and Freezing Tolerance in a Temperature-Dependent Manner. <i>International Journal of Molecular Sciences</i> , 2020, 21, 7557.	1.8	7
16	Proteomic Approaches to Identify Cold-Regulated Plasma. <i>Methods in Molecular Biology</i> , 2020, 2156, 171-186.	0.4	2
17	Plasma Membrane Aquaporin Members PIPs Act in Concert to Regulate Cold Acclimation and Freezing Tolerance Responses in <i>Arabidopsis thaliana</i> . <i>Plant and Cell Physiology</i> , 2020, 61, 787-802.	1.5	26
18	Cold Sensing in Cold Acclimation Process: for Understanding the Season Sensing of Plants. <i>Seibutsu Butsuri</i> , 2020, 60, 098-101.	0.0	0

#	ARTICLE	IF	CITATIONS
19	Shotgun Proteomics of Plant Plasma Membrane and Microdomain Proteins Using Nano-LC-MS/MS. <i>Methods in Molecular Biology</i> , 2020, 2139, 89-106.	0.4	1
20	Temporal proteomics of Arabidopsis plasma membrane during cold- and de-acclimation. <i>Journal of Proteomics</i> , 2019, 197, 71-81.	1.2	45
21	Calcium Signaling-Linked <i>CBF/DREB1</i> Gene Expression was Induced Depending on the Temperature Fluctuation in the Field: Views from the Natural Condition of Cold Acclimation. <i>Plant and Cell Physiology</i> , 2019, 60, 303-317.	1.5	24
22	Evaluation of Electrical and Physiological Properties of Supercooled Fresh Cut Spinach. <i>Journal of the Japanese Society for Food Science and Technology</i> , 2019, 66, 335-340.	0.1	5
23	Data on xylem sap proteins from Mn- and Fe-deficient tomato plants obtained using shotgun proteomics. <i>Data in Brief</i> , 2018, 17, 512-516.	0.5	1
24	Tissue-specific changes in apoplastic proteins and cell wall structure during cold acclimation of winter wheat crowns. <i>Journal of Experimental Botany</i> , 2018, 69, 1221-1234.	2.4	34
25	Effects of Fe and Mn deficiencies on the protein profiles of tomato ( <i>Solanum lycopersicum</i> ) xylem sap as revealed by shotgun analyses. <i>Journal of Proteomics</i> , 2018, 170, 117-129.	1.2	22
26	Plasma Membrane Proteomics of Arabidopsis Suspension-Cultured Cells Associated with Growth Phase Using Nano-LC-MS/MS. <i>Methods in Molecular Biology</i> , 2018, 1696, 185-194.	0.4	9
27	Proteomic analysis reveals that tomato interaction with plant growth promoting bacteria is highly determined by ethylene perception. <i>Journal of Plant Physiology</i> , 2018, 220, 43-59.	1.6	36
28	Freeze-substitution transmission electron microscopy of gentian shoot tips cryopreserved at ultra low temperatures. <i>Plant Biotechnology</i> , 2018, 35, 335-340.	0.5	0
29	Cryopreservation of Plant Genetic Resources. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1081, 355-369.	0.8	4
30	Freezing Tolerance of Plant Cells: From the Aspect of Plasma Membrane and Microdomain. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1081, 61-79.	0.8	18
31	Effects of manganese toxicity on the protein profile of tomato ( <i>Solanum lycopersicum</i> ) roots as revealed by two complementary proteomic approaches, two-dimensional electrophoresis and shotgun analysis. <i>Journal of Proteomics</i> , 2018, 185, 51-63.	1.2	17
32	Isolation of Plasma Membrane and Plasma Membrane Microdomains. <i>Methods in Molecular Biology</i> , 2017, 1511, 199-212.	0.4	4
33	Cold acclimation is accompanied by complex responses of glycosylphosphatidylinositol (GPI)-anchored proteins in Arabidopsis. <i>Journal of Experimental Botany</i> , 2016, 67, 5203-5215.	2.4	48
34	A Shotgun Proteomic Approach Reveals That Fe Deficiency Causes Marked Changes in the Protein Profiles of Plasma Membrane and Detergent-Resistant Microdomain Preparations from <i>Beta vulgaris</i> Roots. <i>Journal of Proteome Research</i> , 2016, 15, 2510-2524.	1.8	35
