

Dirk K Hinch

List of Publications by Year in descending order

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146
papers

11,285
citations

24978

57
h-index

32761

100
g-index

174
all docs

174
docs citations

174
times ranked

10806
citing authors

#	ARTICLE	IF	CITATIONS
1	LEA (Late Embryogenesis Abundant) proteins and their encoding genes in <i>Arabidopsis thaliana</i> . <i>BMC Genomics</i> , 2008, 9, 118.	1.2	818
2	Metabolomics of temperature stress. <i>Physiologia Plantarum</i> , 2008, 132, 220-235.	2.6	439
3	A Global Survey of Gene Regulation during Cold Acclimation in <i>Arabidopsis thaliana</i> . <i>PLoS Genetics</i> , 2005, 1, e26.	1.5	409
4	Natural Genetic Variation of Freezing Tolerance in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2006, 142, 98-112.	2.3	407
5	Priming and memory of stress responses in organisms lacking a nervous system. <i>Biological Reviews</i> , 2016, 91, 1118-1133.	4.7	388
6	Fructan and its relationship to abiotic stress tolerance in plants. <i>Cellular and Molecular Life Sciences</i> , 2009, 66, 2007-2023.	2.4	361
7	Disruption of the <i>Arabidopsis</i> Circadian Clock Is Responsible for Extensive Variation in the Cold-Responsive Transcriptome. <i>Plant Physiology</i> , 2008, 147, 263-279.	2.3	234
8	Flavonoids are determinants of freezing tolerance and cold acclimation in <i>Arabidopsis thaliana</i> . <i>Scientific Reports</i> , 2016, 6, 34027.	1.6	209
9	Expression profiling of rice cultivars differing in their tolerance to long-term drought stress. <i>Plant Molecular Biology</i> , 2009, 69, 133-153.	2.0	207
10	Specific effects of fructo- and gluco-oligosaccharides in the preservation of liposomes during drying. <i>Glycobiology</i> , 2002, 12, 103-110.	1.3	182
11	The role of raffinose in the cold acclimation response of <i>Arabidopsis thaliana</i> . <i>FEBS Letters</i> , 2004, 576, 169-173.	1.3	177
12	AtMyb41 Regulates Transcriptional and Metabolic Responses to Osmotic Stress in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2009, 149, 1761-1772.	2.3	176
13	Stabilization of model membranes during drying by compatible solutes involved in the stress tolerance of plants and microorganisms. <i>Biochemical Journal</i> , 2004, 383, 277-283.	1.7	174
14	Differential remodeling of the lipidome during cold acclimation in natural accessions of <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2012, 72, 972-982.	2.8	171
15	Metabolic and transcriptomic signatures of rice floral organs reveal sugar starvation as a factor in reproductive failure under heat and drought stress. <i>Plant, Cell and Environment</i> , 2015, 38, 2171-2192.	2.8	164
16	The preservation of liposomes by raffinose family oligosaccharides during drying is mediated by effects on fusion and lipid phase transitions. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2003, 1612, 172-177.	1.4	159
17	LEA proteins: IDPs with versatile functions in cellular dehydration tolerance. <i>Biochemical Society Transactions</i> , 2012, 40, 1000-1003.	1.6	158
18	A mitochondrial late embryogenesis abundant protein stabilizes model membranes in the dry state. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2010, 1798, 1926-1933.	1.4	146