35	Lipid profiles of detergent resistant fractions of the plasma membrane in oat and rye in association with cold acclimation and freezing tolerance. <i>Cryobiology</i> , 2016, 72, 123-134.	0.3	52
36	Arabidopsis dynamin-related protein 1 in sphingolipid-enriched plasma membrane domains is associated with the development of freezing tolerance. <i>Plant Journal</i> , 2015, 83, 501-514.	2.8	20

#	ARTICLE	IF	CITATIONS
37	Magnesium inhibits cadmium translocation from roots to shoots, rather than the uptake from roots, in barley. <i>Botany</i> , 2015, 93, 345-351.	0.5	21
38	Higher sterol content regulated by CYP51 with concomitant lower phospholipid content in membranes is a common strategy for aluminium tolerance in several plant species. <i>Journal of Experimental Botany</i> , 2015, 66, 907-918.	2.4	27
39	Characteristics of ultrasonic acoustic emissions from walnut branches during freeze-thaw-induced embolism formation. <i>Journal of Experimental Botany</i> , 2015, 66, 1965-1975.	2.4	17
40	Proteins Associated with Oxidative Burst and Cell Wall Strengthening Accumulate During Citrus-Xanthomonas Non-Host Interaction. <i>Plant Molecular Biology Reporter</i> , 2015, 33, 1349-1360.	1.0	2
41	Aquaporins in developing rice grains. <i>Bioscience, Biotechnology and Biochemistry</i> , 2015, 79, 1422-1429.	0.6	14
42	Analysis of Differential Expression Patterns of mRNA and Protein During Cold-acclimation and De-acclimation in Arabidopsis. <i>Molecular and Cellular Proteomics</i> , 2014, 13, 3602-3611.	2.5	78
43	Confocal cryomicroscopic analysis and cryodynamics of endoplasmic reticulum in herbaceous plant cells. <i>Environmental and Experimental Botany</i> , 2014, 106, 44-51.	2.0	2
44	The Distinct Functional Roles of the Inner and Outer Chloroplast Envelope of Pea ( <i>Pisum</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 T	1.8	37
45	Proteomic Approaches to Identify Cold-Regulated Plasma Membrane Proteins. <i>Methods in Molecular Biology</i> , 2014, 1166, 159-170.	0.4	12
46	Shotgun Proteomics of Plant Plasma Membrane and Microdomain Proteins Using Nano-LC-MS/MS. <i>Methods in Molecular Biology</i> , 2014, 1072, 481-498.	0.4	14
47	Changes of Detergent-Resistant Plasma Membrane Proteins in Oat and Rye during Cold Acclimation: Association with Differential Freezing Tolerance. <i>Journal of Proteome Research</i> , 2013, 12, 4998-5011.	1.8	43
48	Roles of cell walls and intracellular contents in supercooling capability of xylem parenchyma cells of boreal trees. <i>Physiologia Plantarum</i> , 2013, 148, 25-35.	2.6	8
49	Akira Sakai (1920-2012). <i>Cryobiology</i> , 2013, 66, 1-2.	0.3	0
50	<i>Allium fistulosum</i> as a novel system to investigate mechanisms of freezing resistance. <i>Physiologia Plantarum</i> , 2013, 147, 101-111.	2.6	23
51	Plant strategies for survival in changing environment. <i>Physiologia Plantarum</i> , 2013, 147, 1-3.	2.6	4
52	Detergent-resistant plasma membrane proteome to elucidate microdomain functions in plant cells. <i>Frontiers in Plant Science</i> , 2013, 4, 27.	1.7	26
53	Plant plasma membrane proteomics for improving cold tolerance. <i>Frontiers in Plant Science</i> , 2013, 4, 90.	1.7	115
54	Using Synchrotron FTIR and Confocal Cryomicroscopy to Explore Mechanisms of Cold Acclimation and Freezing Resistance Using a Single Cell Layer of <i>Allium fistulosum</i> L., 2013, , 165-177.		2

#	ARTICLE	IF	CITATIONS
55	Comparison of Plasma Membrane Proteomic Changes of Arabidopsis Suspension-Cultured Cells (T87) Tj ETQq1 1 0.784314 rgBT /Ove Cell Physiology, 2012, 53, 543-554.	1.5	58
56	Detergent-resistant Plasma Membrane Proteome in Oat and Rye: Similarities and Dissimilarities between Two Monocotyledonous Plants. Journal of Proteome Research, 2012, 11, 1654-1665.	1.8	40
57	Cold Stress-Induced Acclimation in Rice is Mediated by Root-Specific Aquaporins. Plant and Cell Physiology, 2012, 53, 1445-1456.	1.5	90
58	Sucrose phosphate phosphatase in the green alga Klebsormidium flaccidum (Streptophyta) lacks an extensive C-terminal domain and differs from that of land plants. Planta, 2012, 235, 851-861.	1.6	10
59	Cadmium sorption to plasma membrane isolated from barley roots is impeded by copper association onto membranes. Plant Science, 2011, 180, 300-305.	1.7	9
60	Phylogenetic footprint of the plant clock system in angiosperms: evolutionary processes of Pseudo-Response Regulators. BMC Evolutionary Biology, 2010, 10, 126.	3.2	64
61	Auxin Response in <i>Arabidopsis</i> under Cold Stress: Underlying Molecular Mechanisms. Plant Cell, 2010, 21, 3823-3838.	3.1	292
62	Arabidopsis Synaptotagmin SYT1, a Type I Signal-anchor Protein, Requires Tandem C2 Domains for Delivery to the Plasma Membrane. Journal of Biological Chemistry, 2010, 285, 23165-23176.	1.6	71
63	Dynamic compositional changes of detergent-resistant plasma membrane microdomains during plant cold acclimation. Plant Signaling and Behavior, 2010, 5, 1115-1118.	1.2	20
64	Extracellular freezing-induced mechanical stress and surface area regulation on the plasma membrane in cold-acclimated plant cells. Plant Signaling and Behavior, 2009, 4, 231-233.	1.2	22
65	Calcium-Dependent Freezing Tolerance in <i>Arabidopsis</i> Involves Membrane Resealing via Synaptotagmin SYT1. Plant Cell, 2009, 20, 3389-3404.	3.1	139
66	Relative abundance of $\beta$ -sterols in plasma membrane lipids of root tip cells correlates with aluminum tolerance of rice. Physiologia Plantarum, 2009, 135, 73-83.	2.6	51
67	Molecular phylogeny and expression of poplar circadian clock genes, <i>LHY1</i> and <i>LHY2</i> . New Phytologist, 2009, 181, 808-819.	3.5	63
68	Alterations in Detergent-Resistant Plasma Membrane Microdomains in <i>Arabidopsis thaliana</i> During Cold Acclimation. Plant and Cell Physiology, 2009, 50, 341-359.	1.5	145
69	Characterization of growth-phase-specific responses to cold in <i>Arabidopsis thaliana</i> suspension-cultured cells. Plant, Cell and Environment, 2008, 31, 354-365.	2.8	14
70	<i>Klebsormidium flaccidum</i> , a charophycean green alga, exhibits cold acclimation that is closely associated with compatible solute accumulation and ultrastructural changes. Plant, Cell and Environment, 2008, 31, 872-885.	2.8	101
71	Cryobehavior of the Plasma Membrane in Protoplasts Isolated from Cold-Acclimated <i>Arabidopsis</i> Leaves is Related to Surface Area Regulation. Plant and Cell Physiology, 2008, 49, 944-957.	1.5	23
72	Tissue and Cell-Specific Localization of Rice Aquaporins and Their Water Transport Activities. Plant and Cell Physiology, 2008, 49, 30-39.	1.5	123

#	ARTICLE	IF	CITATIONS
73	Cryopreservation of shoot tips of endangered Hayachine-usuyukiso ( <i>Leontopodium hayachinense</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock Utilisation, 2008, 6, 164-166.	0.4	6
74	Changes in Antioxidative Enzyme Activities and Physicochemical Properties of Tomato Fruits during Post-harvest Ripening. <i>Environmental Control in Biology</i> , 2008, 46, 147-153.	0.3	1