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19	Interaction with Diurnal and Circadian Regulation Results in Dynamic Metabolic and Transcriptional Changes during Cold Acclimation in <i>Arabidopsis</i> . <i>PLoS ONE</i> , 2010, 5, e14101.	1.1	146
20	Heterosis in the freezing tolerance of crosses between two <i>Arabidopsis thaliana</i> accessions (Columbia-0 and C24) that show differences in non-acclimated and acclimated freezing tolerance. <i>Plant Journal</i> , 2004, 38, 790-799.	2.8	145
21	Clinal variation in the non-acclimated and cold-acclimated freezing tolerance of <i>Arabidopsis thaliana</i> accessions. <i>Plant, Cell and Environment</i> , 2012, 35, 1860-1878.	2.8	145
22	Heterosis in the freezing tolerance, and sugar and flavonoid contents of crosses between <i>Arabidopsis thaliana</i> accessions of widely varying freezing tolerance. <i>Plant, Cell and Environment</i> , 2008, 31, 813-827.	2.8	142
23	Functional Divergence of Former Alleles in an Ancient Asexual Invertebrate. <i>Science</i> , 2007, 318, 268-271.	6.0	129
24	Natural variation in flavonol and anthocyanin metabolism during cold acclimation in <i>Arabidopsis thaliana</i> accessions. <i>Plant, Cell and Environment</i> , 2015, 38, 1658-1672.	2.8	126
25	Chlorophyll fluorescence imaging accurately quantifies freezing damage and cold acclimation responses in <i>Arabidopsis</i> leaves. <i>Plant Methods</i> , 2008, 4, 12.	1.9	125
26	Plant fructans stabilize phosphatidylcholine liposomes during freeze-drying. <i>FEBS Journal</i> , 2000, 267, 535-540.	0.2	120
27	Predicting <i>Arabidopsis</i> Freezing Tolerance and Heterosis in Freezing Tolerance from Metabolite Composition. <i>Molecular Plant</i> , 2010, 3, 224-235.	3.9	120
28	Dissecting Rice Polyamine Metabolism under Controlled Long-Term Drought Stress. <i>PLoS ONE</i> , 2013, 8, e60325.	1.1	120
29	Identification of Drought Tolerance Markers in a Diverse Population of Rice Cultivars by Expression and Metabolite Profiling. <i>PLoS ONE</i> , 2013, 8, e63637.	1.1	119
30	Low Amounts of Sucrose Are Sufficient to Depress the Phase Transition Temperature of Dry Phosphatidylcholine, but Not for Lyoprotection of Liposomes. <i>Biophysical Journal</i> , 2006, 90, 2831-2842.	0.2	108
31	Disordered Cold Regulated15 Proteins Protect Chloroplast Membranes during Freezing through Binding and Folding, But Do Not Stabilize Chloroplast Enzymes in Vivo. <i>Plant Physiology</i> , 2014, 166, 190-201.	2.3	108
32	A Mechanism for Stabilization of Membranes at Low Temperatures by an Antifreeze Protein. <i>Biophysical Journal</i> , 2002, 82, 874-881.	0.2	102
33	<i>ERF105</i> is a transcription factor gene of <i>Arabidopsis thaliana</i> required for freezing tolerance and cold acclimation. <i>Plant, Cell and Environment</i> , 2017, 40, 108-120.	2.8	102
34	Intermolecular Interactions in Dry and Rehydrated Pure and Mixed Bilayers of Phosphatidylcholine and Digalactosyldiacylglycerol: A Fourier Transform Infrared Spectroscopy Study. <i>Biophysical Journal</i> , 2003, 85, 1682-1690.	0.2	100
35	Non-Disaccharide-Based Mechanisms of Protection during Drying. <i>Cryobiology</i> , 2001, 43, 151-167.	0.3	99
36	Interaction of two intrinsically disordered plant stress proteins (COR15A and COR15B) with lipid membranes in the dry state. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2010, 1798, 1812-1820.	1.4	95