75	Chilling Tolerance and Field Performance of an F1 Cooking Tomato Cultivar, Nitaki-Koma, Relative to Its Parents. <i>Breeding Science</i> , 2006, 56, 269-276.	0.9	2
76	Responses of the plasma membrane to low temperatures. <i>Physiologia Plantarum</i> , 2006, 126, 81-89.	2.6	212
77	Mechanical Properties and Viability of Japanese Radish Cylinders immersed in Sodium Chloride Solutions. <i>Biosystems Engineering</i> , 2005, 92, 335-340.	1.9	6
78	A New and Simple Technique for the Isolation of Plasma Membrane Lipids from Root-Tips. <i>Soil Science and Plant Nutrition</i> , 2005, 51, 135-139.	0.8	4
79	Plasma Membrane Lipids Are the Powerful Components for Early Stage Aluminum Tolerance in Triticale. <i>Soil Science and Plant Nutrition</i> , 2005, 51, 701-704.	0.8	17
80	Identification of 33 Rice Aquaporin Genes and Analysis of Their Expression and Function. <i>Plant and Cell Physiology</i> , 2005, 46, 1568-1577.	1.5	527
81	Proline synthesis, physiological responses and biomass yield of eggplants during and after repetitive soil moisture stress. <i>Scientia Horticulturae</i> , 2005, 103, 387-402.	1.7	64
82	Temperature-Triggered Periodical Thermogenic Oscillations in Skunk Cabbage ( <i>Symplocarpus</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 1.5 34	1.5	34
83	Proteomics of the rice cell: systematic identification of the protein populations in subcellular compartments. <i>Molecular Genetics and Genomics</i> , 2004, 271, 566-576.	1.0	99
84	Comparison of response of two C3 species to leaf water relation, proline synthesis, gas exchange and water use under periodic water stress. <i>Journal of Plant Biology</i> , 2004, 47, 33-41.	0.9	8
85	Cryopreservation of shoot apices of in-vitro grown gentian plants: comparison of vitrification and encapsulation-vitrification protocols. <i>Cryo-Letters</i> , 2004, 25, 167-76.	0.1	16
86	Solute accumulation in heat seedlings during cold acclimation: contribution to increased freezing tolerance. <i>Cryo-Letters</i> , 2004, 25, 311-22.	0.1	19
87	Structural requirements for the perception of ambient temperature signals in homeothermic heat production of skunk cabbage ( <i>Symlocarpus foetidus</i> ). <i>Plant, Cell and Environment</i> , 2003, 26, 783-788.	2.8	24
88	Modification of the intracellular sugar content alters the incidence of freeze-induced membrane lesions of protoplasts isolated from <i>Arabidopsis thaliana</i> leaves. <i>Plant, Cell and Environment</i> , 2003, 26, 1083-1096.	2.8	82
89	Mass spectrometric approach for identifying putative plasma membrane proteins of <i>Arabidopsis</i> leaves associated with cold acclimation. <i>Plant Journal</i> , 2003, 36, 141-154.	2.8	241
90	Freezing Sensitivity in the <i>sfr4</i> Mutant of <i>Arabidopsis</i> Is Due to Low Sugar Content and Is Manifested by Loss of Osmotic Responsiveness. <i>Plant Physiology</i> , 2003, 131, 1800-1807.	2.3	83

#	ARTICLE	IF	CITATIONS
91	Cryopreservation of In Vitro. Grown Apical Shoot Tips of Strawberry by Vitrification.. Plant Biotechnology, 2003, 20, 75-80.	0.5	22
92	Changes in the Plasma Membrane from Arabidopsis Thaliana within One Week of Cold Acclimation. , 2002, , 181-194.		6
93	Cell Viability of Japanese Radish Cylinders Immersed in Hypertonic Solutions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 149-154.	0.4	0
94	Change in Density of Japanese Radish Cylinders Immersed in NaCl Solution and Its Mathematical Model.. Journal of the Japanese Society for Food Science and Technology, 2000, 47, 439-444.	0.1	1
95	Cold Acclimation in Plants: Relationship Between the Lipid Composition and the Cryostability of the Plasma Membrane. Journal of Plant Research, 1999, 112, 245-254.	1.2	82