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37	The reduction of seed-specific dehydrins reduces seed longevity in <i>Arabidopsis thaliana</i> . <i>Seed Science Research</i> , 2011, 21, 165-173.	0.8	89
38	Molecular signatures associated with increased freezing tolerance due to low temperature memory in <i>Arabidopsis</i> . <i>Plant, Cell and Environment</i> , 2019, 42, 854-873.	2.8	89
39	High night temperature strongly impacts TCA cycle, amino acid and polyamine biosynthetic pathways in rice in a sensitivity-dependent manner. <i>Journal of Experimental Botany</i> , 2015, 66, 6385-6397.	2.4	86
40	Natural variation in CBF gene sequence, gene expression and freezing tolerance in the Versailles core collection of <i>Arabidopsis thaliana</i> . <i>BMC Plant Biology</i> , 2008, 8, 105.	1.6	84
41	Fructans from oat and rye: Composition and effects on membrane stability during drying. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007, 1768, 1611-1619.	1.4	83
42	Membrane Rupture Is the Common Cause of Damage to Chloroplast Membranes in Leaves Injured by Freezing or Excessive Wilting. <i>Plant Physiology</i> , 1987, 83, 251-253.	2.3	77
43	Comparison of freezing tolerance, compatible solutes and polyamines in geographically diverse collections of <i>Thellungiella</i> sp. and <i>Arabidopsis thaliana</i> accessions. <i>BMC Plant Biology</i> , 2012, 12, 131.	1.6	76
44	LEA Proteins: Versatility of Form and Function. <i>Topics in Current Genetics</i> , 2010, , 91-108.	0.7	75
45	Deacclimation after cold acclimationâ€”a crucial, but widely neglected part of plant winter survival. <i>Journal of Experimental Botany</i> , 2019, 70, 4595-4604.	2.4	73
46	Lipid Composition Determines the Effects of Arbutin on the Stability of Membranes. <i>Biophysical Journal</i> , 1999, 77, 2024-2034.	0.2	71
47	Measuring Freezing Tolerance: Electrolyte Leakage and Chlorophyll Fluorescence Assays. <i>Methods in Molecular Biology</i> , 2014, 1166, 15-24.	0.4	71
48	Looking beyond sugars: the role of amphiphilic solutes in preventing adventitious reactions in anhydrobiotes at low water contents. <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2002, 131, 515-525.	0.8	69
49	Time-dependent deacclimation after cold acclimation in <i>Arabidopsis thaliana</i> accessions. <i>Scientific Reports</i> , 2015, 5, 12199.	1.6	69
50	Folding of intrinsically disordered plant LEA proteins is driven by glycerolâ€”induced crowding and the presence of membranes. <i>FEBS Journal</i> , 2017, 284, 919-936.	2.2	69
51	Changes in free polyamine levels, expression of polyamine biosynthesis genes, and performance of rice cultivars under salt stress: a comparison with responses to drought. <i>Frontiers in Plant Science</i> , 2014, 5, 182.	1.7	68
52	Rapid transcriptional and metabolic regulation of the deacclimation process in cold acclimated <i>Arabidopsis thaliana</i> . <i>BMC Genomics</i> , 2017, 18, 731.	1.2	68
53	Molecular mechanisms of combined heat and drought stress resilience in cereals. <i>Current Opinion in Plant Biology</i> , 2018, 45, 212-217.	3.5	68
54	Metabolite and transcript markers for the prediction of potato drought tolerance. <i>Plant Biotechnology Journal</i> , 2018, 16, 939-950.	4.1	68