96	Mode of action of the COR15a gene on the freezing tolerance of Arabidopsis thaliana. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 14570-14575.	3.3	379
97	Effect of Cold Acclimation on the Lipid Composition of the Inner and Outer Membrane of the Chloroplast Envelope Isolated from Rye Leaves. Plant Physiology, 1997, 114, 1493-1500.	2.3	65
98	Effect of Cold Acclimation on Membrane Lipid Composition and Freeze-Induced Membrane Destablization. , 1997, , 171-179.		18
99	Constitutive expression of the cold-regulated Arabidopsis thaliana COR15a gene affects both chloroplast and protoplast freezing tolerance. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 13404-13409.	3.3	380
100	Effects of COR6.6 and COR15am Polypeptides Encoded by COR (Cold-Regulated) Genes of Arabidopsis thaliana on the Freeze-Induced Fusion and Leakage of Liposomes. Plant Physiology, 1996, 111, 313-327.	2.3	39
101	Cold Acclimation of Arabidopsis thaliana (Effect on Plasma Membrane Lipid Composition and) Tj ETQq1 1 0.784314 rrgBT /Overlock 10 T	2.3	497
102	A Contrast of the Plasma Membrane Lipid Composition of Oat and Rye Leaves in Relation to Freezing Tolerance. Plant Physiology, 1994, 104, 479-496.	2.3	250
103	A Comparison of Freezing Injury in Oat and Rye: Two Cereals at the Extremes of Freezing Tolerance. Plant Physiology, 1994, 104, 467-478.	2.3	144
104	Redesigning Crops for Increased Tolerance to Freezing Stress. , 1993, , 697-714.		4
105	Parallel Effects of Freezing and Osmotic Stress on the ATPase Activity and Protein Composition of the Plasma Membrane of Winter Rye Seedlings. Plant Physiology, 1989, 91, 961-969.	2.3	13
106	Effect of Cold Acclimation on the Incidence of Two Forms of Freezing Injury in Protoplasts Isolated from Rye Leaves. Plant Physiology, 1989, 91, 1131-1137.	2.3	39
107	Transformation of the cryobehavior of rye protoplasts by modification of the plasma membrane lipid composition. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 9026-9030.	3.3	103
108	A comparison of freezing vs hypertonic stress on the ATPase activity and protein composition of the plasma membrane of winter rye seedlings. Cryobiology, 1987, 24, 557-558.	0.3	0

#	ARTICLE	IF	CITATIONS
109	Lipid Composition of Plasma Membranes and Tonoplasts Isolated from Etiolated Seedlings of Mung Bean ( <i>Vigna radiata</i> L.). <i>Plant Physiology</i> , 1986, 82, 807-812.	2.3	196
110	Isolation and Characterization of Tonoplast from Chilling-Sensitive Etiolated Seedlings of <i>Vigna radiata</i> L.. <i>Plant Physiology</i> , 1986, 80, 161-166.	2.3	27
111	Properties of Plasma Membrane Isolated from Chilling-Sensitive Etiolated Seedlings of <i>Vigna radiata</i> L.. <i>Plant Physiology</i> , 1986, 80, 152-160.	2.3	79
112	Studies on Freezing Injury in Plant Cells. <i>Plant Physiology</i> , 1986, 80, 187-195.	2.3	52
113	Protein and Lipid Compositions of Isolated Plasma Membranes from Orchard Grass ( <i>Dactylis</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.3	143
114	Involvement of Plasma Membrane Alterations in Cold Acclimation of Winter Rye Seedlings ( <i>Secale</i> ) Tj ETQq0 0 0 rgBT /Overlock 10	2.3	158
115	Isolation and Identification of Plasma Membrane from Light-Grown Winter Rye Seedlings ( <i>Secale</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock 1	2.3	68
116	Partition of Membrane Particles in Aqueous Two-Polymer Phase System and Its Practical Use for Purification of Plasma Membranes from Plants. <i>Plant Physiology</i> , 1983, 72, 105-114.	2.3	168