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55	The drought response of potato reference cultivars with contrasting tolerance. <i>Plant, Cell and Environment</i> , 2016, 39, 2370-2389.	2.8	66
56	Induced, Imprinted, and Primed Responses to Changing Environments: Does Metabolism Store and Process Information?. <i>Frontiers in Plant Science</i> , 2019, 10, 106.	1.7	63
57	Structural transitions in the intrinsically disordered plant dehydration stress protein LEA7 upon drying are modulated by the presence of membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011, 1808, 1879-1887.	1.4	61
58	Combined drought and heat stress impact during flowering and grain filling in contrasting rice cultivars grown under field conditions. <i>Field Crops Research</i> , 2018, 229, 66-77.	2.3	61
59	The Effect of Fructan on the Phospholipid Organization in the Dry State. <i>Biophysical Journal</i> , 2003, 85, 3058-3065.	0.2	60
60	Functional characterization of selected LEA proteins from <i>Arabidopsis thaliana</i> in yeast and in vitro. <i>Planta</i> , 2014, 240, 325-336.	1.6	57
61	The effects of chloroplast lipids on the stability of liposomes during freezing and drying. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1368, 150-160.	1.4	54
62	Integrated analysis of rice transcriptomic and metabolomic responses to elevated night temperatures identifies sensitivity- and tolerance-related profiles. <i>Plant, Cell and Environment</i> , 2017, 40, 121-137.	2.8	54
63	Global changes in gene expression, assayed by microarray hybridization and quantitative RT-PCR, during acclimation of three <i>Arabidopsis thaliana</i> accessions to sub-zero temperatures after cold acclimation. <i>Plant Molecular Biology</i> , 2015, 87, 1-15.	2.0	53
64	Metabolic responses of rice cultivars with different tolerance to combined drought and heat stress under field conditions. <i>GigaScience</i> , 2019, 8, .	3.3	52
65	Effects of Cholesterol on Dry Bilayers: Interactions between Phosphatidylcholine Unsaturation and Glycolipid or Free Sugar. <i>Biophysical Journal</i> , 2007, 93, 1204-1214.	0.2	51
66	Natural Variation of Cold Deacclimation Correlates with Variation of Cold-Acclimation of the Plastid Antioxidant System in <i>Arabidopsis thaliana</i> Accessions. <i>Frontiers in Plant Science</i> , 2016, 7, 305.	1.7	51
67	Intrinsically Disordered Stress Protein COR15A Resides at the Membrane Surface during Dehydration. <i>Biophysical Journal</i> , 2017, 113, 572-579.	0.2	51
68	Both cold and sub-zero acclimation induce cell wall modification and changes in the extracellular proteome in <i>Arabidopsis thaliana</i> . <i>Scientific Reports</i> , 2019, 9, 2289.	1.6	51
69	Interactions of arbutin with dry and hydrated bilayers. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1370, 87-97.	1.4	50
70	The intrinsically disordered protein LEA7 from <i>Arabidopsis thaliana</i> protects the isolated enzyme lactate dehydrogenase and enzymes in a soluble leaf proteome during freezing and drying. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2015, 1854, 1517-1525.	1.1	50
71	Monosaccharide composition, chain length and linkage type influence the interactions of oligosaccharides with dry phosphatidylcholine membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2006, 1758, 680-691.	1.4	49
72	The effect of arbutin on membrane integrity during drying is mediated by stabilization of the lamellar phase in the presence of nonbilayer-forming lipids. <i>Chemistry and Physics of Lipids</i> , 2001, 111, 37-57.	1.5	48

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73	Effects of α -tocopherol (vitamin E) on the stability and lipid dynamics of model membranes mimicking the lipid composition of plant chloroplast membranes. <i>FEBS Letters</i> , 2008, 582, 3687-3692.	1.3	48
74	The intrinsically disordered late embryogenesis abundant protein LEA18 from <i>Arabidopsis thaliana</i> modulates membrane stability through binding and folding. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011, 1808, 446-453.	1.4	48
75	Mapping quantitative trait loci for freezing tolerance in a recombinant inbred line population of <i>Arabidopsis thaliana</i> accessions Tenela and C24 reveals REVEILLE1 as negative regulator of cold acclimation. <i>Plant, Cell and Environment</i> , 2013, 36, 1256-1267.	2.8	48
76	Cryoprotectin: a plant lipid transfer protein homologue that stabilizes membranes during freezing. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2002, 357, 909-916.	1.8	47
77	The lytic activity of the bee venom peptide melittin is strongly reduced by the presence of negatively charged phospholipids or chloroplast galactolipids in the membranes of phosphatidylcholine large unilamellar vesicles. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1996, 1284, 162-170.	1.4	46
78	Differential physiological responses of different rice (<i>Oryza sativa</i>) cultivars to elevated night temperature during vegetative growth. <i>Functional Plant Biology</i> , 2014, 41, 437.	1.1	45
79	Cabbage Cryoprotectin Is a Member of the Nonspecific Plant Lipid Transfer Protein Gene Family. <i>Plant Physiology</i> , 2001, 125, 835-846.	2.3	44
80	Effects of calcium-induced aggregation on the physical stability of liposomes containing plant glycolipids. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2003, 1611, 180-186.	1.4	44
81	Target of Rapamycin Inhibition in <i>Chlamydomonas reinhardtii</i> Triggers de Novo Amino Acid Synthesis by Enhancing Nitrogen Assimilation. <i>Plant Cell</i> , 2018, 30, 2240.1-2254.	3.1	44
82	Cell wall modification by the xyloglucan endotransglucosylase/hydrolase XTH19 influences freezing tolerance after cold and sub-zero acclimation. <i>Plant, Cell and Environment</i> , 2021, 44, 915-930.	2.8	43
83	Natural genetic variation in acclimation capacity at sub-zero temperatures after cold acclimation at 4 $^{\circ}$ C in different <i>Arabidopsis thaliana</i> accessions. <i>Cryobiology</i> , 2008, 57, 104-112.	0.3	41
84	Characterisation of the ERF102 to ERF105 genes of <i>Arabidopsis thaliana</i> and their role in the response to cold stress. <i>Plant Molecular Biology</i> , 2020, 103, 303-320.	2.0	41
85	Antifreeze proteins differentially affect model membranes during freezing. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2001, 1511, 255-263.	1.4	40
86	Influence of drying on the secondary structure of intrinsically disordered and globular proteins. <i>Biochemical and Biophysical Research Communications</i> , 2012, 417, 122-128.	1.0	39
87	Plant Temperature Acclimation and Growth Rely on Cytosolic Ribosome Biogenesis Factor Homologs. <i>Plant Physiology</i> , 2018, 176, 2251-2276.	2.3	39
88	Antibodies against individual thylakoid membrane proteins as molecular probes to study chemical and mechanical freezing damage in vitro. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1985, 809, 337-344.	0.5	37
89	Chapter 6 Effects of Sugars on the Stability and Structure of Lipid Membranes During Drying. <i>Behavior Research Methods</i> , 2006, 3, 189-217.	2.3	37
90	Transcriptome sequencing and microarray design for functional genomics in the extremophile <i>Arabidopsis relative Thellungiella salsuginea</i> (<i>Eutrema salsugineum</i>). <i>BMC Genomics</i> , 2013, 14, 793.	1.2	37

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91	A mechanistic model of COR15 protein function in plant freezing tolerance: integration of structural and functional characteristics. <i>Plant Signaling and Behavior</i> , 2014, 9, e977722.	1.2	36
92	The solute permeability of thylakoid membranes is reduced by low concentrations of trehalose as a co-solute. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1994, 1189, 38-44.	1.4	34
93	Rootstock Sub-Optimal Temperature Tolerance Determines Transcriptomic Responses after Long-Term Root Cooling in Rootstocks and Scions of Grafted Tomato Plants. <i>Frontiers in Plant Science</i> , 2017, 8, 911.	1.7	32
94	Natural variation in the freezing tolerance of <i>Arabidopsis thaliana</i> : Effects of RNAi-induced CBF depletion and QTL localisation vary among accessions. <i>Plant Science</i> , 2011, 180, 12-23.	1.7	31
95	Differential destabilization of membranes by tryptophan and phenylalanine during freezing: the roles of lipid composition and membrane fusion. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2002, 1561, 109-118.	1.4	30
96	Utilizing PacBio Iso-Seq for Novel Transcript and Gene Discovery of Abiotic Stress Responses in <i>Oryza sativa</i> L.. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8148.	1.8	30
97	Cryoprotectin protects thylakoids during a freeze-thaw cycle by a mechanism involving stable membrane binding. <i>Cryobiology</i> , 2003, 47, 191-203.	0.3	29
98	Interactions between the circadian clock and cold-response in <i>Arabidopsis</i> . <i>Plant Signaling and Behavior</i> , 2008, 3, 593-594.	1.2	29
99	Evaluation of Seven Different RNA-Seq Alignment Tools Based on Experimental Data from the Model Plant <i>Arabidopsis thaliana</i> . <i>International Journal of Molecular Sciences</i> , 2020, 21, 1720.	1.8	29
100	Cryoprotective Leaf Proteins: Assay Methods and Heat Stability. <i>Journal of Plant Physiology</i> , 1992, 140, 236-240.	1.6	27
101	Assessment of drought tolerance and its potential yield penalty in potato. <i>Functional Plant Biology</i> , 2015, 42, 655.	1.1	26
102	Transcriptional and Post-Transcriptional Regulation and Transcriptional Memory of Chromatin Regulators in Response to Low Temperature. <i>Frontiers in Plant Science</i> , 2020, 11, 39.	1.7	26
103	Rapid induction of frost hardiness in spinach seedlings under salt stress. <i>Planta</i> , 1994, 194, 274-278.	1.6	25
104	Effects of flavonol glycosides on liposome stability during freezing and drying. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 3050-3060.	1.4	25
105	Structural properties and enzyme stabilization function of the intrinsically disordered LEA_4 protein TdLEA3 from wheat. <i>Scientific Reports</i> , 2019, 9, 3720.	1.6	25
106	Identification of two hydrophilins that contribute to the desiccation and freezing tolerance of yeast (<i>Saccharomyces cerevisiae</i>) cells. <i>Cryobiology</i> , 2011, 62, 188-193.	0.3	24
107	Effects of the sugar headgroup of a glyco-glycerolipid on the phase behavior of phospholipid model membranes in the dry state. <i>Glycobiology</i> , 2005, 15, 1150-1155.	1.3	23
108	Thermotropic phase behavior and headgroup interactions of the nonbilayer lipids phosphatidylethanolamine and monogalactosyldiacylglycerol in the dry state. <i>BMC Biophysics</i> , 2011, 4, 11.	4.4	23

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109	Introduction: Plant Cold Acclimation and Freezing Tolerance. <i>Methods in Molecular Biology</i> , 2014, 1166, 1-6.	0.4	23
110	Chapter 4 Freeze-thaw damage to thylakoid membranes: Specific protection by sugars and proteins. <i>Advances in Low-temperature Biology</i> , 1996, , 141-183.	1.0	23
111	Molecular dynamics simulations and CD spectroscopy reveal hydration-induced unfolding of the intrinsically disordered LEA proteins COR15A and COR15B from <i>Arabidopsis thaliana</i> . <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 25806-25816.	1.3	21
112	Impact of seasonal warming on overwintering and spring phenology of blackcurrant. <i>Environmental and Experimental Botany</i> , 2017, 140, 96-109.	2.0	21
113	Folding and Lipid Composition Determine Membrane Interaction of the Disordered Protein COR15A. <i>Biophysical Journal</i> , 2018, 115, 968-980.	0.2	21
114	Season Affects Yield and Metabolic Profiles of Rice (<i>Oryza sativa</i>) under High Night Temperature Stress in the Field. <i>International Journal of Molecular Sciences</i> , 2020, 21, 3187.	1.8	21
115	Specific interactions of tryptophan with phosphatidylcholine and digalactosyldiacylglycerol in pure and mixed bilayers in the dry and hydrated state. <i>Chemistry and Physics of Lipids</i> , 2004, 132, 171-184.	1.5	19
116	Substantial reprogramming of the <i>Eutrema salsugineum</i> (<i>Thellungiella salsuginea</i>) transcriptome in response to UV and silver nitrate challenge. <i>BMC Plant Biology</i> , 2015, 15, 137.	1.6	18
117	Introduction: Plant Cold Acclimation and Winter Survival. <i>Methods in Molecular Biology</i> , 2020, 2156, 1-7.	0.4	18
118	The concentration of cryoprotective lectins in mistletoe (<i>Viscum album</i> L.) leaves is correlated with leaf frost hardiness. <i>Planta</i> , 1997, 203, 140-144.	1.6	17
119	Release of Two Peripheral Proteins from Chloroplast Thylakoid Membranes in the Presence of a Hofmeister Series of Chaotropic Anions. <i>Archives of Biochemistry and Biophysics</i> , 1998, 358, 385-390.	1.4	17
120	High concentrations of the compatible solute glycinebetaine destabilize model membranes under stress conditions. <i>Cryobiology</i> , 2006, 53, 58-68.	0.3	17
121	Salt stress responses in a geographically diverse collection of <i>Eutrema/Thellungiella</i> spp. accessions. <i>Functional Plant Biology</i> , 2016, 43, 590.	1.1	17
122	Time- and temperature-dependent solute loading of isolated thylakoids during freezing. <i>Cryobiology</i> , 1992, 29, 607-615.	0.3	16
123	Natural Variation in Freezing Tolerance and Cold Acclimation Response in <i>Arabidopsis thaliana</i> and Related Species. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1081, 81-98.	0.8	16
124	Sucrose influx and mechanical damage by osmotic stress to thylakoid membranes during an in vitro freeze-thaw cycle. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1986, 861, 152-158.	1.4	15
125	A Cryoprotective Lectin Reduces the Solute Permeability and Lipid Fluidity of Thylakoid Membranes. <i>Cryobiology</i> , 1997, 34, 193-199.	0.3	15
126	Trehalose Increases Freeze-Thaw Damage in Liposomes Containing Chloroplast Glycolipids. <i>Cryobiology</i> , 1998, 36, 245-249.	0.3	15

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127	Protection of liposomes against fusion during drying by oligosaccharides is not predicted by the calorimetric glass transition temperatures of the dry sugars. <i>European Biophysics Journal</i> , 2008, 37, 503-508.	1.2	14
128	Metabolic responses of rice source and sink organs during recovery from combined drought and heat stress in the field. <i>GigaScience</i> , 2019, 8, .	3.3	14
129	Natural Variation among Arabidopsis Accessions in the Regulation of Flavonoid Metabolism and Stress Gene Expression by Combined UV Radiation and Cold. <i>Plant and Cell Physiology</i> , 2021, 62, 502-514.	1.5	14
130	A quality-controlled microarray method for gene expression profiling. <i>Analytical Biochemistry</i> , 2005, 346, 217-224.	1.1	13
131	The effect of hydrophobic analogues of the type I winter flounder antifreeze protein on lipid bilayers. <i>FEBS Letters</i> , 2003, 551, 13-19.	1.3	12
132	Similar Yet Differentâ€”Structural and Functional Diversity among Arabidopsis thaliana LEA_4 Proteins. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2794.	1.8	12
133	Characterization of the Heat-Stable Proteome during Seed Germination in Arabidopsis with Special Focus on LEA Proteins. <i>International Journal of Molecular Sciences</i> , 2021, 22, 8172.	1.8	12
134	Unravelling Differences in Candidate Genes for Drought Tolerance in Potato (<i>Solanum tuberosum</i> L.) by Use of New Functional Microsatellite Markers. <i>Genes</i> , 2021, 12, 494.	1.0	11
135	Conformational selection of the intrinsically disordered plant stress protein COR15A in response to solution osmolarity â€” an X-ray and light scattering study. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 18727-18740.	1.3	10
136	Genome-Wide Approach to Identify Quantitative Trait Loci for Drought Tolerance in Tetraploid Potato (<i>Solanum tuberosum</i> L.). <i>International Journal of Molecular Sciences</i> , 2021, 22, 6123.	1.8	9
137	Measuring Freezing Tolerance of Leaves and Rosettes: Electrolyte Leakage and Chlorophyll Fluorescence Assays. <i>Methods in Molecular Biology</i> , 2020, 2156, 9-21.	0.4	9
138	Ecotype-Dependent Response of Bacterial Communities Associated with <i>Arabidopsis</i> to Cold Acclimation. <i>Phytobiomes Journal</i> , 2018, 2, 3-13.	1.4	8
139	Transcriptome analysis reveals potential roles of a barley ASR gene that confers stress tolerance in transgenic rice. <i>Journal of Plant Physiology</i> , 2019, 238, 29-39.	1.6	8
140	Can Metabolite- and Transcript-Based Selection for Drought Tolerance in <i>Solanum tuberosum</i> Replace Selection on Yield in Arid Environments?. <i>Frontiers in Plant Science</i> , 2020, 11, 1071.	1.7	8
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145	The Function and Evolution of Closely Related COR/LEA (Cold-Regulated/Late Embryogenesis Abundant) Proteins in <i>Arabidopsis thaliana</i> . , 2013, , 89-105.		5
146	Analysis of Changes in Plant Cell Wall and Structure During Cold Acclimation. <i>Methods in Molecular Biology</i> , 2020, 2156, 255-268.	0.4	4